

**ON LISTENING TO THE SERPENT:
RELATING THE BIBLICAL BOOK OF GENESIS,
JEAN PIAGET ON EGOCENTRISM,
“ORIGINAL SIN,” AND
PAUL MacLEAN ON THE TRIUNE BRAIN**

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Abstract

The editors of Genesis 1-11 continually depict human as rebels against their creator. In chapter three they proposed an explanation for this attitude. We can think of It as an inner compulsion that modern persons call “egocentricity,” mythologically explained as inspired by a “wise” serpent. That creature’s ability to deceive humans (Hebrew ‘adam, “humankind”) was suggested by its perpetual rebirth as evident in the shedding of its skin. Its wisdom derived from association with the sapient spirits of the dead in tombs.

Swiss child psychologist Jean Piaget (1896-1980) noted that human egocentricity is inevitable from earliest infancy. It has similarity to the Roman Catholic doctrine of “Original Sin.”

Neuroscientist Paul D. MacLean (1913-2007) attributed violent acts (“sin”?) to a pre-human stage of development. Evolution of the brain was three-fold, popularly designated as reptilian, mammalian, and primate. Values inherited from remnants of the reptile brain conflict with those of the primate brain. They include the urge to procreate, territorial possession, and being cold-blooded killers. Thus, evolution has introduced schizophysiology into our species.

The mythology of Genesis reflects modern reality. The serpent brain continues to exist and urges humans to rebellion and violence. Biblical theologians in Genesis then outline a remedy for the inevitable voice of the serpent.

Keywords: Gen. 3; egocentricity; original sin; Jean Piaget; Paul MacLean; triune brain

Modern humans, ever since their arrival on the stage of history (some scholars reckon at 200,000 years ago), have been plagued by the mysteries of the world around them. An especially vexing problem was the mystery of human behavior. Why are humans so possessive, aggressive, mean-spirited, desirous of revenge, willing to wage wars of total destruction, and have tempers that flare to extremes?

An early claim that society is unbearable, thanks to human beings, comes to us from ancient Egypt, around 2,000 B.C. A man has an internal debate with himself (with his “soul”) as to whether suicide is his best alternative to life. His “soul” (meaning a nagging doubt?) urges him to endure.¹ Here are some of his observations:

¹ “A Dispute over Suicide,” in D. Winton Thomas (Ed.), Documents from Old Testament Times (New York: Harper Torchbooks, 1958), pp. 162-167.

Brothers are evil, The companions of yesterday
do not love...Hearts are rapacious, Every man seizes
the goods of his neighbor...Men are contented with evil,
Goodness is neglected everywhere...There are no
righteous men. The land is left over to workers of iniquity...
Those that roams the land, it has no end...Death is in
my sight today, Like the longing of a man to see home...

Why are our fellow human creatures like this? One of the more insightful investigations of this problem is found in the early chapters of the biblical book of Genesis (about the Garden of Eden, the “wise” snake, eating the apple, the “fall of Man”) and all that. The tragedy is that despite centuries of study, its central insight has largely been obscured or misunderstood to the present day.

UNDERSTANDING GENESIS CHAPTER 3

We should begin by talking about how to interpret that material, what it really meant to say, and how it might help us to understand why humans behave as they do.

Did you ever notice the difference between Genesis 1-11 and the material that comes next, namely, Chapters 12 and following? I call 1-11 “The Primeval Story,”² and the material thereafter “The Patriarchal History” (using the term “history” rather imprecisely and casually rather than as a claim of totally literal facts).

We begin our study with the biblical Patriarchs (Abraham, Isaac, and Jacob). They live in a world that is believable to us and that is recognizable even today! They are nomads who wander freely, and they live in tents, as Bedouin still do in the Near East, for example, in Jordan, Syria, Israel, and Saudi Arabia.

When we turn to the other side of the equation, Genesis 1-11, we find ourselves in a world that is unlike anything in the world today. In fact, we may well wonder if it ever existed (or was even meant to exist as literally described)! (1) It is a world in which there was a single human couple from whom all persons will descend; (2) a world in which there is a wonderful Garden of Eden in which grow magic trees whose fruit will provide all knowledge (tuition free!), and grant perpetual human rejuvenation (like the “Fountain of Eternal Youth” that the Spaniard Ponce De Leon allegedly sought in Florida)³; (3) a world in which there lived a snake that can stand upright and walk around, that speaks Hebrew, and who “picks on” pretty naked girls; (4) a world in which the human female is “built” (the literal verb in Genesis) from the rib of a human male; (5) a world in which people live to ages of 700, 800, and even 969 years in the case of Methuselah (Genesis 5:27); (6) a world where waters of a universal flood cover the tops of the highest mountains, leaving behind no archaeological or geological trace in the modern world; (7) and where (in Genesis 11), human beings can build a tower so high that it threatens to reach the heavens where God dwells and which causes God to take action against it!

Not only do these early stories seem unlikely to us in the present (although some persons want to take them quite literally), but they are also of a different “genre” (a French work that indicates a particular type of literature). Here, for example, are some of the genres that occur in the other side of our biblical divide, i.e., in the Patriarchal History: genealogies, inventories, itineraries, prayers, hymns, and battle-accounts. Each is easily recognizable by its form.

² “Primeval” means “original, earliest,” with emphasis here on the word “story,” an account whose purpose and truth may be more (and beyond) mere literal chronological and historical “happening.”

³ It is a mistaken interpretation to think that the biblical idea is once and for all immortality.

In Genesis 1-11, on the other hand, you find genres such as these: (1) Creation Stories (two of them, and clearly not meant to be scientific accounts, and with contradictions that easily escapes our notice)⁴; (2) stories that are laced with non-literal symbolic numbers⁵; (3) a flood-account (Genesis 7-8, two of them woven into a whole⁶) about waters that are unleashed from “windows” in the solid dome across the sky that separates heaven from earth (Genesis 7:11); and (4) there are multiple instances of a literary genre called an “etiology.” It is a type of literature that is common in the ancient world but very strange to us and that is often set in “primeval” time.

Each type of literature (each genre) has its own proper time and place for recital and had its own purpose. Etiologies in Genesis 1-11 scream at us by their literary form: “Do not misunderstand me! I am not meant to be a literal, historical, scientific account!”

An etiology is a type of folk-literature, entertaining and non-literal, that most ancient people, unlike some persons in the present, would have properly understood. It seeks to explain the origin of some physical object or of a specific custom, by placing its origin “back there” in primeval time. It says, in effect, “That’s the way it was, or it began, and so that’s the way it has continued to the present day!” Its context of telling often would likely be something like this: a child asks the question, “Why are things like this?” and the parent would respond with an entertaining explanation. Here is a single illustration.

“Why do women have a subservient position in our society, and suffer pains in childbirth?” Was it because of what happened in primeval time to the disobedient proto-mother Eve, to whom God said, “I will greatly increase your pangs in childbearing, and he [your husband] shall rule over you?” [Genesis 3:16].

The advantage of a proper understanding the genre of a biblical story (“etiology”) becomes clear about the subservient role that women played in most Biblical narratives. Note that the genre “etiology” merely describes, in folk-literature form, what once was and thus it has continued to the present day. That is, it does not prescribe, it does not mandate, what ought to be in the present! Thus, modern husbands cannot use the story to prove, by the Bible, who ought to be “boss” in the family!!

Let us now look at another indication that the Primeval Stories were not meant to be strict scientific or historical accounts. Take, for instance, the Creation Story, beginning at Genesis 1:1 and concluding at 2:4a.⁷ Notice the constant usage of the number “7.” It is a standard, symbolic number that expresses “completion” and “perfection.”⁸ Throughout the Bible, things tend not to happen in sixes or eights but in sevens. There are 397 instances of this, even in such surprising instances as the number of ways that God threatens to correct Israel (Deut. 28:22), and in other places that speak of a seven-fold punishment.

Even in the present, this number partakes of specialty. To cite but a few examples: We drink “7 Up”; we observe a seven-day week; we have movies entitled, “The Magnificent Seven”; we have a 7th inning stretch at a baseball game; we speak of “seven deadly sins”; and on and on!⁹

So, in the Bible’s first story (1:1-2:4a), creation is completed after 7 days (after all, no sane deity would have done it in 6 or 8); each paragraph, when it mentions a specific created item (e.g., the heavenly “light[s],” Genesis 1:14-18), uses that word 7 times; moreover, the first verse of the text, in Hebrew, contains 7 words; the second verse contains 14 words (2 X 7); and the word “God” is used a total of 35 times (5 X 7) in the complete story (1:1-2:4a). No wonder that God repeatedly remarked that his work was “good” (Genesis 1:4, 10, 12, 18, 21, 25, 31). How many times are we told this? Seven!!

⁴ To cite but a single example: in Genesis 1 the order of creation is vegetation, then animals, and finally humankind (male and female in one expression); in Genesis two it is a human male, then plants, animals, and finally a single human female. There is even “light” and “darkness,” one day, even before there is a sun to activate them!

⁵ Especially the ages in Genesis 5.

⁶ For one instance of variation of the divine cause, note the alternation of the terms “the Lord” and “God.”

⁷ Verses (like chapters) were a late addition to the English biblical text and sometimes mistakenly spanned across a proper division. Here, part “a” of the verse properly belongs to the first creation story, whereas part “b” begins the second one.

⁸ This has to do with the seven major celestial objects (each representing a deity): sun, moon, and the five visible planets (Mercury, Venus, Mars, Jupiter, and Saturn).

⁹ I have discussed this at length in my book, Genesis, Creation, and Creationism (Paulist Press, 1993), Appendix VII (Where else?? An appropriate number!).

Little wonder, then, that the biblical text does not intend to tell us anything about a modern question such as the true age of the earth (which is really around 4.5 billion years), or whether Charles Darwin was right or wrong about the “evolution” of the human species!¹⁰

Now look at what happens to Chapters 1-11 when it is editorially placed as a preface to the Patriarchal History (Genesis 12 and following)! That joining has created the impression that the former is also part of history. It not only has been historicized, but it has also been anchored into chronology, as if it all happened in “real time” just before the appearance of Abraham!

That joining now enables us to see an intended and profound theological implication that Chapters 1-11 did not previously have, one now intended by the editor who joined it all together!

The totality of stories in Genesis 1-11 has a predominant and re-occurring theme. It is that human beings are rebels: disobedient, egocentric, and vindictive. For example: They refuse the boundaries placed upon them in the Garden (3:6), they want to be “like God” and know-it-all (3:5), they indulge in violent murder when Cain kills Abel (4:5-9), they threaten massive vengeance upon those who harm them, following the example of Mr. Lamech (4:23-24), they resent death as a limit on their existence (3:22), they constantly plotted evil (6:5), they “filled the earth with violence (6:11), they were “evil from youth” (8:21), and they want to “make a name for themselves” by building a tower “with its top in the heavens” (11:4).

To sum up thus far: ancient Israel had a great variety of literature: part of it religious, part of it humorous, part of it historical, and each type was originally recited at its particular time and place. The stories were short, and they were unconnected. However, with the passage of time, leaders began to weld the smaller units into a larger story, and as they did so they gave them a religious significance that they did not previously have.

The key building block for understanding the “primeval story” is Genesis 12 which may be, after all, where semi-historical material starts in the Bible. There, the writer tells us that God summoned Abraham and Sarah from the city of Ur in southern Mesopotamia and requested that they go to the land of Canaan. They are to do this in order to “be a blessing to all of the families of the earth.”¹¹ In short, we are being told of the origins of Israel that will ultimately lead to the Synagogue and the Church in the present.

We cannot really appreciate why Abraham and Sarah were called, why there must be an Israel, a Church, apart from the prior 11 chapters of Genesis. It is here that the necessity for Abraham's call is suggested and those 11 chapters receive, on the other hand, their ultimate meaning only in light of chapter 12.

The Biblical theologians took these old, familiar, unrelated stories in chapters 1-11 and put them together. This they did, not because someone needed to collect and publish them for secular and antiquarian purposes, but rather because they could be used as what we might now call “sermon illustrations.” That is: they make vivid the beliefs that the theologians want the people of their day to accept. They are not so much historically true as they are theologically true. They capture the nature of humans, they illustrate our pride, and they make clear the difficulties God will face in trying to bring about a new age. When we read the story, we know that it is true because it is true of us! As a modern theologian reportedly has put it: “It is, it is, it is...regardless of how much we want to say only, ‘It was’.” (That is: If we overly historicize the story, make it about something that happened (only) “back there,” we escape its insight and enduring relevance.) As John Steinbeck said in East of Eden, “And I here make a rule--a great and lasting story is about everyone or it will not last. The strange and foreign is not interesting--only the deeply personal and familiar.”¹² That is why the primeval story was preserved, retold, and handed down from one generation to the next.

So, what does the story look like when it gets in its final and present shape? The following is how it appears to me!

It begins something like this: Is the present world in which we live ideal? Is it as God created it or intended it? The answer is, “No, it is not, and the fault lies not in the design or the intent of the Deity, but in human nature. Humans do not like to have boundaries placed upon their existence.

¹⁰ It might be well to remember that religion is not basically about geology or biology. As Cardinal Baronius reportedly stated about the ideas of Copernicus and Galileo: “The Bible teaches us how to go to heaven, not how the heavens go.”

¹¹ The RSV footnote has the best translation here, as opposed to RSV text and NEB.

¹² Penguin Books (New York, 1992), p. 270.

Tell them, "You must not do so-and-so!" and you immediately create the urge to do it! Place a sign at newly sown grass requesting that persons not tread there, and some persons will soon assert their independence and rebelliousness by doing so

The snake in the story represents a voice that we seemingly hear (or a thought that we have) urging us to think only of our own desires and security and of how to protect our own welfare by any means necessary and even deadly violence. In the last analysis and from a modern perspective, the serpent is that inner voice, our own ego, that will not let us accept the fact that we are human and that we are accountable for our actions. It says, in effect: "Do you really believe that religion-stuff? Are you not a modern, educated, rational person? Do not repress your intelligence! Assert your independence and freedom!"

In the earliest form of the Primeval Story, "Adam" is not a proper name (as it seemingly was understood in later biblical texts and surely is in Christian tradition).¹³ Rather, it is a word which means "humankind," and hence is the model, the essence, the illustration of every person. What is said of "him" never really happened. The terrible thing is that it is always happening! Thus, the story illustrates the belief that it is humans, not God, who are responsible for the moral problems of the world.

Once humans reject their creature-hood, once they decide that they are free to do as they please, they then will do practically anything. Once independent ancient stories are then arranged to illustrate the excesses to which they (we) will go. Indeed, says the Biblical editor, speaking on his own judgment as if it were the very voice of God, "Indeed, every imagination of his [namely, a human's] heart will be continuously evil" (Genesis 6:5).

Once I had reached the above conclusion about what the serpent really represented in the story, the question arises as to the originality of my idea. Have earlier interpreters reached the same conclusion? For a quick confirmation, I turned to a "giant in the field," Claus Westermann, in his learned commentary on Genesis 1-11.¹⁴

HOW DID THE SERPENT GET INVOLVED?

Now arises a crucial question about the serpent. Why is it that it was chosen by the biblical storyteller as the source of the voice that prods and misleads humanity [the 'adam']? Why not use, say, by a woodchuck?

A historical fact must be realized at the outset. The serpent in this Genesis narrative is not identified with the devil (Satan) as is done in later Jewish and Christian tradition. Note that it is described (in various English translations) only as "more astute," "more crafty," "more subtle," "the sliest," "more cunning," of "any other wild animal that the Lord God had made" (Genesis 3:1). Nothing is said about demonic evil on its part (although it is punished for its activity); it is just one of God's creatures, specifically the cleverest one! In the Hebrew Bible there is no idea of Satan as a heavenly opponent of the deity (after all, Judaism is monotheistic, not dualistic) until after the Exile (I Chr. 21:1-7, and even there it is debatable).¹⁵ Moreover, nowhere in the Hebrew Bible is the serpent in Eden identified with Satan.¹⁶ The first attested identification (indirectly) is in the Intertestamental book called, "The Wisdom of Solomon," dated from the 1st century BC to the 1st century AD. At 2:24 it reads, "...but through the devil's envy death entered the world."

Here are some factors that may have led to the choice of the serpent as the inner voice of human temptation.

1. There is an earlier story in the Ancient Near East that may have been the model for the biblical thinker. It is known as The Gilgamesh Epic, and it is attested in Mesopotamia as early as 2,000 B.C. (whereas the biblical account is many centuries later). The theme of that story is the human longing for perpetual youth, and it features an etiological tale about how the opportunity was lost to a serpent.

In the story, a king named Gilgamesh learns of a magic plant that grows at the bottom of the sea. Its name,

¹³ For example, it has before it in Hebrew the definite article, literally "the adam," and hence no person in ancient Israel would have understood it as a proper name. We do not say in any language known to me, "the Arnold" or "the Jane." The biblical word is derived from the verb "to be red" ("adam"), reflecting the color of blood that seems to be the source of life. The word thus means something like "the human being."

¹⁴ Minneapolis: Augsburg Publishing House, 1974 (English translation by John Scullion, 1984), p. 237. There, along with a range of explanations that have been proposed by scholars, Westermann lists: "The serpent is purely symbolical: it symbolizes human curiosity (Talmud, B. Jacob), or 'intellectual curiosity' (N.P. Williams)." Westermann himself does not choose that explanation however (p. 238) because it "would not suit the character of the narrative." That does not seem to me to be a sufficient reason for rejection.

¹⁵ Here some readers will offer various supposed textual refutations but none of them is worthy of consideration here.

¹⁶ See any reputable commentary or Shawna Delonsky, "How the Serpent Became Satan," in Biblical Archaeology Society (June 26, 2020), available on the Web.

appropriately enough, is something like this: “When eaten by an elderly person, youth is regained” (Tablet XI, line 281). Gilgamesh dives down and secures a specimen, intending to transplant it in his city until it is needed when he is older. On the way there, hot and dusty, he stops for a nap. Whereupon we read:

A serpent perceived the fragrance of the plant;
It came up, snatched the plant, (and ate it);
Shedding its skin, it crawled away.
Then Gilgamesh sat down and wept!

Thus, while the serpent appears to have been reborn, Gilgamesh must grow old and die! The serpent has stolen his opportunity for rebirth.

That is, serpents are seldom observed to die a natural death. Instead, they seem ever to be reborn as is suggested by the skin that they shed. Thus, the Gilgamesh story serves as an etiology about how serpents acquired this astonishing ability in contrast to humans who must die.

In the (apparently) adopted biblical version, it is also a serpent that out-manuevers the human. The magic plant in the sea has become a tree that grows in the center of the deity’s garden.

2. Serpents are often found underground in existing holes that were created by other small creatures. They also hibernate in these burrows as well as in rock crevices and caves. Such locations included the rock-hewn tombs that were prepared in the “Lands of the Bible” for deceased humans.¹⁷ So, at least among the neighboring Canaanites (and others such as the Greeks), the “spirits” of the dead would be believed to continue to exist in the Underworld (not yet identified as a place of punishment). Moreover, such “spirits” were believed to have knowledge about present and future events on earth. Thus, just as the “dead” could be consulted for information (a process known as necromancy),¹⁸ serpents could be worshipped because they lived among the sapient dead (hence the knowing¹⁹ serpent in Genesis). It is not surprising, then, that serpents were sometimes worshipped,²⁰ were believed to have the power of healing,²¹ and that shrines were erected to them.

THE SERPENT AND CHILDHOOD DEVELOPMENT

At least two points previously made can now clarify how the serpent might speak to the present: (1) the portrait of humans in Genesis 1-11 as egocentric rebels and (2) the serpent in Genesis 3 as an inner voice that not only discourages humility and accountability but also leads to evil behavior.

A possible explanation for this enduring tendency of humans was proposed by the esteemed Swiss psychologist named Jean Piaget (1896-1980). His theory of the child’s cognitive development is put forward in numerous publications, among them being, The Child’s Conception of the World.²²

Piaget’s theory of the development of the child’s cognitive abilities has four stages. The first, designated as “The Sensorimotor Stage” (from birth to age two), is characterized by (among other things) “extreme egocentrism,” meaning that the child has difficulty in seeing the viewpoint of others. The second stage is entitled “Pre-operational.” It begins, Piaget says, with the development of speech around the age of two and lasts until around the age of seven. Among its characteristics is continued egocentricity. Stage three is designated as “The Concrete Operational Stage,” ages 7-11, in which the child can think logically and is “no longer egocentric.” Stage four, “The Formal Operational Stage,” ages 11-16 and beyond, features the development of abstract reasoning.

My way of explaining Piaget’s main point to my first-year undergraduate students (apologies to Piaget for any inaccuracies) goes something like this. “When we are born, our mind is a blank slate. It/we can only learn by sensing what happens to the self, and that information is all that can be comprehended or that matters. One’s only recourse to discomfort is to yell, and then a vaguely perceived face appears and solves the sensed needs. All knowledge is

¹⁷ They were often the size of small modern rooms and were hewn from the soft limestone of the area.

¹⁸ The clearest and most detailed story of such necromancy is to be found in Homer’s Odyssey (Book XI). A translation can be found on the Web (“The Odyssey, Book XI.”) See also the biblical account of King Saul’s encounter with the Witch of Endor (I Samuel 28). An argument against such belief may be found in the biblical book of Ecclesiastes at 9:5, “The living know that they will die, but the dead know nothing; ... never again will they have any share in all that happens under the sun.”

¹⁹ Note the advice of Jesus to his disciples at Matthew 10:16, “Be wise as serpents.”

²⁰ For archaeological evidence from Israel and well as biblical discussion, see The Interpreter’s Dictionary of the Bible (New York: Abingdon Press, 1962), Volume 4, p. 290 (or another reputable Bible Dictionary).

²¹ A modern remnant of that belief continues in the caduceus (serpent[s] entwining a staff, used in modern logos of health providers such as Blue Cross/Blue Shield).

²² London: Routledge and Kegan Paul, 1928. For a discussion and full bibliography, see the article “Jean Piaget” in Wikipedia.

integrated around the self. The infant soon senses, “What power I have! Temper tantrums are the road to getting my way.”

Initially, the child can only say, “My toy! My Mommy,! My comfort!” Only slowly, only over the years, can one learn to stand outside the self and perceive the viewpoint of others, such that the former, “Joan is my sister” can become “I am Joan’s sister.”

Such early inevitable behavior, should it continue into adulthood, would be regarded as abrasive, selfish, anti-social, and confrontive. In common language, the meaning of the term “egocentrism” in adults is expanded (beyond that of Piaget) to mean self-centered and unattractive prideful braggadocio. In the language of religion, it is the essence of “sin” (essentially to put the self at the center of everything).

Does Piaget really believe that ego is overcome by Stage Three? That is what he reportedly states. If he does believe that, either he is mistaken, or his homeland (Switzerland) has somehow become “the Kingdom of God.” His proposed Stage Three is one that I have not been able to reach, and I have seldom perceived it in others. In fact, more recent psychologists have proposed extensive experiments to demonstrate that egocentrism continues in the average person. One of them states, “We don’t ever completely outgrow the youthful form of egocentrism known as the imaginary audience.”²³ Egocentrism is the only way that humans can develop. It is simply the way that we were born, and it nags us for the rest of our life. Thus, the “snake” is an automatic inner voice/urge that we cannot easily escape.

Neither logical persuasion nor public education automatically affects a cure. The biblical tradition instead seems to presuppose that parental and communal guidance and example have a chance of success. Hence the problem that is outlined in the Primeval Story (Genesis 1-11) is immediately and deliberately followed by the Call of Abraham and Sarah (Chapter 12 and following). They are to leave their homeland and form a new community in the land of Canaan. It is to be a new social entity governed by humility, fairness, and “loving the other as oneself.”²⁴ It will be known as Israel and will lead to the Synagogue and the Church.

Consider a supporting perspective. Various of my ministerial students at Duke Divinity School have informed me as follows. “I have done about every mean thing that a person can do (abused my children, beat my wife, kicked the dog, made and sold intoxicants, swore that my bad habits could not be broken, and so on). Yet, in a Christian worship service I was suddenly confronted by a divine presence that led to a conversion experience. My life was totally reformed, and my terrible habits immediately removed. I have never again been tempted by them.”

Egocentricity can easily lead to narcissism. That is when a person goes beyond inability to see someone else’s point of view. Now one simply does not care about the other; one disdains what the other person feels. One becomes annoyed and even angry when others fail to agree with our feelings or agenda. This then can lead to hubris, a level of arrogance and overconfident pride in which others are shamed and victimized. It may even seem necessary for us to send such dangerous defectives to “re-education” camps as is commonly done in the modern world.²⁵

To the extent that the dangers of the voice of serpent are valid and that religion is an effective counter, it is alarming to note the increasing neglect and negation of the biblical religion(s) that are taking place in Western Civilization. Indeed, the serpent who asked in the beginning, “Did God really say...?” Genesis 3:1) is slowly winning the battle. “He” is crafty, indeed!

“ORIGINAL” SIN

The point of view expressed in the present article has the potential to shed greater believability on the origin of what the Roman Church has long proclaimed as “original sin.” The Church did so because it had historicized the account in the Garden of Eden. This then neatly explained death and the universal presence of sinful activity by human beings. Adam’s sin (commonly called “the fall of man”) had somehow affected each human descendant thereafter. “In Adam’s fall, we sinned all,” as The New England Primer of 1690 reportedly put it. It is sometimes commonly referred to as “birth sin” and is to be distinguished from later human sins of omission and commission (the do’s and don’ts).

Perhaps the Church’s concept can be clarified by quoting from a source of its official teaching.²⁶

Question: “What happened to Adam and Eve on account of their sin?”

Answer: “On account of their sin Adam and Eve lost sanctifying grace, the right to heaven, and their special gifts;

²³ For example, Susan Krauss Whitbourne, “It’s a Fine Line Between Narcissism and Egocentrism,” in Psychology Today, April, 2012 (available on line). The “imaginary audience is how we conclude that someone else feels.

²⁴ Leviticus 19:18; Matthew 19:19

²⁵ To cite but a few examples, Russia, China, and Cambodia.

²⁶ This We Believe; By This We Live (Revised Edition of the Baltimore Catechism, No. 3; Confraternity of Christian Doctrine, 1957). Newer editions have since appeared, but perhaps the central idea has not changed.

they became subject to death, to suffering, and to a strong inclination to evil, and they were driven from Paradise.”
[p. 44]

Question: “What happened to us on account of the sin of Adam?”

Answer: “On account of the sin of Adam, we, his descendants, come into the world deprived of sanctifying grace and inherit his punishment, as we would have inherited his gifts had he been obedient to God.” [p. 45]

[This section continues by quoting the very late book known as **Wisdom of Solomon (at 2:24)**²⁷ that identifies the serpent in Eden with the Devil, as later does early Christianity.]

Question: “Why is this sin called original?”

Answer: *This sin is called original because it comes down to us through our origin, or descent, from Adam.”*
[p. 45]

Question: “What are the chief punishments of Adam which we inherit through original sin?”

Answer: “The chief punishments of Adam which we inherit through original sin are: death, suffering, ignorance, and a strong inclination to sin.” [p. 45] “The fact of original sin explains why man is so often tempted to evil and why he so easily turns from God”. ... “The penalties of original sin—death, suffering, ignorance, and a strong inclination to sin—remain after Baptism, even though original sin is taken away.” [p. 46]

This way of trying to explain the central flaw of human beings suffers from the following particulars that should be evident from my discussion above.

1. It assumes that all modern humans are descended from a historical couple, the biblical Adam and Eve. Thus, it historicizes material that by genre was not meant literally to be true. The very form of the story is such that no person in biblical antiquity would have considered it to be biologically, chronologically, and literally true. Moreover, most modern rational persons will not believe that it is literally true and thus the Church’s claim causes disrespect for the Bible.
2. It accepts the traditional identification of the serpent in Genesis with the Devil (explicitly so by quoting from the very late book entitled *Wisdom of Solomon*²⁸), and this is contrary to Genesis which is hundreds of years earlier.²⁹
3. Human beings, according to scientific evidence such as fossils, were on earth perhaps 200,000 years ago, far beyond the reach of historical records.

If egocentricity (and its developments into narcissism and hubris) can be considered as inevitable and as “original sin” (as Piaget’s work illustrates), then the Church has a much preferable and easier case to make.

THE DEVELOPMENT OF THE HUMAN BRAIN Is the Serpent physically Still There?

An astute modern writer, Arthur Koestler, has evaluated what he proposes to be the sad state of humanity as follows:

If we look without blinders at the history of the human race, we must recognize that a paranoid streak runs unbroken from the blood sacrifices of almost all prehistoric cultures to the mass exterminations of the twentieth century.

To put it vulgarly, we are led to suspect that there is somewhere a screw loose in the human mind, and always has been. To put it in more scientific language, we ought to give consideration to the possibility that somewhere along the line something has gone seriously wrong with the evolution of the nervous system of Homo sapiens.

The strategy of evolution, like any other strategy, is subject to trial and error. There is nothing particularly improbable in the assumption that man’s native equipment... may contain some serious fault in the circuitry of his most

²⁷ This book is canonical (authoritative; scripture) in Roman Catholicism but not in Protestantism (where it is designated as “apocryphal.”)

²⁸ Around the time of Jesus.

²⁹ The first chapter of is part of a late layer of book, around the 6th century, B.C. Other parts may be as old as the 11th century.

precious and delicate instrument—the central nervous system.”³⁰

Koestler then assumed that he had found a description of the evolutionary mistake in the research of Paul D. MacLean (1913-2007), a distinguished physician and neuroscientist who, after many high appointments and honors, retired as Senior Research Scientist, Emeritus in the Department of Neurophysiology of the National Institute of Mental Health.³¹

What enamored Koestler was MacLean’s idea that the human brain had a long hierarchical development (by accretion over hundreds of millions of years) in three stages, each anatomically and chemically distinct. He coined the term “triune” brain to describe it.³²

The most ancient part of the human brain is the brainstem and related small areas at the base of the skull (Basal Ganglia). It regulates such involuntary forces as heartbeat, blood circulation, and respiration. These functions are the most basic to life and that is why the “hit man” shoots his victim at the base of the skull. Above and including that area is MacLean’s proposed earliest layer of the development of the human brain. He referred to it as “the R-complex” and the archicortex,³³ but it commonly has come to be called “the reptilian brain” [for the consonant “R” in the title “R” Complex] and sometimes as “the lizard brain.” It is present in all land vertebrates and is the entire brain of reptiles. It expresses itself through instinctive responses, such as the overwhelming urge to procreate (or at least to copulate), violence, territorial possession, and being a cold-blooded killer. It can assert itself as an autonomous force on later brain development.

The next layer, developing millions of years later, MacLean designated as the “limbic system” or the “paleomammalian brain,” or the mesocortex³⁴ (commonly now called “the mammalian brain,” “the old brain,” or “the emotional brain”). [It includes the hippocampus, amygdala, and cingulate gyrus.] It expresses itself through emotions, the urge to form social hierarchies, play, communication (nonverbal), and care for the young.

Millions more years roll by while the final layer forms: “the nonmammalian brain” (commonly called the neocortex, “the primate brain,” and “the new brain”). This part of the brain, allowing language and the power of reason, was what made the development of humans to be possible. It expresses itself through verbal language, consciousness, self-awareness, and ability to reason. It gives us the power of self-awareness, for which the Scottish poet Robert Burns yearned: for “the power to see ourselves as others see us.”³⁵

Otherwise put: the development of the human brain was by an additive process somewhat like the superimposed layers of a cake.

Each layer of the Triune Brain, so MacLean thought, retained its unique behavioral urges and pressed for their actualization in the present. For example, if we are confronted by a life-threatening situation, the reptilian brain responds by releasing chemical substances that can trigger aggression and even murderous violence. If we merely observe a tragedy, the mammalian brain releases substances that trigger the emotion of sympathy. When we are faced with a decision that should be made by reason, the neocortex is called upon, but the earlier primitive instincts and emotions often overrule it.³⁶

MacLean saw support for his *Triune Brain* in surgical procedures that he performed on the brains of certain types of monkeys. For example, by removing the globus pallidus,” part of what he considered to be the “reptilian complex,” a monkey’s aggressive behavior would cease.

Now comes the proposed cause of the “paranoid streak” that Koestler claims to run through human history. He quotes MacLean as follows³⁷:

While] our intellectual functions are carried on in the newest and most highly developed part of the brain, our affective behavior continues to be dominated by a relatively crude and primitive system. This situation produces a clue to understanding the difference between what we ‘feel’ and what we ‘know’.”

³⁰ “Is Man’s Brain An Evolutionary Mistake?” *Horizon*, Volume X, Number 2 (Spring, 1968), pp. 34-43.

³¹ See the article entitled “Paul D. MacLean” in [Wikipedia](#) (8/15/2020).

³² See Constance Holden, “Paul MacLean and the Triune Brain,” *Science*, New Series, Vol. 204, No. 4397 (June 8, 1979), pp. 1066-1078. MacLean’s central publication reportedly was in 1990, The Triune Brain in Evolution.

³³ Where the part “archi” is the Greek word for “beginning.”

³⁴ Where the “meso” component is the Greek word for “middle” (as in Mesoamerica or Mesopotamia).

³⁵ The poem is entitled, To A Louse.

³⁶ This is analogous to Sigmund Freud’s conclusion that humans are far from the rational beings that they suppose.

³⁷ Koestler in Horizon (Vol. X, No. 2), at p. 37.

Koestler then points out that what we “feel” does not express itself through reason in the neocortex but by reactions of the mesocortex through the viscera. Hence we speak of amazing courage as “having guts,” we react to extreme fear by sweating and by loss of control of the bladder and bowels, and we speak of the loss of a loved one as a “broken heart.”³⁸

Even clearer becomes the implication of MacLean’s understanding of the development of the brain, when Koestler quotes as follows³⁹:

Man finds himself in the predicament that Nature has endowed him essentially with three brains which, despite great differences in structure, must function together and communicate with one another. ... Speaking allegorically of these three brains within a brain, we might imagine that when the psychiatrist bids the patient to lie on the couch, he is asking him to stretch out alongside a horse and a crocodile. ... The reptilian brain is filled with ancestral lore and ancestral memories and is faithful in doing what its ancestors say, but it is not a very good brain for facing up to new situations. It is as though it were neurosis-bound to an ancestral superego.

Koestler then goes on to speak of the similar limitations of the mammalian brain. He sums things up by speaking of the domination of the old brain over the new by saying that “schizophysiology is built into our species.”⁴⁰

MacLean’s interesting proposal that could link the snake of the reptilian brain with the snake in the book of Genesis is nearly impossible for the non-specialist reader to evaluate. In fact, it largely caught popular imagination only through Koestler’s (apparently not widely read) article that is much easier to understand and was especially popularized through the enthusiastic but slightly cautionary approval by the revered astronomer Carl Sagan.⁴¹

More recent Neuroscientists reportedly have not generally accepted MacLean’s theory of the development of a Triune Brain. Their criticisms focus on his theory of brain development and not on the claim of a continued influence by the “reptile brain.” Such critics prefer instead a more wholistic development of the entire brain.

A long and technical review of MacLean is by Terrence Deacon.⁴² Among the more recent proposal that he mentions is one that conceives of “new cortical areas as differentiating out of old areas rather than being created independently adjacent to them. This has the attractive property that new areas [of the brain] should continue to bear some functional and connectional interrelationships with their parent areas” (p. 665).

It indeed seems reasonable to assume that the “reptile brain,” to whatever extent it survives in future development of the whole, could continue to assert its presence and values in the making of decisions. Thereby, the “new brain” may be led to rationalize and justify the base behavior to which the “lower brain” is urging us. As the biblical prophet Isaiah put it about such persons (5:20), “Ah, you who call evil ‘good’ and good ‘evil’!”

My favorite example of this reality comes from my days as a student at Duke Divinity School. A fellow student was chatting with some of us about dating practices and etiquette. He remarked about what he considered the necessity of taking along and being prepared with a pack of condoms. When questioned about his rationale for

³⁸ Even in the Hebrew Bible (ancient Israel), the seat of emotions was understood to be in the abdomen. A striking example can be found in Song of Solomon 5:4. A woman, at the approach of her lover, remarks (literally, as in the King James Version), “My bowels were moved for him.” Modern idiomatic translations (such as the New Revised Standard Version), straining to be as literal as possible, reads, “My inmost being yearned for him.” The slightly older Revised Standard Version, shifting the site of emotions to the modern one, has “my heart was thrilled within me.”

³⁹ *Horizon* (Volume X, No.2), at p. 37.

⁴⁰ *Horizon* (Volume X, No. 2), at p. 39.

⁴¹ *The Dragons of Eden: Speculations on the Evolution of Human Intelligence*. New York: Ballantine Books, 1977, Chapter 3.

⁴² “Rethinking Mammalian Brain Evolution,” in *American Zoologist*, 30 (1990), 629-705. Rather than propose a definitive solution to the difficult problem of brain development, he has two more modest goals: (1) to express skepticism about previous research methods and (2) to outline alternative approaches. A much briefer and understandable critique of MacLean may be found in Daniel

Toker, “You Don’t Have a Lizard Brain” at the website <https://thebrainscientist.com/2018/04/11/you-dont-have-a-lizard-brain/>

this preparation, he spoke of the possibility of sexual activity. Concerning this potential happening, he spoke of sexual arousal of his date. It was problematic, he said, to help create such a situation and then not do anything to relieve it. It was “immoral,” he said, to contribute to such arousal and leave it unfulfilled.

“How self-serving for you,” we might say to this student! In this case, it appears that the ancient serpent (with its similar appearance to male physiology), had overwhelmed his better sense.⁴³

Clever indeed is the serpent! Modern humans arrogantly refer to themselves as homo sapiens (“wise persons”). They rejoice and consider themselves to be educated, rational, and sophisticated. Yet, they unknowingly hear the serpent ask, “Did God really say...?” Indeed, to expand a quotation above, “It is not so much that it really happened to historical ancestors named Adam and Eve as that it is always happening to every adam [human being].”

The possible consequences of a modern seminary education may be either a “conservative” one (= literal, “Yes, there really was an ancient talking snake”), or it may be an “enlightened” one (= “What a quaint illustration of how ancient people thought!”). However, to repeat another quote, “‘It is, it is, it is,’ regardless of how much we want to say only, ‘It was!’”

That aside, the crafty serpent smiles and says to itself, “Gotcha!!”

⁴³ Some biblical scholars, both old and recent, have connected the theme of acquiring “knowledge” in the Garden of Eden episode with the discovery and beginning of sexual knowledge and activity. It might be noted that the German word for “snake” (schlange) has also become a slang term for the male sexual organ (“schlang”).