

**The Creation of Adam in the Late Stone Age:
Klein's Giant Leap Forward Hypothesis and the Biblical
Creation of Man**

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Abstract: Klein's Giant Leap Forward hypothesis utilizes archeological records to suggest that humans have undergone a substantial leap in thought, culture and art circa fifty thousand years ago. In this paper I refer to the historical Christian understanding of the *imago dei* set forth by Irenaeus, Aquinas, Luther, Calvin and Barth in order to show that Klein's theory actually describes the biblical Creation of Man.

Keywords: Richard Klein, Giant Leap Forward, imago dei, Creation of Man, Theological Critical Realism, Constructive Theology, Thomas Aquinas, Martin Luther, Karl Barth.

Introduction

What can science tell us about the creation of man? Archeological research provides ample information about the existence of multiple human species in the past and the subsequent disappearance of all but one of them. With the existence of so many species, when can we place man's actual creation as described by scripture? Are we the original humanity created by God, or a development thereof?

By utilizing our theological and religious conceptions of human creation in the Creator's image, I contend that one particular human species was the result of scriptural creation and that all previous human species were merely a part of the animal kingdom created by God prior to the creation of man. The understanding of the image of God implied different endowments throughout Judeo-Christian history and was understood differently by various critical Christian thinkers. In this essay I aim to show that part of that historical

understanding of the *imago dei* corresponds to human traits which, according to Richard Klein's Giant Leap Forward hypothesis, have abruptly appeared some fifty thousand years ago in a human species. Furthermore, as per biblical record and archeological remains, this shift in human thinking - attributed by Klein to changes in genetic and consequently, neural structures - brought about the rapid expansion of modern human populations by providing man an evolutionary advantage. For this reason, I claim that the period of 50 thousand years ago in which these changes took place constitutes the timing of the actual creation of man as described by the Bible. My aim is not to assess the validity of Klein's theory: I assume its truthfulness and build upon it using the Christian dogma of the creation of man.

I shall first elaborate upon Richard Klein's theory of the Giant Leap Forward (part 2) before reviewing some historical understandings of the biblical *imago dei* (part 3). I will then conclude by explaining how the archeological findings leading to Klein's Leap hypothesis correspond to the *imago dei* and why that allows us to understand the Leap as the creation of man (part 4).

Richard Klein's "Giant Leap Forward" Hypothesis

Popular beliefs about the origin of the first humans place their appearance at about 6 million years ago. Between that time and 2.5 million years ago, many bipedal species appeared with ape-like brain sizes and features.¹ The first human species whose brain size was larger than that of an ape was the first to invent stone flaking circa 2.5 million years ago. Subsequent species used that same ability to construct stone tools which enabled them to add animal flesh and morrow to their mostly vegetarian diet.

¹ Klein, *The Dawn of Human Culture*, 7.

This improved ability to extract energy from the environment led to the first human expansion out of Africa and into Europe and Asia. This expansion took place some two million years ago and is termed the first human migration out of Africa. Scientists believe the first species to emerge was the *Homo ergaster*. The subsequent populations' geographical spread led to their differentiation into different physical types about one million years ago. However, the human type we belong to (the "modern" human) evolved exclusively in Africa while the other types that had spread out of Africa and into Euroasia earlier, have all disappeared.² Though those first African humans were anatomically identical to us, some scientists contend that they lacked the very thing that defines our being and society - the ability to think abstract thoughts.

The human species that inhabited Africa between 100ka and 50ka (= 50 thousand years ago) were anatomically modern or close to modern, but behaviorally similar to the Neanderthals and various other non-modern humans. African archeological findings show a significant, qualitative change to this species 50ka to 40ka. Following this period, archeological remains show findings that are indistinguishable from the henceforth hunter-gatherer societies. Before those humans, behavior changed very slowly and in lockstep with human anatomy, while since that period anatomy remained stable and behavior changes accelerated tremendously.

Scientists such as Stanford university Biological Anthropologist Richard Klein, among others, believe this particular trait for abstraction to be the result of an abrupt genetic change. Klein proposes a hypothesis which he terms the "Giant Leap Forward." The leap took place circa 50ka and underlaid the third human expansion out of Africa. The most prominent feature of this leap is the appearance of "modern" human traits such as the ability to form complex social structures, culture, rituals, standardized bone artifacts, and art. For instance, the

² *Ibid*, 8.

humans living 50ka were the first to dig graves that imply a ritualistic burial.³ In addition, the explosion in artifactual diversity during that time in Eastern Africa indicates the first appearance of ethnographic cultures and ethnic groups who were conscious of their own identity.⁴

The new traits found in the prehistoric records from circa 50ka include “the burgeoning of unequivocal art and personal ornamentation ... [which] suggests a capacity for abstract or ‘symbolic’ thought.” These findings relate to a dramatic increase in human population numbers which brought about the expansion out of Africa and seemed to have increased human biological fitness (the ability to survive and give birth to fertile offspring). The change was not merely a historical and cultural one, but a profound evolutionary leap.⁵ Klein summarizes the specific changes to population and behavioral traits which took place during the period of 50-49ka⁶:

- *Substantial growth in the diversity and standardization of artifact types.*
- *Rapid increase in the rate of artifactual change through time and in the degree of artifact diversity through space.*
- *Oldest indications for widespread shaping of bone, ivory, shell, and related materials into formal artifacts (“points,” “awls,” “needles,” “pins,” and others).*
- *Earliest appearance of indisputable art and personal ornamentation.*
- *Oldest undeniable evidence of spatial organization of camp floors, including elaborate hearths and the oldest indisputable structural “ruins.”*

³ *Ibid*, 231.

⁴ *Ibid*, 233.

⁵ *Ibid*, 269.

⁶ *Ibid*, 270.

- *Oldest evidence of the transport of large quantities of highly desirable stone raw material over scores or even hundreds of kilometers.*
- *Earliest secure evidence of ceremony or ritual, expressed both in art and in relatively elaborate graves.*
- *First evidence of human ability to live in the coldest, most continental parts of Eurasia (northeastern Europe and northern Asia).*
- *First evidence of human population densities approaching those of historic hunter-gatherers in similar environments.*
- *First evidence of fishing and other significant advances in human ability to extract energy from nature.*

Klein recognizes the leap as a unique phenomenon, signifying a profound change in human mental constitution, and describes its resulting behavior as markedly differing from the behavior characterizing humans before it. Those changed behavior patterns first appear in East Africa but later exist in western Asia and eastern Europe between 45ka and 40ka,⁷ corresponding to the third African exodus.⁸ Those traits seem to have allowed humans of that era a competitive evolutionary advantage which enabled them to replace their non-modern contemporaries.⁹

Researchers are still unsure whether these social changes result from behavioral changes that have accumulated gradually during the period between 120ka and 50ka or whether they are the result of a relatively abrupt change that took place about 50ka. Klein believes the change resulted from

⁷ Bar-Yosef O. 2000. The Middle and early Upper Paleolithic in Southwest Asia and neighboring regions.

⁸ Mellars PA. 2006. A new radiocarbon revolution and the dispersal of modern humans in Eurasia. *Nature* 439:931–935.

⁹ Klein, *Out of Africa and the Evolution of Human Behavior*, 270.

a rapid genetic change, which led to a different neuronal constitution in human brains. He states that the genetic explanation better explains the archeological record of the third African expansion that took place during that period.¹⁰ The claim that advanced social and cultural behavior has evolved gradually, driven by demographic change, does not explain why those behaviors evolved when they did or why they evolved at all.¹¹ Therefore, Klein claims that the most plausible explanation for such traits' appearance is a genetic one. He cites research claiming that between 120ka and 70ka human population density in Africa was very low. After 60ka, humans became archeologically invisible, probably owing to significantly reduced population numbers during a hyperarid spell in the middle of the last glaciation period.¹² The number of humans living during the period of 50ka was no more than 10,000 breeding adults, and it is only following the above mentioned behavioral changes that the population started to grow and move out of Africa.

Klein goes even further and proposes that the genetic shift which occurred at that time changed the neuronal constitution of human brains. Before this time, morphology and behavior evolved in tandem so that consecutive species present different behaviors and progressively larger heads, which may indicate larger brains. However, during the period in question, no exterior anatomic change can be detected, yet behavior (as seen in archeological records) changed to include new cultural and social elements. This change is best explained, according to Klein, by a change in brain neuronal structures among the human species living in that period, which afforded them the ability to innovate.¹³ To support his claim, Klein cites clinically-oriented research pointing to possible genes that may impact

¹⁰ *Ibid*, 267.

¹¹ *Ibid*, 271.

¹² Deacon HJ. 1995. Two late Pleistocene-Holocene archaeological depositories from the southern Cape, South Africa; Beaumont PB, Vogel JC. 2006. On a timescale for the past million years of human history in central South Africa.

¹³ Klein, *Out of Africa and the Evolution of Human Behavior*, 271.

cognition and communication. He hopes that further elaboration of said genes' function may give us a better understanding of how human brain anatomy changed fifty thousand years ago.¹⁴

One of the findings indicating these new traits among late stone age humans was discovered by the University of Illinois anthropologist Stanley Ambrose while working in western Kenya on a prehistoric rock shelter called Enkapune Ya Muto, or the "Twilight Cave." Among the stone tools found at the site, Ambrose also discovered some six hundred fragments of ostrich eggshells, thirteen of which were fashioned into disk-shaped beads. This significant finding tells us that circa 40 thousand years ago, a person toiled to produce these ornamental artifacts instead of going about their daily business of acquiring nourishment or reproducing. The beads had to be painstakingly ground until only a delicate ring remained. This activity constitutes an example of ornament making and one of the earliest signs of culture. The beads were most probably later used in a barter system, exchanged for food and protection from neighboring tribes; an activity also witnessed in the modern-day !Kung people of Botswana. The beads served as symbols of reciprocity between neighboring groups of people in case of a natural disaster which disrupted the acquisition of food, functioned as tokens of mutual obligations - a prehistoric "insurance policy" which afforded a social security system, and represent a new development among the humans of 50-40ka eastern Africa.¹⁵ Klein calls this investment of ornamental objects with meaning the "dawn of modern human behavior," and suggests that within the grand scope of human evolution, such symbolic behavior is a recent innovation. He makes the

¹⁴ Dorus S, Vallender EJ, Evans PD, Anderson JR, Gilbert SL, Mahowald M, Wyckoff GJ, Malcolm C, Lahn BT. 2004. Accelerated evolution of nervous system genes in the origin of Homo sapiens; Fisher SE. 2006. Tangled webs: tracing the connections between genes and cognition.

¹⁵ Klein, *Out of Africa and the Evolution of Human Behavior*, 12-14.

bold leap and declares that, unlike their predecessors, these modern humans were *self-aware*.¹⁶

Creation in the Image of God¹⁷

Then God said, "Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth."

*"So God created man in his own image, in the image of God he created him; male and female he created them."*¹⁸

Most theologians who interpreted these verses understood them as signifying a metaphysical similarity between the human soul and God's being.¹⁹ Patristic, medieval and modern interpreters asked: "In what way are humans like God and unlike animals?" Middleton quotes David Cairns as saying that "In all the Christian writers up to Aquinas we find the image of God conceived as man's power of reason."²⁰ This is the effect of the lingering influence of Platonism on Christian Theology.²¹ The view of reason as the prime component of the *imago dei* contends that advanced human cognitive abilities are common to God and the creature and that Genesis 1 refers specifically to human rational thinking as the ability the lack of which separates man from beast.

Irenaeus (c.130-c.200) believed that the image of God referred to man's capacity for rationality and free will. He was heavily influenced by the classic Greek philosophers Plato, Aristotle

¹⁶ *Ibid*, 14.

¹⁷ This section follows Hoekema's historical survey in *Created in God's Image*.

¹⁸ *Genesis* 1:26-27 ESV.

¹⁹ Middleton, *The Liberating Image*, 18.

²⁰ Cairns, *Image of God in Man*, 10.

²¹ Middleton, *The Liberating Image*, 19.

(who called man's intellect divine and described it as the spark of divinity) and the Stoics, who taught that man's reason is his highest and most notable characteristic.²² Following Irenaeus, Thomas Aquinas (1225-1274) also held that God's image in man manifests in the latter's intellect and reason. He added that the rational ability of man resides exclusively in the mind and exists in three stages: the first is his ability to understand and love God (all possess this ability), the second is his choice to know and love God imperfectly (the Just make such a choice), and the third is when man knows and loves God perfectly (the Blessed attain this).²³ Thomas was aware that man can never truly know God, but he notes that reason enables man to know that God is the first and preeminent cause of all things, and the light of faith and prophecy aids this knowledge.

During the Reformation, different voices attempted to replace or supplement the metaphysical understanding of Genesis 1 by the image of God being man's ability for ethical conformity and the obedient response to God. The first to do so was Martin Luther (1483-1546), who rejected the view that the image of God has a metaphysical similarity to rationality and saw the *imago dei* as an image composed of righteousness lost through sin and restored through the sacrifice of Christ.²⁴ Luther refused to distinguish between the two terms 'image' and 'likeness' used in the Bible, unlike some of his predecessors. He claimed that both designate the original righteousness and moral excellence God has endowed man with and which he has lost in the Fall. The *imago dei* consists of the godness and holy purity man possesses, which are similar to God's attributes. However, following the Fall, man has lost those characteristics, and he can only gain them back through redemption by faith in Christ.²⁵ However, Luther did distinguish between humankind's private image which consists of the mentioned

²² Hoekema, *Created in God's Image*, 55.

²³ *Ibid*, 59.

²⁴ Luther, "Lectures on Genesis 1-5", in *Luther's Works*, 1.55-56.

²⁵ In support of this assertion, Luther quotes *Col* 3:10 and *Eph* 4:24.

moral righteousness, and his public image consisting of his physical attributes.²⁶

John Calvin's (1509-1564) understanding of the *imago dei* resulted in a combination of the metaphysical view of God's image with Luther's ethical interpretation. Calvin differentiated between the broad and narrow understandings of the *imago dei*,²⁷ an approach which followed Irenaeus in making the distinction between the image of God as referring to human rationality and freedom, and "Divine Likeness" which designates the ethical dimension thought to be common to God and man.²⁸ According to Calvin, the image of God exists in man's soul, which itself resides in the mind and heart, and includes his integrity, true knowledge, righteousness, and holiness (following Col 3:10 and Eph 4:24).²⁹ Since man is endowed with the image of God, continues Calvin, we must treat all with kindness and love. Calvin's assertion paves the way to a system of morality, which exist alongside the view of *imago dei* as human reason and rational thought. He insisted that man's creation in the image of God demands that we treat each other with respect, love, and even in a sacrificial way.³⁰ Hoekema does not explain what he means by "sacrificial," but it is clear that he ties moral and ethical behavior with the image of God, albeit not referring to morality as an element of humanity's *imago dei*.

Moving forward to modern times, Karl Barth (1886-1968) attempted to root his understanding of the *imago dei* in a somewhat different exegesis of the book of Genesis. He contended that God's image does not refer to man's intellect and reason but to the human capacity to respond to God's word in

²⁶ Henri Blocher, *In the Beginning: The Opening Chapters of Genesis*, 81; Brunner, *The Christian Doctrine of Creation and Redemption*, 76.

²⁷ Calvin, *Genesis*, 91-97.

²⁸ Middleton, *The Liberating Image*, 21.

²⁹ Hoekema, *Created in God's Image*, 67.

³⁰ *Ibid*, 69-70.

its existence as male and female.³¹ Barth refused to equate the human and the divine and use an anthropological description of the human being as the locus of God's image. Instead, Barth utilized Genesis 1:27 as a key verse, hinting at the nature of the *imago dei*: "So God created man in his own image, in the image of God he created him; male and female he created them" (RSV). This verse led Barth to believe that being created by God in His image means an existence rooted in confrontation: the "juxtaposition and conjunction" of man and woman which tells us about their relationship with the Divine. Creation as man and woman is the dominant enabler of confrontation between the genders: each can be both an "I" and a "thou" to the other. This I-thou confrontation concerns the relation between man and woman, but also between any two individuals regardless of their gender and between humanity and God.³² There exists an "I-thou" confrontation between each of us and the Lord Himself, and a creature created able of such a relationship with individuals of his own kind is also able of a relationship with the Lord.

Barth spoke of two kinds of relationships that make up human ontology and mirror the I-Thou relationship within the Trinity. In his own words: "The relationship between the summoning I in God's being and the summoned divine Thou is reflected both in the relationship of God to the man whom He has created and also in the relationship between the I and the Thou between male and female, in human existence itself."³³ According to Barth, God has created man for this very purpose: to be in a covenantal relationship with Him, as well as with his fellow human beings. That is the reason why the Lord created man capable of existing in perpetual I-thou relationships with

³¹ Barth, *Church Dogmatics* 3.1.194-97.

³² Hoekema, *Created in God's Image*, 75.

³³ Middleton, *The Liberating Image*, 23, quoting from *Church Dogmatics* 3.1.196.

Himself and others. This ability, the I-thou relationship, is an essential aspect of man's existence, and he cannot lose it.³⁴

This view of God's image in man facilitates its understanding not as a given state but as a way of living. God has created us in His own image and this is evident in our behavior: we can act toward our fellow human beings the way God acts toward us, and be in fellowship with others as we can be with God. It is not just a characteristic of our being, but also of our actions.

This historical overview of the concept of *imago dei* is by no means an exhaustive one. However, I have presented the main overarching themes and we are now able to discuss whether we can find those themes in human archeological findings from 50ka, and whether they have first appeared at that time, indicating the period of man's creation.

Discussion: How the Giant Leap Forward Constitutes the Endowment of *imago dei*

In this section I intend to show that the findings indicating the increase in human cognitive capacities that have led Klein to the formation of the "Giant Leap Forward" hypothesis also indicate the approximate timing of man's creation by God as described by the Bible. I will do so by explaining how the very traits that appeared during circa 50ka were the same traits man has been endowed with when God created him in His image. To this end, I shall compare the archeological findings cited by Klein with the various historical understandings of the *imago dei*, as listed in the preceding chapters.

The trait that most significantly coincides with an understanding of the *imago dei* is human reason. Many of the findings support the abrupt appearance of a new, qualitatively different type of human reasoning circa 50ka. Granted, we see signs of early advances in human thought even before 50ka: paleontological records show that the larger the skull of a given

³⁴ Hoekema, *Created in God's Image*, 76.

prehistoric human species, the more advanced the technology that species was able to produce. This is evident, for instance, in the first species with brains larger than that of an ape who could produce stone flakes suitable for obtaining animal flesh and marrow. However, these primitive technological abilities only progressed as the brain grew in size. We can view such advancement as part of a natural progression belonging to God's creation of the animal world. The significant advancement in human development came about via a qualitative change in neural mechanisms producing a different type of mental ability, one able to display behavioral traits that were completely absent from the previously described succession of human brain sizes, and it could do so without any further changes to skull sizes.

Those significant advancements in thought and behavior (culture, ritual, art, ornamentation, artifactual standardization) brought about the ability to construct completely different societies and as I contend, suggest a divine intervention described by the Bible as the creation of man. Nor did these advancements disappear rapidly - those were the behavioral changes that brought about our modern society with its complex societal structures, philosophy, art, and technological achievements. The human species of 50ka never went back to living the way its predecessors did, which was very similar to the human species that previously spread to Eurasia but disappeared completely. Klein is adamant in stating that the behavioral advancements we witness in archeological relics constitute the appearance of symbolic and abstract thought which lacked in previous human species and constitute a profound evolutionary leap.

The specific findings from the period in question correspond to the appearance of an entirely new type of human thought, which in turn corresponds to the way Christian thinkers understood creation in the image of God for more than a millennium. The increase in the diversity of tools during that period indicates advanced problem-solving abilities and the

ability to abstractly envision the function of tools and cultural artifacts, the use of which for hunting and fishing led to better extraction of energy from animal products and indicates a deeper understanding of one's environment. Such an ability corresponds to a heightened intellect. The camp floors' organization which indicates the assignment of functionality to various domestic spaces and the ability to fashion technological solutions that enable life in very cold areas both correspond to an increase in abstract thinking and planning. These findings indicate a level of sophistication that did not exist beforehand, and which never disappeared - it continued to develop and still does. Klein stresses that those behaviors are not evident among earlier species and indicate a sudden leap in human mental abilities. Such a sudden appearance of abstract thought corresponds to the Biblical account of man's creation, which took place as a unique event. God created man in what the Bible describes as a period shorter than a day and not as an ongoing process. This description corresponds to the relatively sudden change in human behavior described by Klein and characterized as a leap because of its sudden appearance circa fifty thousand years ago.

Despite human species existing before 50ka, I contend that the human whom God created appeared at that time and that all prior human species belonged to the animal kingdom, which was created earlier according to the biblical account.³⁵ I also contend that God "infused" His image into a previously existing species, thus making it into a modern human. This hypothesis follows from Klein's assertion that what caused the Giant Leap Forward was a change in the genetic composition of prior human species that brought about a change in its neural structures enabling dramatically more advanced societal and cultural structures to emerge. This assertion rests on the fact that no anatomical changes can be observed at that period, further supporting the view that the *imago dei* is not a physical

³⁵ "It is also clear that, in distinction from other creatures, only man has been made in God's image." Hoekema, *Created in God's Image*, 54.

trait. David Cairns has remarked that up to Aquinas, all Christian thinkers understood the *imago dei* as man's power to reason, and we can see it fits well with Klein's archeological Leap hypothesis.³⁶

We turn now to Luther, Calvin and Barth's understanding of the *imago dei* and how it corresponds to the findings leading to Klein's leap theory.

“Culture encompasses religion, food, what we wear, how we wear it, our language, marriage, music, what we believe is right or wrong, how we sit at the table, how we greet visitors, how we behave with loved ones, and a million other things.”

- Cristina De Rossi, an anthropologist at Barnet and Southgate College, London.³⁷

Building on De Rossi's definition, I add that culture is the activities that strongly utilize the notion of one person being important to another, or one group of people being viewed by another as being worthy to receive treatment that necessitates behaviors unrelated to the direct acquisition of nutrition or procreation. Such behavior patterns are the ones we find have emerged around 50ka.

This mutual view of human beings as entities to which one should behave in such a way encompasses, I claim, both the ethical view of the *imago dei* presented during the Reformation as well as the “I-Thou” relationship offered by Barth in the 20th century. The ethical approach necessitates both the confrontation between people described by Barth and the mutual view that the person or group existing alongside one are also a product of divine creation. Such individuals are worthy

³⁶ Cairns, *Image of God in Man*, 10.

³⁷ <https://www.livescience.com/21478-what-is-culture-definition-of-culture.html>. Accessed Nov. 8th, 2020.

to receive and understand acts that fall within the realm of culture and understand products of one's toil which we characterize as art and ritual.

Furthermore, one needs to be aware of one's surrounding individuals as able to reciprocate the "I-thou" relationship and be worthy of an ethical treatment in order to create such artistic artifacts as have been found, and to perform societal and cultural rituals the remains of which we find in archeological record. Therefore, I see the Reformation views of Luther and Calvin, as well as Barth's reciprocal view, as mutually supportive. If we find evidence of one, we find evidence of the other as well.

Art and culture derive their meaning predominantly from the audience who experiences them, and this has value for the person who creates such artifacts or rituals. The same is true for personal ornamentation: one wishes to create a particular image in the eye of one's beholders. Hence, those experiencing the sight of said ornamentation need to be regarded as being able to understand the meaning of the ornament and be regarded as sentient beings of roughly the same stature as the person wearing the ornaments. A clear "I-thou" relationship exists in this transaction, and the mutual understanding that ensues among the confrontational parties is one that facilitates an ethical engagement among both. The same applies to ritual as well: most rituals convey a message to all persons involved, and often the message is to be transmitted from the group of individuals performing the ritual to all those watching or listening to it. This ability assumes an appreciation of the "other" as a proper person, to be treated in a particular way. It is especially true in the case of ritualized burial and the elaborate graves (which constitute artistic artifacts), where the individuals for whom the ritual is performed may be among the deceased person's relatives or community.

The presence of an ethical treatment between groups and of an "I-thou" confrontation between them is most evident in the

findings of Stanley Ambrose at the Enkapune Ya Muto site. The beads Ambrose found function as reciprocal markers, indicating that the person who manufactured them is capable of abstract thought, and hence that they should be treated ethically as one of God's sentient creatures. The beads also signify that their makers are capable of ethical behavior and that the help afforded in exchange for the beads is reciprocal, hence the receiving party is also able to act ethically and provide assistance on rainy days in return for being helped at the time of the transfer of beads. In this way, a social security system is formed, based upon the recognition that all members possess the necessary divine endowments allowing them to participate in such an arrangement. Those traits are either virtue itself (as per Luther's understanding of the *imago dei*) or a reasoning ability bestowed by the Lord and indicating that the beads' makers are to be treated ethically.

Klein's assertion that unlike their predecessors, these modern humans were self-aware implies the appearance of the "I" component of Barth's understanding of the *imago dei*. Being aware of oneself shows that every individual of a given group perceives him or her -self as a conscious agent acting within that group and that they are surrounded by different conscious agents who are similar in certain ways and different in others. Self-awareness solidifies the understanding that interpersonal relations exist between separate individuals, thus establishing the "I-thou" relationship between them, and this corresponds to the appearance of the *imago dei* within the group, indicating their new creation by the Lord according to the Barthian understanding of the *imago dei*.

Though we know of several expansions out of Africa in paleontological history, the third African migration that took place 50ka owing to the leap in human cognition is different. The human descendants following this expansion spread throughout the world and contributed to the extinction of other human species in ways that are still unclear. Their most recent descendants are us, with our elaborate societies, systems of

governance, art, culture, science and technology. Unlike previous expansions out of Africa by different human species, we have endured, and this corresponds to our understanding of human expansion following the endowment of man with the image of God:

“And God blessed them. And God said to them, “Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth.”³⁸

This verse corresponds to the third expansion out of Africa and the rapid increase in population size which followed the Giant Leap Forward. The subsequent population’s size remained constant during the hunter-gatherer period and increased dramatically since, further differentiating it from the previous expansions out of Africa conducted by prior human species.

To conclude, this essay points out a plausible timing of God’s creation of man that corresponds to Richard Klein’s “Giant Leap Forward” hypothesis. I have examined the archeological findings that led Klein in forming his theory and compared them to the historical understanding of the traits humanity has been endowed with following its creation by God, collectively termed *imago dei*. In the process, I have shown the similarity between the archeological and biblical records, suggesting that Klein’s Leap constitutes man’s divine creation.

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