Origins of stone worship: From Jasperite pebble "Makapgo" dating 3mya to the twelve pillars of Moses, Warren Fields and Stonehenge, Newgrange Tomb, Gobekli Tepe, the forgotten megalith monument Nabta Playa, Stone Circles in Japan, Australian Aborigine stone circle, Native American stone wheels



Photo of the "Stonehenge" megalith monument in England (2600-2400 BC) by Mitch Hodge unsplash Preamble: Charles E Peck Jr academia.edu https://independentscholar.academia.edu/CharlesPeckJr Followers 2,052; Engaged Readers 4,176; Total Essay Views 466,223 (lots of spam-bots w/ some from universities) Point of Order 1: There is a correlation between Trump's Hate Speech and the horrific increase in violence in the USA. Most horribly, 800+ children-teenagers have been killed in US school shooting (excludes colleges). The recent assassination of United Health CEO confirms Piazza's conclusion "I find that hate speech by politicians is a significant, substantive, driver of domestic terrorism." Studies by Hodwitz & Massingale; Piazza; Nacos, Shapiro, Bloch-Elkon, consistently indicate a correlation between hate speech and increased violence. 73+ school shootings for the last 4 years. The surge began in 2015 – when Trump entered politics. 2024 CNN "82 school shootings." In contrast there has been only 1 school shooting in Spain & 2 in the Philippines in their entire history. It is distressing "to me" many American leaders don't seem to care. Several connections have said it should be the top priority Point of Order 2 Censorship: Years ago, Carole Cusack, author & Australian sociology prof observed: "Defining everything you do as spam is simply unacceptable!" On FB recently I had four essays deleted: Selective Attention; T'nalak - Native American dream folklore; music (believe it or not); native American lunar calendar. Academia.edu my international essays are not reaching their audience, Visitors from France, Italy, Spanish speaking countries, & the Philippines have declined -dramatically. That started last September which coincides with anti-Trump essays I posted about the correlation between Trump's hate speech and violence in USA with over 800 children-teenagers killed in school shootings. I send evidence of a problem - academia-edu replies "There ius no problem"

Wolfgang Pauli "To me it seems the most important and exceedingly difficult task of our time is to work on the construction of a new idea of reality." It would seem "our reality" isn't working all that well. Einstein: We cannot solve our problems with the same thinking we used when we created them.

Brief overview of megaliths and rock worship

From the earliest times of human prehistory, formless stones have been revered and worshiped with the belief that these stones possess an intrinsic divine energy or force. The worship of stones and megaliths was widespread throughout the world, on every continent, including Africa, as well as Australia. Stone worship often took the form of megaliths - like symbolic temples, so to speak - from the Mesolithic period, then throughout the Neolithic, as well as the Chalcolithic period and, finally, until the age of copper.

In Europe there are between 35,000 and 50,000 stone structures of one kind or another. In Ireland, there is a variety of circles, cromlechs, dolmens, menhirs, Logan stones, pillar stones, "oracle" stones (Ireland had numerous prophetic stone idols such as Lia Fail on the hill of Tara), passage tombs, burial mounds, kurgans, cairns or galgals, alignmententine. stones, Guardian stones, Omphalos or Navel of the Earth stones (the Oracle of Delphi had one), or "oracle" stones. As a point of information, in my research – while I found no stone megaliths in the Philippines, I did stumble across "thunderstones!" in "prehistoric" Philippine culture as well as isolated "Ato" structures similar to dolmens.

To give you an idea of the extent of the practice of stone worship in the world, although most people will probably be surprised that a large number of megalithic burials are found in Northeast and South Asia. Today, the Korean Peninsula has the largest number of sites, with estimates ranging from 15,000 to 1,000,000 megalithic burials & dolmens in the south. In addition to this, the Korean peninsula - contains an incredible 40% of the world's dolmens - which is a megalith created by placing a large capstone on top of two or more supporting stones thus creating a chamber - or tomb because dolmens are often used as a tomb or burial chamber. Interestingly, megalithic burials are also found in China in Liaoning, Shandong, and Zhejiang, parts of Taiwan, in Japan in Kyusu and Shikoku, and in Vietnam's Đong Nai province. In fact, some remnants of the megalithic tradition can still be found today on the islands of Sumba and Nias in Indonesia.

For perspective, the Mesolithic age is generally understood to be from 10,000 BC to 8,000 BC. The oldest monumental megalithic site is the prehistoric site of Gobekli Tepe in Asia Minor in Turkey. for now. Gobekli Tepe, which is enormous and consists of 200 pillars in about 20 circles, was built in 9500 BC and predates any other monolithic site by thousands of years. However, there is the Wappara Stone Circle – much less complex – but built around the same time. Also, the first jewelry, carved shale pendants - or amulets/talismans - date from the Mesolithic Period. Engraved pendants outside of England and Scandinavia are relatively unknown. Neanderthals and other ancient people used natural amulets at funeral

The Consciousness Factor: Consciousness as an Evolutionary Force and the formation of Groups The Materialist Problem:

Perhaps Jeremiah Reyes has the best "description" of the materialist problem. Jeremiah Lasquety-Reyes, author & widely quoted expert on Filipino ethics I quote quite often said, "Hi Charles, I completely agree with you that this extreme adherence to materialism is too restrictive and limiting, and frankly fails to capture so many richer aspects of human experience and

psychology. It leaves the field of psychology all the poorer. I am myself looking for a framework that helps me confront it. Partly, I think an alternative metaphysics is needed, one that respects the reality and meaning of things like love, relationships, and the profound reality of other people as people and not just as a compound of atoms, chemicals, and neurons firing. Glad that we're on the same page!" Thjat6 is very true. Half of human consciousness is not strictly quantifiable: art, music, dreams, imagination, creativity, as well as ideals. Kant pointed out "freedom" is a complex symbol beyond quantification.

To begin with, as Elzbieta Halas states, symbols "condense numerous meanings" and point to realities beyond their literal representation. Balaganapath emphasizes that "The meanings that these symbolic forms transmit are complex. Instead of standing for a single referent, they evoke a variety of meanings, some of which may be ambiguous." *It is for that reason that – historically - symbolism got sidelined and marginalized*. Rollo May, an American existential psychologist and author, observes. "Neither term, "symbol" or "myth," even appears in the index of the standard psychology textbooks." Elzbieta Halas states: "Too often symbolism is thought of as an epiphenomenon, a phenomenon that is derivative of what are considered to be more important factors, such as business, resources, power, organization, etc. which are allegedly 'objective' facts."

Yet, as Confucius, a Chinese philosopher and spiritual leader who lived from 551 to 479 BCE, observed long ago, "Signs and symbols rule the world, not words or laws!" Modern politics and religion have proved Confucius right. Ralph Waldo Emerson said, "We are symbols, and inhabit symbols." As Iain McGilchirst emphasizes, the "rigid adherence" to quantification limits and restricts and limits analyses" The complexity of symbols and symbolism leaves symbols outside the scope of Materialist methods. That would be doubly true of human consciousness. So, the approach of consciousness as an evolutionary force is to the best of my knowledge untried. From that perspective the consciousness factor would play a significant role in the construction and purpose of megalith stone monuments.

Human Consciousness and Group Formation – Throughout the tens of thousands of years of spiritual and religious groups – it would only stand to reason that one function of religions is to form groups.

"Stonehenge Had a Secret, Second Purpose All Along What if the mysterious monument wasn't just meant for astronomy? Stonehenge may have had a second purpose beyond its well-documented astronomical uses."

A recent addition to Stonehenge is a new study from experts at University College London (UCL) and Aberystwyth University suggests that Stonehenge might've served a similar unifying purpose beyond its well-documented astronomical uses. This breakthrough comes from the discovery reported earlier this year that the six-ton Alter Stone—the recumbent central megalith at Stonehenge—actually originated from Scotland and not Wales, as previously believed. (Popular Mechanics, by Darren Orf Published: Jan 02, 2025) "Stonehenge may have had a second purpose beyond its well-documented astronomical uses...that the monument may have been built in part to unify neighboring people groups in and near the area of its construction. This

idea comes primarily from the fact that many of the stones used in the construction of Stonehenge hail from various locales around the United Kingdom.

In context of stone worship, recent research appears to indicate larger numbers of people gatherings at get-togethers than earlier suspected - such as at Vespasian's Camp near Stonehenge (CA 271) and Star Carr (CA 282) are increasingly being detected by archaeologists. These get-togethers appear to have involved far greater numbers of people than previously suspected."

Furthermore, Andrew B. Powell in his assessment of the Irish Newgrange Passage Tomb in comparison to other Irish Passage Toms observes, "The scale of megalithic tomb construction in Ireland during the Neolithic is clear evidence that important sets of social relations, including rights of succession to symbolic and material resources, were ideologically legitimized in the context of mortuary ritual. The various tomb types found in Ireland — the passage tombs, court tombs, portal tombs, Linkardstown cists, and wedge tombs, representing different domains of ritual practice and discourse — are each characterized by specific symbols and forms. In a competitive social environment, where economic and political power derived increasingly from the possession of ritual power, ever tighter control was exerted over the content of the passage tomb ritual discourse, the inherent ambiguity of its symbolism being exploited in order to legitimize the possession of that power."

#### Models of social-moral order

Preamble: Actualities and models

- "Proper knowledge maps or mirrors the actualities of the real world!!" K Gergen:
- "To understand something, whether we are aware of it or not, depends on choosing a model!" I McGilChrist
- Real-world context-evidence which Kant, McGilChrist and Sherif insist is vital for a valid theory.
- In religious and spiritual beliefs people are the only real "actualities not artificial abstractions like the supernatural
- 1. Erica Hill's Model as "dynamic social behaviours embedded within the context of daily life of arctic hunter gatherer and beliefs in animal spirits as "human relations with the natural world"; "Their thoughts and actions established and maintained relationships with prey animals and may be more productively conceptualized as dynamic social behaviours embedded within the context of daily life than as privileged ritual acts." and the beliefs focused attention (evolutionary adaptive selective attention) of the community on the activity of hunting-gathering of animals.
- 2. Emile Durkheim's model: "The forces before which the believer bows are not simple physical energies, such as are presented to the sense and the imagination; they are social forces,"
- 3. Ramon Reyes Model from prehistoric societies in the Philippines: "In sum, one social and moral order encompasses the living, the dead, the deities and the spirits, and the total environment."

Elzbieta Halas Model of Social Symbolism: Halas states that "groups exist only on the ground of common symbolization of their members." "The processes of symbolization...create a social order, express meaning and control actions. Symbols are not autonomous. They constitute tools of action, indicating and dramatizing social relations"

- 4. D. Balaganapath observes: "The basis of every culture and every identity is determined by its own established common symbolic expression."
- 5. In a similar vein, Rapport observes, "Few if any societies break the world into the more or less distinct systems distinguished by Western science. Not all of them, surely, distinguish environmental from social relations. Moreover, these understandings and principles, which in the Maring view, account for the structure and state of the world and invest the world and actions in it with meaning, are not confined to the particular material and social regulations regulated. They include as well metaphysical abstractions of great generality. (p. 116 Ecology, Meaning and Religion, Roy Rappaport, North Atlantic Books, 1979)
- 6. Mannheim's Model Historical Synergy between economic political reality and Metaphysical Truths: "Mannheim holds that historical and political thought is determined by the sociohistorical location of the thinker and the political aspirations and material ambitions of the group or groups to which he belongs. Such thought is inherently value-laden, one-sided, distorted, and therefore false. In short, all systems of historical-social-political thought are ideologies"! (p.143 Truth and Ideology: Reflections on Mannheim's Paradox by Willard A. Mullins, History and Theory, Vol. 18, No. 2 (May, 1979), pp. 141-154)

### Different Theories of Religious Beliefs

- 1. There are a number of different theories on the function of religions: fear of the unknown; anthropomorphism, social functionalism. There is a consensus-synthesis of Viktor Frankl, William James, and Carl Jung that spiritual experiences beliefs help people make sense of the world and can create a sense of reality. The research in music as social self and spiritual self is remarkable and I believe helpful in highlighting spiritual and religious beliefs.
- 2. Throughout the entire history of humanity, religions which are groups have formed and reformed. So, it would stand to reason while religious beliefs are complex, a very salient and significant function of religions is to form groups. Looking at religion from the "groups perspective" does highlight different aspects. Rituals from the perspective of the group then function to gain the submission of the individual through participation in group activities. An overview of religions shows the importance and significance of festivals, celebrations and group related rituals. An ancient Athenian calendar revealed that all but one day had a religious festival of one sort or other scheduled. The Australian Aborigines, inn the offseason held religious rituals-celebrations every day. Preparing body decorations can take hours. That would again seem to suggest that group formation is intrinsic to religious belief.
- 3. Fear of the unknown Fear of the unknown is a popular theory. The philosopher David Hume, the anthropologist Malinowski, and Einstein all emphasize the role of anxiety or fear.
- 4. Anthropomorphism, the attribution of human characteristics or behavior to a god, animal, or object, is another favorite theory. Xenophanes (believed to have been born roughly 570-560 BC.) did advocate that a "truth of reality" did exist. Xenophanes (and later Hume and St Augustine) argued that the "human" frame of reference shapes to a large degree how people viewed God. Modern psychology has shown that humans do have a built-in tendency in the Theory of Mind to visualize intentions and "beings" as it were.

- 5. Social functionalism is a very popular theory. Most anthropologists ascribe to the theory in one form or another. The theory basically states that the reason religion exists, is because it creates social cohesion and social solidarity.
- 6. Supernatural Swindle a) The oversimplification of religion as the "supernatural" is not only a gross oversimplification but it is a serious distortion and methodology flaw as well. The "supernatural" concept is unscientific and lacks any real-world context which Kant, Sherif, and McGilChrist say is a prerequisite especially in context of Christ's description of the Holy Spirit as the "Spirt of Truth" or "Spirit is Truth" as well as guidance.

The "supernatural" or "supernatural beings" is a widespread maladaptive stereotype! By definition, it is beyond or outside the scope of scientific inquiry – which makes it a loaded term - categorizing that as a "Definist" -fallacy and worthless, meaningless word. The definition of supernatural in Dictionary: "of a manifestation or event attributed to some force beyond scientific understanding or the laws of nature." The supernatural concept is widespread and frequently found in definitions of myths or prophecy.

For perspective, I asked my Filipina partner – who is Catholic – if God is "supernatural." She said, "Yes!" I then pointed out that Jesus Christ never once used the world "supernatural" in the Gospels and describes the Holy spirit as "Spirit and Truth" (John 4:23-24), guidance (Luke), "Spirit is Truth" (John 5:6) She then agreed with my argument that "supernatural" did not unequivocally equate to the "Biblical God" On top of that, the idea of the "supernatural comes with baggage: powers, the supernatural-unreal, crystal ball vision, all-knowing – all seeing, etc. If spirituality is about something it would be about "people."

b) Besides being an unscientific and meaningless because it is a loaded term and thus categorized as a Definist fallacy, there is another methodology flaw involved. There appear to be a consensus in neuroscience that in morals, music and other phenomena, different regions of the brain are intimately interconnected and not confined to one process or region of the brain. There is no reason to think that spirituality would be any different.

The Neuroscience Map-Model of Morals: Funk and Gazzanigna observe that: "Morality is a set of complex emotional and cognitive processes that is reflected across many brain domains. Some of them are recurrently found to be indispensable in order to emit a moral judgment, but none of them is uniquely related to morality...Some of the emotions processed are more central to morality than others, but all emotions contribute to moral judgment given specific contextual situations.... The neural circuits of brain regions implicated in morality overlap with those that regulate other behavioral processes." (Brain Architecture of human morality, Funk and Gazzanigna Current opinion in Neurobiology 2009 19:678-681)

What materialists have done is to separate and disconnect transcendental spirituality - which resulted in spirituality being pigeonholed as the supernatural = other-worldly, unreal, superstitious nonsense, etc. To disconnect transcendental spirituality as a separate entity – without real-world context-evidence is a violation of scientific principle and methods.

## Historical context of stone worship

The Old Testament has a number of references to sacred stones. Perhaps these references come from the long-lost ancient civilization of Mesopotamia, the "standing stone" or "menhir" is a very old and revered religious/spiritual tradition in the Middle East. Of course, Moses placed twelve "pillars" at the foot of Mount Sinai. Perhaps the most famous is the stone that Jacob erected at Bethel (Gen. xxviii. 18) to mark the divine visitation in his dream where his head rested on this stone. Jacob also built a stone at Shechem (Gen. xxxiii. 20), at Gilead (Gen. xxxi. 52), and finally the stone that Jacob placed on Rachel's tomb. Joshua (including a circle of twelve at Gilgal), Samuel, and sacred stones were also found at Gibeon, Enrogel, and Michmash. Karen Armstrong says that the Palestinian Semites worshiped a fertility goddess by placing stones upright in their fields as a sign of respect for the fertility goddess.

Dolmens and menhirs have been discovered in large areas of the Middle East, from the Turkish border in northern Syria near Aleppo, south to Yemen. Generally, these stone monuments are dated to the late Chalcolithic or early Bronze Age. Dolmens and menhirs have been found in many countries in the Middle East: Lebanon, Syria, Iran, Israel, Jordan, as well as in Saudi Arabia. The largest number and highest concentration of stone monuments are found in southern Syria and along the Jordan Valley.

## Massebot: Sacred Stones in the Bible and Mideast

"As among many other ancient peoples, so among the Israelites, too, sacred stones played an important cultic role. The Old Testament uses the term maṣṣēbâ (literally, an erected thing) to designate such a sacred stone, usually in the form of an uninscribed stele. Sacred stones were regarded approvingly in early Old Testament texts; later they were forbidden because of their association with idolatrous Canaanite rites.

Sacred stones were used during the ceremonies of covenant ratification at Sinai (Ex 24.4). Moses erected 12 massebôt as a sign of the acceptance of Yahweh's covenant by the 12 Israelite tribes. A stone became sacred also by reason of its association with a theophany. After his vision at Bethel, Jacob took the stone on which he had slept, anointed it with oil, and set it up to commemorate his vision (Gn 28.18). When Bethel later became a popular sanctuary, anointing the stone became part of the rites celebrated there (Gn 35.14)."¹ (https://www.encyclopedia.com/religion/encyclopedias-almanacs-transcripts-and-maps/stones-sacred-bible)

Karen Armstrong observes that the Canaanites "erected" stones in fields to get divine enhancement for fertility. The ancient Hebrews had difficulty suppressing stone worship as well as worship in high places. Christianity also had a difficult time with stone worship as well. It would stand to reason that an underlying cause would be that stone worship has roots in genetic physiology.

# <u>The Attention Factor – Selective attention is a pivotal piece of the puzzle in understanding spiritual and religious beliefs: Warren Fields Mesolithic lunar-orientation vs Stonehenge Neolithic Solar-orientation</u>

Warren Fields, Scotland: "world's oldest known calendar"

Sidhharrth S Kumaar observes, "The Oldest Calendar in the World: The calendar system introduced by the Sumerians is believed to be the first of the calendars. However, some historians believe that the Europeans had a system that could be even older. A team of researchers found 12 large pits in

<sup>&</sup>lt;sup>1</sup> "Stones, Sacred (in the Bible) | Encyclopedia.com." n.d.

Aberdeenshire, Scotland. The placement of these pits mirrored the moon's phases; they are estimated to be about 10,000 years old and maybe the oldest "calendars" globally. This discovery proves that the history of calendars is constantly changing. In Warren Field, Aberdeenshire, Scotland, a Mesolithic arrangement of twelve pits and an arc are present, which roughly dates about 10,000 years ago, appears to be associated with the lunar calendar. In 2013, it was dubbed as "world's oldest known calendar"." Chronology of calendar: Human evolution journey Sidhharrth S Kumaar

#### Warren Fields Lunar timekeeper

Vince Gaffney's team have demonstrated how the combination of this (Warren Fields) pit configuration and their landscape setting could have accurately tracked the seasons, creating what is in essence a primitive calendar that the team have dubbed a 'time reckoner'. If they are correct, it is the earliest such device known anywhere in the world. (Current Archeology Mesolithic Timelords: A monumental huntergatherer 'calendar' at Warren Field, Scotland September 5, 2013 6 mins read) So, as early as 8,000 BCE, the hunter gatherers of Scotland had developed a lunar-solar calendar of sorts.

#### Solar Orientation of Stonehenge

Clive Ruggles observes that "authors such as Burl(1987) have emphasized a change from lunar symbolism to solar symbolism, and this could imply that some fundamental changes in ritual practice and tradition accompanied the transition from Stonehenge 2 to Stonehenge 3. There is certainly no compelling evidence for solar orientation during this period, yet the evidence is quite convincing when we reach Stonehenge 3, especially with regard to the 'solar corridor' into the sarsen circle, despite the uncertainties in much of the archaeological evidence." (Astronomy and Stonehenge, Clive Ruggles)

New Grange Passage Tomb: With "an accurate astronomical alignment = [solar] illumination of burial chamber at mid-winter"

The material record from Neolithic and Early Bronze Age Britain and Ireland suggests that astronomical symbolism, in the form of rough alignments upon certain horizon rising and setting positions of the sun or moon, was incorporated into a range of prehistoric ritual monuments at various places and times. Evidence comes from certain individual sites, most notably Newgrange with its spectacular midwinter sunrise phenomenon (O'Kelly 1982, 123-5), but most compellingly from trends observed in regional groups of small, similar Bronze Age ritual monuments such as the recumbent stone circles of northeastern Scotland (Ruggles and Burl 1985) and the short stone rows of western Scotland (Ruggles 1988; Martlew and Ruggles 1996) and the south-west of Ireland (Ruggles 1994). 'Once we have accepted the reality of even the simplest observations . . . the question is no longer one of acceptance or rejection, but simply of degree' (Bradley 1984, 77). (Astronomy and Stonehenge, Clive Ruggles, British Academy, 92)

Besides the English Neolithic Stonehenge Megalith monument on the Salisbury plain which had a solar orientation, the Irish Newgrange Passage Tomb had a definite solar orientation. The same is true of the Hopi Native Americans which had an agrarian society and a solar orientation-calendar. "Among sedentary agricultural tribes, the cycle of the seasons was of great ritual importance, but the time of the beginning of the year varied. Some observed it about the time of the vernal equinox) - which is a solar orientation. The "vernal equinox" is the "two moments in the year when the Sun is exactly above the

Equator and day and night are of equal length. In the Northern Hemisphere the vernal equinox falls about March 20 or 21, as the Sun crosses the celestial equator going north". (Britannica)

Mannheim's Model that the economic-political reality shaped social and religious views is borne out by Mesolithic vs Neolithic monuments. The hunter gatherers from the Scottish Warren Fields had a "Lunar" orientation vs Stonehenge Neolithic "solar" orientation. Similar to the hunting gathering culture of the Scottish Warren fields, Native American hunter-gatherers had predominantly "lunar calendars. Ion native American cultures, "As years were determined by seasons and not by a fixed number of days, the correlation of moons and years was also approximate and not a function of a daily count. Most tribes reckoned 12 moons to a year. Some northern tribes, notably those of New England, and the Cree tribes, counted 13. The Indians of the northwest coast divided their years into two parts, counting six moons to each part, and the Kiowa split one of their 12 moons between two unequal seasons, beginning their year with a Full Moon. The naming of moons is perhaps the first step in transforming them into months. The Zuni Indians of New Mexico named the first six moons of the year, referring to the remainder by color designations associated with the four cardinal (horizontal) directions, and the zenith and the nadir. Only a few Indian tribes attempted a more precise correlation of moons and years. The Creeks are said to have added a moon between each pair of years, and the Haida from time to time inserted a "between moon" in the division of their year into two parts. It is said that an unspecified tribe of the Sioux or the Ojibwa (Chippewa) made a practice of adding a "lost moon" when 30 moons had waned." (Native American Calendars https://www.crystalinks.com/calendarnamer.html)

Hopi Native American solar orientation.

The solar orientation of the Hopi Native Americans was evidently influenced by the agrarian focus of Hopi economic political reality – with beliefs distinct from native American hunter-gatherers. "Beginning with the work of Alexander Stephen and Jesse Fawkes in the 1890s, scholars have come to recognize that the Hopi based both their agricultural and ceremonial calendars on observations of the rising and setting of the Sun aligned with specific natural places on the local horizon, which they call tuvoyla (markers), tingappi (announcing points), and either uyispi or naatwànpi (planting points)" (McCluskey, S.C. (2021). The Hopi Calendar and Some Archaeological Correlates of Horizon Markers. In: Boutsikas, E., McCluskey, S.C., Steele, J. (eds) Advancing Cultural Astronomy. Historical & Cultural Astronomy. Springer, Cham.)

The traditional Hopi economy centred on farming and, after Spanish colonization, on herding sheep. The chief crop was corn (maize), and the Hopi also grew beans, squash, melons, and a variety of other vegetables and fruits. Men farmed and herded, in addition to building houses, performing most of the ceremonies, making moccasins, and weaving garments and blankets. Women made baskets and pottery, gardened, raised children, cared for the elderly, and were responsible for the strenuous tasks of providing their families with hand-drawn water and hand-ground cornmeal.

Hopi, the westernmost group of Pueblo Indians, situated in what is now northeastern Arizona, on the edge of the Painted Desert. They speak a Northern Uto-Aztecan language. The precise origin of the Hopi is unknown, although it is thought that they and other Pueblo peoples descended from the Ancestral Pueblo (Anasazi), whom the Hopi call Hisatsinom, "Ancient People." Archaeology has revealed that some abandoned pueblos, such as Sikyatki and Awatovi, were once occupied by Hopi people. Hopi origin traditions tell that their ancestors climbed upward through underground chambers called kivas and lived in many places before reaching their present settlements in this, the Fourth World. (Britannica, T.

Editors of Encyclopaedia. "Hopi." Encyclopedia Britannica, October 21, 2024. <a href="https://www.britannica.com/topic/Hopi">https://www.britannica.com/topic/Hopi</a>.)

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The Forgotten Megalith Monument: "Before Stonehenge, There Was Nabta Playa, The World's Oldest Observatory Long before the pyramids, nomads in the Sahara built a stone circle aligned with the stars. What they discovered in the sky may have shaped an entire civilization.

Nestled deep in the Nubian Desert of southern Egypt lies a prehistoric relic that has reshaped our understanding of ancient astronomy. Known as Nabta Playa, this 7,000-year-old stone circle predates Stonehenge by more than a millennium and may be the earliest known example of an astronomical observatory.

In a landmark paper published in 1998, archaeoastronomer J. McKim Malville and archaeologist Fred Wendorf revealed that this site aligned with major stars such as Sirius, Arcturus, and Alpha Centauri.

Prehistoric Skywatchers of the Sahara The builders of Nabta Playa were nomadic pastoralists who roamed a vastly different Sahara than the one we know today. Between 10,000 and 5,000 years ago, the region was lush and seasonally wet, dotted with playa lakes that filled during the annual monsoon. At the heart of Nabta Playa lies a stone circle and a series of burial mounds and radial alignments, constructed between 4800 and 3000 B.C. These structures were not merely symbolic; they were functional tools used to mark the summer solstice.



According to Malville, who had an "epiphany" while studying the site, the stones form radial lines like spokes on a wheel, aligning precisely with celestial events. The presence of fire pits and tamarisk roofing allowed researchers to radiocarbon-date the site, affirming its antiquity.

How Ancient Stones Mapped The Sky And The Rains? The builders of Nabta Playa used their observatory to follow bright stars that dominated the summer sky. Calculations based on stellar drift revealed that Arcturus would have aligned with the stones around 4800 B.C. Other alignments matched Sirius—associated in later Egyptian tradition with rebirth and flooding—as well as Alpha Centauri and even the Orion constellation. These stellar guides were not decorative; they served navigational purposes across a vast and often featureless landscape. The nomads likely used the circular motion of stars to journey from one water source to the next—just as Polynesian sailors used the stars to navigate the Pacific.

### The Culture Behind the Cosmos

Far from being primitive, the people of Nabta Playa formed a semi-nomadic culture with surprising complexity. Wendorf's excavations uncovered huts, wells, fireplaces, and storage pits suggesting permanent seasonal settlements.

More intriguingly, cattle bones and a cow-shaped megalith were found at the site's central tomb—offering a glimpse into a cattle cult that may have preceded Egyptian bull worship. The ritual significance of cattle here hints at a broader cosmological belief system, possibly tied to fertility and seasonal renewal. Researchers found charred seeds of domesticated sorghum and millet, some of the earliest in the world. These crops would later spread across Africa and into India, playing a key role in the rise of other early civilizations.

From Desert Ruins To Egypt's Dynastic Dawn Between 3000 and 2500 B.C., the once-fertile Sahara began to dry irreversibly. This climatic collapse likely drove the Nabta Playa culture north toward the Nile Valley and south into Nubia. This dispersal has led some scholars, including Malville and Wendorf, to suggest that Nabta Playa may represent a "black genesis" for Egyptian civilization. The reverence for cattle, stellar alignments, and solar worship later seen in Egyptian religious systems may trace their ideological roots to these prehistoric astronomers.

The theory remains contested, but it offers an alternative to the long-held notion that Egypt's origins lie solely in the Fertile Crescent. For many, the cow goddess Hathor—a major figure in Egyptian mythology—is a lingering clue linking Nabta Playa's cattle cult to the religious iconography of later dynasties. (Science - Melissa Ait Lounis Published on April 19, 2025)

## Stonehenge is an enigma!

The origins and meaning of Stonehenge are shrouded in the mists of time. Stonehenge, located on the Salisbury plain in England appears to be isolated and alone – but that is deceptive, historically. In the immediate vicinity of Stonehenge, there are over 350 other henges, barrows and monuments. While the beginnings of Stonehenge, roughly around 3000 BCE to 2935 BCE, began with a modest enclosure of 56 pits or "Aubrey Holes" (John Aubrey identified the holes in 1666), and a ditch. "Human cremation burials were found within and around most of the holes, as well as within the encircling ditch and bank. (Of an estimated 150–240 cremation burials at Stonehenge, 64 had been excavated by the first decade of the 21st century.) ... The area surrounding the Aubrey Holes was used as a place of burial from roughly 3000 to 2300 BCE." "About 8000–7000 BCE, early Mesolithic hunter-gatherers dug pits and erected pine posts within 650 feet (200 meters) of Stonehenge's future location. It was unusual for prehistoric hunter-gatherers to build monuments, and there are no comparable structures from this era in northwestern Europe."

Most stone circles in England were built between 3000 BC and 1000 BC Little is known about the design and purpose of stone circles, but there is a consensus that the circles served as gathering places for rituals and ceremony and very important in ancient communities. Stonehenge is one of the most famous and famous stone monument sites. Extensive archaeological excavations show that Stonehenge was actually built in stages, over a very long period of time. Archaeologists have found postholes dating back to the Mesolithic period around 8000 BC. In fact, the nearby Mesolithic astronomical site 'Warren Field' in Britain is believed to be the oldest lunar calendar in the world.

Stone building at Stonehenge began in 2600 BC when two concentric arrays of holes were dug in the center of Stonehenge. Interestingly it is now generally accepted that the bluestones originally used were brought by the builders from a distant quarry in Pembrokeshire, Wales, 150 miles away! In the next stage of development, 30 large stones of Oligocene-Miocene sarsen were brought from a quarry about 25 miles north of Stonehenge. The development and filling of the Stonehenge circle continued. Archaeological excavations of animal teeth and bones at the site suggest that approximately, between 2600 and 2400 BC, up to 4,000 people gathered at the site for midwinter and midsummer festivals, as archaeological evidence has shown that the animals were slaughtered between nine months and 15 months after birth in the spring. Additionally,

evidence suggests that some of the animals may have come from as far away as the Scottish Highlands.

Stonehenge appeared 4 to 5 thousand years after Warren fields

Stonehenge appeared 4 to 5 thousand years after Warren fields, and was the product of an agrarian society which emerged beginning roughly around 4,000 BCE. "Stonehenge was built in six stages between 3000 and 1520 BCE, during the transition from the Neolithic Period (New Stone Age) to the Bronze Age. As a prehistoric stone circle, it is unique because of its artificially shaped sarsen stones (blocks of Cenozoic silcrete), arranged in post-and-lintel formation, and because of the remote origin of its smaller bluestones (igneous and other rocks) from 100–150 miles (160–240 km) away, in South Wales. The name of the monument probably derives from the Saxon stan-hengen, meaning "stone hanging" or "gallows." Along with more than 350 nearby monuments and henges (ancient earthworks consisting of a circular bank and ditch), including the kindred temple complex at Avebury," The "orientation of Stonehenge shifted form a lunar orientation to a solar orientation.

Second stage: 2640–2480 BCE Stonehenge Trilithons of Stonehenge, Wiltshire, England.

"Except for human burials, there is no evidence of activity between Stonehenge's first and second stages of construction. About 2500 BCE the sarsen stones were brought from the Avebury area of the Marlborough Downs, about 20 miles (32 km) to the north. Outside the northeastern entrance of Stonehenge, they were dressed smooth by pounding with sarsen hammers. They were then arranged inside the circle in a horseshoe-shaped setting of five tall trilithons (paired uprights with a lintel)—the central and largest of which is known as the giant trilithon—surrounded by 30 uprights linked by curved lintels to form a circle. The stones appear to have been laid out systematically in units and subunits of the long foot; the circumference of the sarsen circle is 300 long feet. The lintels, weighing some 7 tons each, are held on top of the uprights by mortise-and-tenon (dovetail) joints, and the ends of the curved lintels of the sarsen circle fit together with tongue-and-groove joints. All the joints were created using hammer stones, presumably in imitation of woodwork. Most of the sarsen uprights weigh about 25 tons and are about 18 feet (5.5 meters) high. The uprights of the giant trilithon, however, were 29 feet (9 meters) and 32 feet (10 meters) high, weighing more than 45 tons."

Third stage: 2470–2280 BCE

"Radiocarbon dating indicates that the side ditches and banks of a ceremonial avenue almost 2 miles (3 km) long were dug from Stonehenge to the River Avon at some time in the period between 2470 and 2280 BCE. It is possible that the avenue traces the path of the bluestones that were moved from the Aubrey Holes and Bluestonehenge to the Q and R holes during Stonehenge's second stage of construction. The avenue varies in width from about 60 to 115 feet (18 to 35 meters) and terminates at a small henge at the riverside. This henge, measuring 100 feet (30 meters) in diameter, was built after the bluestones at its centre were removed. About the first 1,600 feet (500 meters) of the avenue from Stonehenge are aligned toward the summer solstice sunrise and the winter solstice sunset. Excavations in 2008 revealed that this stretch of the avenue's banks was built upon preexisting natural chalk ridges coincidentally sharing this same

solstitial alignment. At Durrington Walls a similar avenue about 560 feet (170 meters) long and 100 feet (30 meters) wide had been built about 2500 BCE between the Southern Circle and the River Avon and remained in use for several centuries. The Durrington avenue was aligned toward the summer solstice sunset, while the Southern Circle faced the winter solstice sunrise. This solstitial alignment raises the possibility that Stonehenge and Durrington were built as complementary halves of a single complex, articulated by the River Avon."

Stonehenge 3 demonstrates a "solar orientation"

Clive Ruggles observes that "authors such as Burl(1987) have emphasized a change from lunar symbolism to solar symbolism, and this could imply that some fundamental changes in ritual practice and tradition accompanied the transition from Stonehenge 2 to Stonehenge 3. There is certainly no compelling evidence for solar orientation during this period, yet the evidence is quite convincing when we reach Stonehenge 3, especially with regard to the 'solar corridor' into the sarsen circle, despite the uncertainties in much of the archaeological evidence."<sup>2</sup> (Astronomy and Stonehenge, Clive Ruggles)

## The Ireland Newgrange Passage Tomb: With "an accurate astronomical alignment = [solar] illumination of burial chamber at mid-winter"

"The most striking characteristic of the Neolithic in Ireland was the sudden appearance and dramatic proliferation of megalithic monuments. The largest of these tombs were clearly places of religious and ceremonial importance to the Neolithic population, and were probably communal graves used over a long period. In most of the tombs that have been excavated, human remains—usually, but not always, cremated—have been found. Grave goods—pottery, arrowheads, beads, pendants, axes, etc.—have also been uncovered. These megalithic tombs, more than 1,200 of which are now known, can be divided for the most part into four broad groups, all of which would originally have been covered with earth, that in many cases has been eroded away to leave the impressive stone frameworks" (Wikipedia)

There are four types of stone megaliths.

1 "Court cairns – These are characterized by the presence of an entrance courtyard."<sup>3</sup>

2 Passage tombs – These constitute the smallest group in terms of numbers, but they are the most impressive in terms of size and importance. They are also found in much of Europe... the biggest and most impressive of them being found in the four great Neolithic "cemeteries" of the Boyne (Brú na Bóinne,), Loughcrew, Carrowkeel and Carrowmore. The most famous of them is Newgrange, one of the oldest astronomically aligned monuments in the world. It was built around 3200 BC. At the winter solstice the first rays of the rising sun still shine through a lightbox above the entrance to the tomb and illuminate the burial chamber at the centre of the monument...4

<sup>&</sup>lt;sup>2</sup> Ruggles, Clive, B. Cunliffe, and C. Renfrew. "Astronomy and Stonehenge." In Proceedings-British Academy, vol. 92, pp. 203-230. OXFORD UNIVERSITY PRESS INC., 1997.

<sup>&</sup>lt;sup>3</sup> "Cairn - New World Encyclopedia." n.d.

<sup>&</sup>lt;sup>4</sup> Cummings, Vicki. n.d. "Passage Tomb | Megalithic Tomb | Britannica." Encyclopedia Britannica.

- 3 Portal tombs These tombs include the well-known dolmens. They consist of three or more upright stones supporting a large flat horizontal capstone (table). The Knockeen and Gaulstown Dolmens in County Waterford are exceptional examples.<sup>5</sup>
- 4 Wedge tombs The largest and most widespread of the four groups, the wedge tombs are particularly common in the west and southwest." (Wikipedia)

### Newgrange

"The material record from Neolithic and Early Bronze Age Britain and Ireland suggests that astronomical symbolism, in the form of rough alignments upon certain horizon rising and setting positions of the sun or moon, was incorporated into a range of prehistoric ritual monuments at various places and times.

Evidence comes from certain individual sites, most notably Newgrange with its spectacular midwinter sunrise phenomenon (O'Kelly 1982, 123-5), but most compellingly from trends observed in regional groups of small, similar Bronze Age ritual monuments such as the recumbent stone circles of north-eastern Scotland (Ruggles and Burl 1985) and the short stone rows of western Scotland (Ruggles 1988; Martlew and Ruggles 1996) and the south-west of Ireland (Ruggles 1994). 'Once we have accepted the reality of even the simplest observations . . . the question is no longer one of acceptance or rejection, but simply of degree' (Bradley 1984, 77). (Astronomy and Stonehenge, Clive Ruggles, British Academy, 92)



Newgrange - Ireland.jpg Andrew Kearns Wikimedia

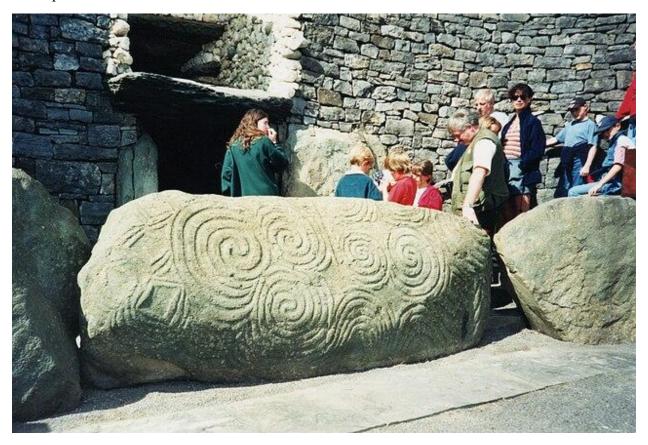
The Newgrange passage tomb in County Meath in the Republic of Ireland is, because of its scale, architecture, and decoration (O'Kelly 1982), one of the most spectacular monuments of Neolithic Europe. Its design and alignment, admitting the light of the mid-winter solstice sunrise, are evidence that its builders were not only familiar with basic astronomical cycles, but also incorporated such 'scientific' information within their ritual practices and discourse.... A number of claims have been made that evidence of Neolithic science is to be found at Newgrange. The

<sup>&</sup>lt;sup>5</sup> Wikipedia contributors. 2024. "Dolmen." Wikipedia. December 25, 2024.

<sup>&</sup>lt;sup>6</sup> Byrne, Martin. n.d. "Irish Wedge Tombs." 2024.

<sup>&</sup>lt;sup>7</sup> Ruggles, Clive, B. Cunliffe, and C. Renfrew. "Astronomy and Stonehenge." In Proceedings-British Academy, vol. 92, pp. 203-230. OXFORD UNIVERSITY PRESS INC., 1997.

first, that the monument incorporates an accurate astronomical alignment, can be readily demonstrated (Patrick 1974). For a few days around mid-winter, light from the rising sun enters the 'roof-box' above the entrance, shines in a narrow beam down the passage and illuminates the end recess of the chamber. There can be no doubt that this was an integral feature of the tomb's design <sup>8</sup>(Newgrange — Science or Symbolism Published online by Cambridge University Press: 18 February 2014 Andrew B. Powell) Powell, Andrew B. "Newgrange—Science or Symbolism." In Proceedings of the prehistoric Society, vol. 60, no. 1, pp. 85-96. Cambridge University Press, 1994. p.94



Entrance to Newgrange Tomb, Co Meath - geograph.org.uk - 6518331.jpg note the designs on the rock – there are a large number associated with Newgrange

Newgrange exhibits a number of features that have been used to characterize the concept of 'Neolithic science'. There is an accurate astronomical alignment which provided the axis for the tomb, and which involved the illumination of the burial chamber at mid-winter. There is the use of geometric forms to determine the shape of the monument, although the employment of these forms did not require Pythagorean geometry, nor the possession by Neolithic society of any sophisticated mathematical skills, but merely the use of a standard unit of length. However, explaining these features in terms of evidence for a discrete scientific discourse, implying some

<sup>&</sup>lt;sup>8</sup> Powell, Andrew B. "Newgrange—Science or Symbolizm." In Proceedings of the prehistoric Society, vol. 60, no. 1, pp. 85-96. Cambridge University Press, 1994.

essential progression from a ritual or religious discourse, ignores the significance of the particular contexts within which this knowledge was used.

The scale of megalithic tomb construction in Ireland during the Neolithic is clear evidence that important sets of social relations, including rights of succession to symbolic and material resources, were ideologically legitimized in the context of mortuary ritual. The various tomb types found in Ireland — the passage tombs, court tombs, portal tombs, Linkardstown cists, and wedge tombs, representing different domains of ritual practice and discourse — are each characterized by specific symbols and forms.

In a competitive social environment, where economic and political power derived increasingly from the possession of ritual power, ever tighter control was exerted over the content of the passage tomb ritual discourse, the inherent ambiguity of its symbolism being exploited in order to legitimize the possession of that power. On the one hand that symbolism was refined, so narrowing the range of possible meanings. On the other, it was extended by formalizing and incorporating new areas of knowledge, such as simple geometry and calendrical data, and so providing new evidence as to the legitimacy of power. The ritual symbolism expressed in the fabric and art of passage tombs like Newgrange invoked the powers of the supernatural world in order to sanction the inequalities of the social order. Its precise conjunction of a celestial cycle and a geometrical configuration implied also that this order was in harmony with the physical world of time and space. P.95

## Gobekli Tepe - 9500 BC

The oldest stone worship site is Gobekli Tepe in Asia Minor in modern Turkey, dating to 9500 BC. It is earlier than all other megalithic sites. Considering its young age, the site of Gobekli Tepe is quite large and includes at least 200 pillars in about 20 circles. The stones are huge, standing up to 20 feet tall and weighing up to 10 tons each. Some of the stone pillars are decorated with relief designs of bulls, humanoid figures and predators. It is quite surprising that there seems to be a certain geometric pattern in the layout of Gobekli Tepe - namely, an equilateral triangle. The researchers concluded that the people who built Gobekli Tepe had at least a rudimentary knowledge of geometry. The enigma of Gobekli Tepe has no traces of domesticated plants or animals discovered, or habitation for that matter, and it seems difficult to imagine a hunter-gatherer society engaging in such a massive effort to build such a massive monument, it must there are others.

Gobekli Tepe: The World's First Temple? Predating Stonehenge by 6,000 years, Turkey's stunning Gobekli Tepe upends the conventional view of the rise of civilization Andrew Curry November 2008

The Stone Monuments – "Narrowly Defined Stone Worship" - from a certain perspective - may have been a by-product of a major consciousness development – evolution in human consciousness – and society "research... has shown that within 1,000 years of Gobekli Tepe's construction, settlers had corralled sheep, cattle and pigs. And.... geneticists found evidence of the world's oldest domesticated strains of wheat; radiocarbon dating indicates agriculture developed there around 10,500 years ago, or just five centuries after Gobekli Tepe's construction." Perhaps – in light of that major social development stone monuments – worship could be viewed as a "locus" of society building.

[T]he main excavation site. In the pits, standing stones, or pillars, are arranged in circles. Beyond, on the hillside, are four other rings of partially excavated pillars. Each ring has a roughly similar layout: in the center are two large stone T-shaped pillars encircled by slightly smaller stones facing inward. The tallest pillars tower 16 feet and, Schmidt says, weigh between seven and ten tons. As we walk among them, I see that some are blank, while others are elaborately carved: foxes, lions, scorpions and vultures abound, twisting and crawling on the pillars' broad sides. Schmidt points to the great stone rings, one of them 65 feet across. "This is the first human-built holy place," he says.

Schmidt, 53, asks me to imagine what the landscape would have looked like 11,000 years ago, before centuries of intensive farming and settlement turned it into the nearly featureless brown expanse it is today. Prehistoric people would have gazed upon herds of gazelle and other wild animals; gently flowing rivers, which attracted migrating geese and ducks; fruit and nut trees; and rippling fields of wild barley and wild wheat varieties such as emmer and einkorn.

"This area was like a paradise," says Schmidt, a member of the German Archaeological Institute. And partly because Schmidt has found no evidence that people permanently resided on the summit of Gobekli Tepe itself, he believes this was a place of worship on an unprecedented scale—humanity's first "cathedral on a hill." My question is, Was the primary "reason" for building stone monuments to draw people together as opposed to the sole and entire purpose to worship God.

Peters and Schmidt say, Gobekli Tepe's builders were on the verge of a major change in how they lived, thanks to an environment that held the raw materials for farming. "They had wild sheep, wild grains that could be domesticated—and the people with the potential to do it," Schmidt says. In fact, research at other sites in the region has shown that within 1,000 years of Gobekli Tepe's construction, settlers had corralled sheep, cattle and pigs. And, at a prehistoric village just 20 miles away, geneticists found evidence of the world's oldest domesticated strains of wheat; radiocarbon dating indicates agriculture developed there around 10,500 years ago, or just five centuries after Gobekli Tepe's construction.

Question: Were the Stone Monuments – beyond "Narrowly Defined Stone Worship" - from a certain perspective – could possibly have been a by-product – not the main-line goal as it were - of a major consciousness development, an evolution in human consciousness and society. After all synchronous with the erection of the temple "research... has shown that within 1,000 years of Gobekli Tepe's construction, settlers had corralled sheep, cattle and pigs. And...geneticists found evidence of the world's oldest domesticated strains of wheat" The question, then is – in light of that major social development, then stone monuments—worship could be viewed as a "locus" of "society – consciousness building." That is where the stone "temples" a byproduct of the primary drive to form societies.

As Park and Paloutzian emphasized, "religion and spirituality are more or less coherent, culturally elaborated meaning systems embedded in and acquired through social relationships and institutions situated in complex natural and built environments." Paloutzian and Park (p. 12)

## **Stone Worship in Ancient Greece**

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<sup>&</sup>lt;sup>9</sup> Paloutzian, Raymond F., and Crystal L. Park, eds. Handbook of the psychology of religion and spirituality. Guilford Publications, 2014.p.12

Pausanias, a Greek traveler and historian who lived in the 2nd century AD, wrote about how the ancient Greeks worshiped "rough" stones - which may refer to the cult of the god Hermes in connection with building stone piles in courtyards and at crossroads.

#### THE HERMAE (BOUNDARY STONES)

"Hermai were boundary or mile-stones, carved with the head and phallus of Hermes. They were rural markers which were also supposed to ensure the fertility of the herds and flocks and bring luck. Hermai were erected at boundaries, crossroads and in gymnasia.

Pausanias, Description of Greece 2. 3. 4: "Proceeding on the direct road to Lekhaion [the port of Korinthos] we see a bronze image of a seated Hermes. By him stands a ram, for Hermes is the god who is thought most to care for and to increase flocks, as Homer puts it in the Iliad: --'Son was he of Phorbas, the dearest of Trojans to Hermes, rich in flocks, for the god vouchsafed him wealth in abundance.' The story told at the mysteries of the Mother [Demeter] about Hermes and the ram I know but do not relate.""

### Jomon Perios Stone circles in Japan

It should be noted that stone circles in Japan appeared at the same time as other stone circles that were widespread and widespread in other parts of the world - England, Ireland, Germany, Spain...and so on. The article, Secrets of the Stone Circles, states that "one of the greatest mysteries that archaeologists have attempted to solve is that of the stone circles. Ceremonial stone circles first appeared in the early Jomon period, 13,000 BC - late 2,000 BC. Hundreds of stone circles and stone features have sprung up all over Japan. A stone circle from the early Jomon period was found at the Wappara site in Nagano Prefecture. It consists of long-standing stones arranged in a circle. Elaborate stone circles have been found in several places in the Chubu region from the Middle Jomon period, and archaeologists have discovered large numbers of them in Hokkaido and northern Tohoku from the Jomon period. last and final. (https://heritageofjapan.wordpress.com/just-what-was-so-amazing-about-jomon-japan/ways-of-the-jomon-world-2/did-the-jomon-have-a-calendar /secrets-of-stone-circles/)

## **Stone Worship: Native American Medicine Wheels**

Fred Chapman observes: "Researchers have identified as many as 150 medicine wheels in Montana, South Dakota, Wyoming and the Canadian provinces of Alberta and Saskatchewan. The Bighorn Medicine Wheel is unique among features of this type. It is the best-known, and one of the largest and best preserved on the northern and northwestern Plains. It was the first medicine wheel to be mentioned in popular literature and the first to be studied by the professional scientific community.

Most medicine wheels are found in southern Alberta and Saskatchewan. The oldest is the 5,500-year-old Majorville Cairn in Alberta. The Bighorn Medicine Wheel, probably less than 1,000 years old, was first studied in 1902 by the noted ethnologist S. C. Simms on behalf of the Chicago Field Museum."

The Bighorn Medicine Wheel, 2011. The rock circle is about 80 feet in diameter, with 28 'spokes' radiating from a central cairn, five cairns around the rim and a sixth slightly outside the perimeter."<sup>10</sup>

Medicine Wheel/Medicine Mountain: Celebrated and Controversial Landmark Fred Chapman Wednesday, April 10, 2019 WYOHISTORY.com



### BHMW north 2011.jpg Imerriot Wikimedia

The Bighorn Medicine Wheel, more recently re-named the Medicine Wheel on Medicine Mountain, rests at 9642 feet elevation. Ivy Merriot found that it measures similar aspects of the sky as the wheels in the UK that Alexander Thom analyzed, showing that different cultures were able to devise similar scientific instruments for similar purposes regardless of their individual cultural interpretations of the sky.

## Recent 2024 Discovery: An ancient mini-Stonehenge stands underwater in Grand Traverse Bay, part of Lake Michigan.

Looking for shipwrecks in this area, which was a busy 19th- and 20th-century maritime trade route, Mark Holley, professor of underwater archaeology at Northwestern Michigan University,

<sup>&</sup>lt;sup>10</sup> Chapman, Fred. "Medicine Wheel/Medicine Mountain: Celebrated and Controversial Landmark." WyoHistory. org (2019).

first came across a rock that he said bears a prehistoric carving of a mastodon. On further investigation, he discovered a Stonehenge-like arrangement of ancient stones.

There's an outer ring of stones, about 40 feet in diameter, and an inner ring about 20 feet in diameter, both made of local granite. They stand 40 feet below the water's surface, and the stones are some 9,000 years old, making this one of the oldest structures ever discovered in North America. At that time, said Holley, the lake bed was dry. Stonehenge would not be erected for another 4,000 years.

Holley points out that the stones are not of anything like the size of those at Stonehenge, instead ranging in size from that of a basketball to that of a compact car. There's also a number of stones arranged in a line over one mile long. <sup>11</sup> By Artnet News February 13, 2024 https://news.artnet.com/art-world/prehistoric-structure-lake-michigan-stonehenge-2432737

## **Australian Aborigines**

Wurdi Youang stone arrangement in Victoria, Australia, Wurdi Youang is an egg-shaped Aboriginal stone arrangement in Victoria, Australia. Here we present a new survey of the site, and show that its major axis is aligned within a few degrees of east-west. We confirm a previous hypothesis that it contains alignments to the position on the horizon of the setting sun at the equinox and the solstices, and show that two independent sets of indicators are aligned in these directions. We show that these alignments are unlikely to have arisen by chance, and instead the builders of this stone arrangement appear to have deliberately aligned the site on astronomically significant positions. (WURDI YOUANG: AN AUSTRALIAN ABORIGINAL STONE ARRANGEMENT WITH POSSIBLE SOLAR INDICATIONS Ray P. Norris, Cilla Norris, Duane W. Hamacher and Reg Abrahams)

Even in their long separation from other people, the Australian Aboriginal branch of the human species, the Aborigines, worshiped stones. An anthropologist tells the story of an Aboriginal man who pointed to a standing stone and said, "That's my grandfather!" In Aboriginal creation myths, during the dream period, half-animal, half-plant deities roam the earth creating nature and becoming the intrinsic forces of the world - and most of their myths center in the dream journeys of the divine ancestor-creators. Uluru, known as "The Rock" - a large monolithic rock outcrop of natural sandstone - is arguably the most sacred place in Aboriginal folklore. Beliefs in the presence of "spirits" in rocks, trees, and nature are widespread and almost universal. The Sicun people are among the Oglala Indians of North America who believe in protective spirits in rocks. Wakan is a \_ word among the North American Dakota Indians for spiritual, sacred, and mystical things. It can be objects in nature, especially some large rocks. The spirits there are called Taku skan, Inyan and Tunkan. The stones are painted with significant colors. Another illustration from Ireland is the belief of a region of Éireann on a shapeless rock called the "Neevougi" rock which

<sup>11</sup> Artnet News. 2024. "A Prehistoric Structure Under Lake Michigan Resembles a Mini-Stonehenge." Artnet News, February 13, 2024.

is - or was - believed to have the power - or strength - to calm the sea so that the men could go out fishing.

## Jasperite Pebble: Possibly the beginning of stone tool making - stone worship

It is possible that the beginnings of stone worship began with Homo sapiens, perhaps even 2 to 3 million years ago, in the species of Australopithecus africanus. The Jasperite 'Makapango' pebble was found in Africa in 1925 and is associated with the species Australopithecus africanus. What is unique about the Makapango pebble is that it was found relatively far from any possible natural source.

It stands to reason that the "belief" in the value of something like a rock or a pebble because of the belief in a "living" essence or force in natural things is an inherently symbolic idea or an archetype within no conscious person since the beginning of mankind - and beyond, in fact. It seems to show and display a very creative and imaginative emotional awareness and connectedness to the world and environment. We must not forget that Einstein, Sagan Jung, Planck and other scientists extolled the virtues of imagination above rational analysis or knowledge. There are many spiritual processes here [mostly unconscious], and the Makapango Pebble is the first evidence of one of the first to emerge and evolve into human consciousness. Without this spiritual connection to the world and especially stone worship, it seems unlikely that "we" developed the stone tools upon which the human species developed and flourished.

## The Stone Age and the making of stone tools

The Paleolithic age is, by far, the longest age in human history at around 2.5 million years - and in fact involves not only Homo-sapiens, but also 'pre-human' species. It represents most of human history, about 2.5 million years, and involves several human species. Only in the last 50,000 to 100,000 years has any significant evolution or technological development occurred. Caleb Strom said in the article *The Stone Age: The First 99 Percent of Human History, "The* Acheulian toolkit appears to have been the dominant cultural tradition in Eurasia and Africa for 1.9 million years to the present. about 200,000 years ago, when the evolutionary -advances in cognition turned the tide and began the next Paleolithic period.

About 400,000 years ago, early humans developed techniques that led to a diversification of tool making as well as a "standardization" that involved extensive process control. Caleb Strom argues that "the This development probably represents one \_ \_ \_ yet cognitive development, because \_ The such detailed method of making of those stone tools require \_ of more skill and thought \_ than those \_ past tradition of making of tools .... In time too of the Middle Paleolithic probably produced the first stone-tipped spears. »

The central role of stone worship tool-making in the evolution of mankind is explained by Caleb Strom, when be observed he that "it was probably also during the Middle Paleolithic that humans went from scavengers to big game hunters. The tools used by early human species, such as Homo erectus, suggest that early humans were scavenged meat from carcasses left behind by carnivores. In fact, this may have been how early humans left Africa, following carnivores, such as saber-toothed cats, as they devoured those that did not carnivore slaughter ended. Middle Paleolithic weapons, such as spears, and medium-

sized animal specimens found at butchery sites suggest actual hunting, possibly indicating that big game hunting began in the Middle Paleolithic.

In conclusion, Caleb Strom said "Therefore our analyzes show that the evolution of the modern human brain shape was characterized by directional and gradual changes resulting in the typical globular modern human shape established sometime after about 100,000 years and perhaps before 35,000 years before our time. That is, the "final" shape and composition of the human brain was established only in recent history "at some point 100,000 years ago. In addition, some researchers theorize that human consciousness evolved in more recent history - perhaps shown by the relatively recent evolution or development of the ideal of compassion in the major religions over a period roughly within the scriptures from Deuteronomy, the development of compassion in the Upanishads , and then the ideal of compassion that arose in Jesus Christ, Buddha and Mohammed.<sup>12</sup>

## Prehuman Stone tool Making & Sociological Evidence of Unconscious Spiritual Symbolism

Tim Spector, in the article What Twins Reveal About the Science of Faith (Popular Science, August 8, 2013) states, "They [researchers] have estimated the heritability of spirituality at about 40 to 50 percent, which is quite high if considering how hard things like that are to measure. Other US studies using more detailed questions in larger numbers have found similar or stronger genetic influences. The This study reveals our variable but inherent sense of spirituality, which affects how we see the world, ourselves, and the universe. It is independent of our formal religious beliefs and practices and, strangely, more independent of family influence.<sup>13</sup> »

Furthermore, Gilbert Todd Vance, in an article, Genetics of Religiosity, states that, "Although it may seem at first glance that religiosity is not influenced by genes, studies have shown that genetic effects contribute to individual differences in a wide range of range of traits and behaviors, including social attitudes, personality, professional interests, IQ, and religiosity.<sup>14</sup>

Genetic perspective of stone tool making – and unconscious symbolism underlying the modern crystal craze

Hannah Devlin observes, "The discovery of stone tools dating back nearly 3m years has raised questions about which hominin species was behind the ancient technology. The artefacts, found at a site in Kenya, are thought to be the oldest known example of a specific set of stone tools used for butchery and pounding plant material. The emergence of the so-called Oldowan toolkit is viewed as a milestone in human evolution and was assumed to be an innovation of our ancestors. However, the latest excavation revealed a pair of massive molars belonging to Paranthropus, a muscular-jawed hominin on a side

<sup>&</sup>lt;sup>12</sup> Strom, Caleb, and Caleb Strom. 2020. "The Stone Age: The First 99 Percent of Human History." Ancient Origins Reconstructing the Story of Humanity's Past. April 12, 2020.

<sup>&</sup>lt;sup>13</sup> Spector, Tim. 2013. "What Twins Reveal About the Science of Faith." Popular Science. August 9, 2013.

<sup>&</sup>lt;sup>14</sup> Vance, Gilbert Todd. "Genetics of Religiosity." In Encyclopedia of Psychology and Religion, pp. 942-943. Cham: Springer International Publishing, 2020.

branch of our evolutionary tree, alongside the tools." Hannah Devlin Science correspondent, Discovery of 3m-year-old stone tools sparks prehistoric whodunnit, Guardian.com

Infants have an innate fear of snakes and spiders. John Virata observes, "The researchers tested 48 babies, each six months in age, and analyzed how they reacted to images that the researchers thought would scare them. The babies were placed on their parents' laps, with their parents wearing opaque glasses that prevented them from seeing the images shown to the babies, images of snakes and spiders on white backgrounds. When the babies were shown images of spiders and snakes, they constantly reacted with larger pupils, a much different reaction when they were shown images of flowers and fish".

Humans have a built-in fear of snakes, according to babies view of photos depicting the reptiles. The reactions, the researchers say, suggests that humans are born with an innate fear of snakes and spiders. Could Fear Of Snakes Be Genetic? Study Says Yes, John Virata October 27, 2017 3:55 pm Reptiles magazine.com

Madeleine Thomas notes that "according to some experts, the younger generation chooses spiritual practices like crystal healing because it allows them to combine elements from many religions and ancient traditions into an individual spiritual practice." That dovetails with what Cusack observes - that there is a democratization of spirituality underway (for better or worse). He goes on to say that "although crystals first became popular in the 1970s, the new consumers targeted by crystal suppliers are in their twenties and thirties...And they reach a trendy, urban clientele. and diverse as well as young celebrities like Kylie Jenner, Katy Perry and Miranda Kerr.

The Scale of Fandom: Star Wars and Harry Potter:

Evidence of a genetic predisposition for the idea or symbolism of "spirit" is easy to find and plentiful in abundance. For instance, "May the Force be with you!" has become a cultural Icon. As Wikipedia observes, "Star Wars references are deeply embedded in popular culture" In the article The Fandom Menace, Tom Morris observes that "With a total value of over \$68 billion, "Star Wars" is the fifth-highest grossing media franchise of all time." Morris goes on to say that "At the beginning of 2017, Star Wars fans accounted for over 1 in 3 internet users. But into the second half of 2019, this figure has fallen to just over 1 in 4." What is fascinating is that "Star Wars has the rare advantage of being a popular franchise, with cross-generational appeal" in that, roughly between 23 to 26% of internet users from generation Z, generation X, Millennials, and Boomers. Another intriguing fact is that "2 in 3 Star Wars fans agree the internet makes them feel closer to people." (The Fandom Menace: Profiling Star Wars' Influential Fanbase Tom Morris Tom's an Insights Analyst & Writer at GWI).

The Star Wars Influence on Culture is remarkably extensive — especially for a fiction book. Rather incredibly, honest to God, real religions have emerged based on Star Wars and who believe in a Life-Force that "surrounds us... penetrates us" and "binds the galaxy together" — just as Obi Wan Kenobi explained in the movie. The "Jedi" are a real organized religion in some countries. Throughout the world many people answer census questions and list their religion as Jedi knights with England, Australia and New Zealand getting surprisingly high responses as Jedi Knights. Wikipedia states the fact that "A real-

<sup>&</sup>lt;sup>15</sup> Devlin, Hannah. 2023. "Discovery of 3m-year-old Stone Tools Sparks Prehistoric Whodunnit." The Guardian, February 10, 2023.

<sup>&</sup>lt;sup>16</sup> Morris, Tom. "The Fandom Menace: Profiling Star Wars' Influential Fanbase." GWI. December 3 (2019).

life religion based on Star Wars called Jediism follows a modified version of the Jedi Code, and they believe in the concept of The Force as an energy field of all living things, which "surrounds us... penetrates us" and "binds the galaxy together", as is depicted within Star Wars movies, although without the fictional elements such as telekinesis.

Scale of the popularity and influence of Harry Potter and Star Wars culture

YouGov's latest research shows that nearly two thirds of Americans (62%) say that they like Star Wars. Men (73%) are more likely than women (51%), however, to say that they like Star Wars. Women (39%) are also nearly twice as likely as men (23%) to say that they have never watched a Star Wars movie.

69% of Americans have, however, watched a Star Wars film. When you first saw a Star Wars film depends a lot on how old you are, as younger Americans are unsurprisingly a lot more likely to have first seen the movies when they were kids. Overall, however, 35% of Americans first saw a Star Wars when they were a child and 34% first saw a Star Wars when they were already an adult. (Star Wars more popular with men than women, You Gov, Peter Moore) It is interesting that polls indicate that North America has the largest fan base proportionately with over 1 in 3 internet users identifying themselves as Star Wars fans.

Thus, it would seem an inevitable conclusion that in light of the widespread popularity of Star Wars and Harry Potter that this could not happen without spiritual symbolism as well as the symbolic "spirit as life force" archetype in the unconscious. The important characteristic of symbols – on which there is a consensus between William James, Carl Jung, and Viktor Frankl. Donald Kalsched views archetypes: "Archetypal energy is rooted deep in the unconscious and it is 'archaic', primitive, and also 'typical'. Archetypal energies and affects are not easily assimilated by the conscious mind. They can be luminous or dark, angelic or demonic, but because they exist in raw, unmediated form they tend to be overpowering." Nancy Furlotti echoes that statement when she says, "Affect emerges from archetypes, which are the a priori ordering principles of nature, the world, and the psyche. When an archetype is activated, energy is put in motion that does not adhere to the laws of causality, or time and space." (Tracing a Red Thread: Synchronicity and Jung's Red Book:(2010), Psychological Perspectives, 53:4, 455-478) Beliefs and ideas are very real and incredibly powerful. For perspective I would add that the idea of "spirit" as energy and force is very real, especially in light of a collective consciousness.

That being said, Carole Cusack correctly observes "the imaginative exercise of realizing that world (of spirituality and supernatural force in Harry Potter and Star Wars) is extremely attractive...... (p.27) The energy set in motion via unconscious symbolism takes many forms: compassion, idealism, music, and so on. In fact, Catherine Hall, in her article, 'Reading and [w]rocking': Morality and musical creativity in the Harry Potter fandom, observes, "Wizard rock, often stylized in written form as 'wrock', creatively engages with and augments the content world of Harry Potter through musically and lyrically diverse performances. Fan studies centred on Harry Potter have often discussed the application of fictional heroism to real-world issues, and wizard rock musicians are frequently cited as fandom activists. However, there is little analysis of the music, lyrics and performances of wizard rock as it relates to the moral messages of the series........ wizard rock community's application of fictional heroism through music, lyrics and performance encourages fellow Harry Potter fans to embrace heroic qualities in the

<sup>&</sup>lt;sup>17</sup> Furlotti, Nancy. "Tracing a Red Thread: Synchronicity and Jung's Red Book." Psychological Perspectives 53, no. 4 (2010): 455-478.

real world."<sup>18</sup> (CATHERINE HALL Florida State University 'Reading and [w]rocking': Morality and musical creativity in the Harry Potter fandom; Journal of Fandom Studies Volume 4 Number 2 © 2016 Intellect Ltd Article. English language. doi: 10.1386/jfs.4.2.193) Cusack also observes that there is a democratization of spirituality underway (for better or worse). The Star Wars Influence on Culture is remarkably extensive – especially for a fiction book.

Rather incredibly, real religions have emerged based on Star Wars and who believe in a Life-Force that "surrounds us... penetrates us" and "binds the galaxy together" – just as Obi Wan Kenobi explained in the movie. The "Jedi" are a real organized religion in some countries. Throughout the world many people answer census questions and list their religion as Jedi knights with England, Australia and New Zealand getting surprisingly high responses as Jedi Knights. Wikipedia states the fact that "A real-life religion based on Star Wars called Jediism follows a modified version of the Jedi Code, and they believe in the concept of The Force as an energy field of all living things, which "surrounds us... penetrates us" and "binds the galaxy together", as is depicted within Star Wars movies, although without the fictional elements such as telekinesis.

## **Ancient Pendants and Amulets**

It is possible that the roots of the modern "crystal craze" lie in the genetic principles of stone worship dating back 2-3 million years ago to the Jasperite pebble "Makapgo" - found far from any possible natural resource for this particular type. of stone - which appears to be connected to the prehuman species Australopithecus africanus. The first production of stone tools - developed about 2.5 million years ago by the species Homo habilis - which preceded Homo sapiens. The beginning of the Stone Age began with the most basic stone tools made by early humans. The Oldowan tool industry is the oldest known stone tool industry. These Oldowan toolkits are simple but include hammers, stone cores, and sharp stone flakes.

Amy Chavez, in her article On the Worship of Rock and the Shinto Gods, interviewed Man-chan, a Shinto priest, who is "84 years old and considered the person most in contact with the Shinto spirits (we), in our island". Chavez said that "the people could offer their prayers and the stone served as a vehicle of communication between the people and us. Nowadays, however, buildings are being built to dedicate Shinto shrines...... The special stones actually contain kami spirits. These stones should receive the rays of the rising and setting sun. These sacred stones contain spiritual energy. Their power can last forever, as long as the area is well maintained and clean. You can tell if a stone has kami or not by holding it in your hand to feel its energy. Women are said to be particularly sensitive to this energy. Yes! The folkloric "sensitivity" of women is consistent with modern research that women are, in fact, more receptive to spirituality than men and attend church "more" than men. <sup>19</sup>

The belief that rocks and stones contain energy is of course widespread throughout the world. For example, the Dakota Indians of North America believe that spiritual energy resides in nature and the earth and especially in certain large stones painted with significant colors. The spirits in rocks and stones are called Taku skan skan, Inyan and Tunkan. The Sicun tribe of the Oglala Indians of North America,

<sup>&</sup>lt;sup>18</sup> Hall, Catherine. "'Reading and [w] rocking': Morality and musical creativity in the Harry Potter fandom." Journal of Fandom Studies 4, no. 2 (2016): 193-208.

<sup>&</sup>lt;sup>19</sup> Chavez, Amy. 2011. "On Rock Worship and the Shinto Gods." The Japan Times, July 8, 2011.

believed that protective spirits resided in rocks. I should point out that emotional interest in stones is an evolutionary adaptive trait in that interest in stones clearly played a role in the development of stone tools during human evolution. In fact, one has to think of an instinctive drive by the very fact that the evolution of tool making actually took place.

In the early Old Testament, stones were used as memorials to God in worship. Bethel is where Jacob commemorated his vision by building a standing stone (as is widely practiced in Palestine) In the Exodus, Moses built twelve pillars in thanksgiving and remembrance to God. Gilgal is where Joshua commemorated the Israelites' miraculous entry into the Promised Land by placing memorial stones or standing stones when the Israelites crossed the river. Additionally, Samuel built an Ebenezer stone after God stopped the Philistine invasion. But in Jeremiah's time, when the Jewish leaders directly opposed the Canaanite cult of stone worship that built pillars (a practice that spread throughout the world), stone worship was deliberately suppressed to prevent the Jews from their traditional, exclusive, YWYH. - only worship. There are also specific and explicit prohibitions in the Quran forbidding the worship of stones.

Initially, the Jewish amulet called the Hand of Miriam (Miriam was the sister of Moses and she was considered a prophetess in her own right) which is very similar to the Muslim variant called the Hand of Fatimah was very popular. Today, this seems to be a controversial issue in Muslim beliefs - partly due to the number of recent articles about gemstones (rings and pendants) in the last few years, it is a "hot topic". Nouri Sardar, in his article in 2018, Wearing Rings and Gemstones in Islam: Philosophy and Benefits, said that "Gemstones have a special place in Islam. An example of this is AI -Hajar AI- Aswad, the black stone, located next to Trembling and wanting Muslims kiss and touch. He went on to say that "Some believe that gemstones have the power to heal illness, both physical and metaphysical. The finger is a direct link to the heart, and according to some experts in mysticism and the scientific properties of gemstones, it is the gemstone energy that transfers from the stone to the body. He said that "In Shia literature, there are many hadiths about the benefits of gemstones, including the aqeeq. – which is the jewel of the ring that "the hadith mentioned earlier [in the article] by Anas ibn Malik proves that the Holy Prophet truly wore". Imam Ali Al-Ridha is an important source cited by the author. As I mentioned earlier, the issue seems to be very controversial due to the number of articles on the subject, and beliefs tend to differ between regions and sects.<sup>20</sup>

#### **Technical Science**

Technically, science has proven the crystal believers right, because in all reality, there really is "energy" in crystals. In other words, "the vibrational movement of an atom in a crystal spreads to neighboring atoms, leading to a wave of propagation of vibrations throughout the crystal. How the natural vibrations of This voice in the crystal structure determines the fundamental properties of the material. For example, these vibrations determine how far heat and electrons can travel through the material and how the material interacts with light. Benjamin Radford, in the article "Why is quartz used in watches?" [ "Why used Quartz in Watches?" ] (Live Science Contributor, February 21, 2013) states that "Some materials, such as certain ceramics and quartz crystals, can generate electricity when subjected to mechanical stress. The ability to convert voltage to and from mechanical stress is called piezoelectricity.

<sup>20</sup> Sardar, Nouri. 2020. "Wearing Rings and Gemstones in Islam: Philosophy and Benefits." The Muslim Vibe. August 25, 2020.

Quartz crystals maintain a precise frequency standard, which helps regulate the movement of a watch or clock, thus making timepieces highly accurate. Quartz is also used in radios, microprocessors and many other technological and industrial applications. Keeping crystal beliefs in perspective, this is more of a "consciousness" than an instinctive belief, so to speak. <sup>21</sup>

Reading materialistic analyzes of ancient spiritual and religious beliefs, it is apparent that most spiritual beliefs are completely out of context. The context in/from 10,000 BC was that "nature" was the entire environment for humans, thus making the relationship and interaction with nature (the environment) a priority and important aspect of human life. It is through spirituality that the human species engages - and confronts - the environment. Nature awareness is an evolutionary adaptive trait. In addition to this, processes involving "imagination" have become important and critical to any awareness or understanding of nature.

## The modern-day craze for crystals, the stone instinct & prehistoric stones

"Jessie Oatman was suffering from a breakup - she thought she had just lost her loved one - when she first decided to try healing crystals. The 34-year-old's heart felt stuck, she said, as if shattered into a hundred thousand pieces. His shoulders began to collapse from what he believed to be a heavy burden of heartache. And so Oatman's friend, who was studying shamanism at the time, placed a series of stones on his chakras, a chain of seven linear energy portals. The vibrations and healing properties of crystals, some say, help rid the chakras of lingering negative energy and realign the body and mind. Friend is placed a piece of pale pink rose quartz, the " stone of love ", which is believed to open and soothe the suffering heart, in Oatman's chest. The experience was transformative. "I was able to move some of the blocked energy that was there," Oatman said. "I remember the weight which was once in my heart raised with real focus on the heart chakra, using this rose quartz." Oatman has been married since her first chakra cleansing, and rose quartz remains her favorite crystal.

WHY YOUTHS ARE STRENGTHENED BY HEALING CRYSTALS BY HEALING CRYSTALS. Of course, most psychologists tend to view mystical crystal healings with some skepticism, perhaps seeing the cure as an illustration of the placebo effect at best. However, some influences should be considered. First, as William James and Carl Jung observed, emotions stimulate symbols or "abstractions" as William James called them, especially religious and spiritual beliefs. Ancient stone worship dates from the Mesolithic Age to the Bronze Age and is widespread throughout the world on all continents, and involves literally tons and tons of evidence that stone cult beliefs are true. Additionally, talismans, a particular form of stone worship, first appeared as burials in Neanderthal and other prehistoric burials. The Badarian culture dates back to perhaps 5000 BC. AD and provides the first direct evidence of agriculture in Upper Egypt, which often used amulets as grave goods.

Madeleine Thomas notes that "according to some experts, the younger generation chooses spiritual practices like crystal healing because it allows them to combine elements from many religions and ancient traditions into an individual spiritual practice." He goes on to say that "although crystals first became popular in the 1970s, the new consumers targeted by crystal suppliers are in their twenties and thirties...And they reach a trendy, urban clientele. and diverse as well as young celebrities like Kylie Jenner, Katy Perry and Miranda Kerr. In 2016, Crystal Matrix boutique owner in Los Angeles, Patricia

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<sup>&</sup>lt;sup>21</sup> Radford, Benjamin. 2022. "Why Is Quartz Used in Watches?" Livescience.Com, June 30, 2022.

Bankins, said that her dominant demographic is now "a lot of young people" (WHY ARE YOUNG PEOPLE SO HEALING CRYSTALS? MADELEINE THOMAS / MADELEINE THOMAS MISE UPDATED: JUNE 14, 2017).

Aaron Earls says "When many Americans need spiritual help, they go to church. Or look up at the mountains. Or pick up some crystals. Four in 10 Americans (42 percent) believe that spiritual that power lies in physical objects like mountains, trees, and crystals, according to a new study of American religion from Pew Research. A similar number (41 percent) believe in psychics. A third (33 percent) believe in reincarnation, while 29 percent believe in astrology." (AMERICANS BELIEVE IN GOD, BUT ALSO IN PSYCHIC AND CRYSTALS - August 31, 2018) This renewed interest in crystals and talismans may be genetic remnants or vestiges of Stone Worship prevalent throughout world at different levels from the Mesolithic period to the Bronze Age.

Tess McClure notes that "five years ago, crystals weren't a big deal. Now, fueled by a lucrative combination of social media-friendly aesthetics, cosmic spirituality, and the seemingly unstoppable wellness juggernaut, they've gone from a quaint oddity associated with patchouli and "crushed velvet" [ crushed velvet], to a global consumer phenomenon .......... Believers say the crystals conduct ambient energy – like miniature telephone towers that pick-up signals and route them to the user – thus rebalancing malignant energies, healing in body and mind. First popularized in the West in the 1970s, the recent revival of crystal healing has coincided with a growing interest in alternative spirituality and healing practices. According to data from the Pew Research Center, more than 60% of American adults have at least one "new age" belief, such as trust in astrology or the power of psychics, and 42% believe that spiritual energy can be localized in the physical. things like crystals <sup>24</sup>(article: Demand for 'healing' crystals is surging – but many are mined in deadly conditions in one of the world's poorest countries. And there is little evidence that this billion-dollar industry is being cleaned up its action. Demand for 'healing' crystals is on the rise - but many are mined under deadly conditions in one of the world's poorest countries. And there is little evidence that this billion-dollar industry is "cleansing its action.")

#### **Footnotes**

American Institute of Physics. "A better way to control crystal vibrations: By introducing impurities into a material, researchers can control the speed and frequency of phonons, potentially leading to more energy-efficient devices" ScienceDaily, 21 May 2018. [American Institute of Physics. "A better way to control crystal vibrations: By introducing impurities into a material, researchers can control the speed and frequency of phonons, potentially leading to more energy-efficient devices" ScienceDaily, May 21, 2018.] < www.sciencedaily.com/ releases/2018/05/180521154243.htm>.

<sup>&</sup>lt;sup>22</sup> Thomas, Madeleine. 2017. "Why Are Young People so Into Healing Crystals?" Pacific Standard. April 6, 2017.

<sup>&</sup>lt;sup>23</sup> Smietana, Bob. 2023. "Americans Believe in God, but Also Psychics and Crystals." Lifeway Research. February 16,

<sup>&</sup>lt;sup>24</sup> McClure, Tess. 2021. "Dark Crystals: The Brutal Reality Behind a Booming Wellness Craze." The Guardian, September 13, 2021.

# Prehuman stone tool making and Philippine "thunderstones"

Prehuman stone tool making

Excerpt from article: An earlier origin for stone tool making: implications for cognitive evolution and the transition to Homo Jason E. Lewis and Sonia Harmand

"The discovery of knapped stone artefacts dating to 3.3 Ma at the site of LOM3 on the western side of Lake Turkana in northern Kenya has fundamentally changed our understanding of early hominin evolution and the development of technological behaviour in our lineage. In addition to pushing back the beginning of the known archaeological record by 700 000 years, it places the origins of stone knapping half a million years before the earliest known fossil evidence of the genus Homo [39], and marks the first time a new industry of the Earlier Stone Age has been proposed in over 80 years [40].

stone tool making might no longer be considered characteristic only of Homo. It could now also be attributed to earlier hominins like Australopithecus or Kenyanthropus, having developed from pre-existing stone manipulation and tool-use behaviours of our primate ancestors.... Instead of the conventional narrative described above, evidence is quickly amassing that stone tool-making behaviours are not necessarily limited to Homo; cranial, post-cranial and behavioral diversity in early Homo is much wider than previously thought, emerging from similarly high diversity in Pliocene genera and earlier than previously thought; and these evolutionary changes may not have been directly related to living in savannah grassland environments." <sup>25</sup>

The stone tool making evolutionary adaptive "trait" would be very relevant to "Stone Worship" – especially in light of the deeply embedded instinct related to stone tool making – which is now believed to have originated in prehuman species - as long ago as 3.3 million years ago. It would stand to reason then that the "attention to stone" (archetype) would be built into the human unconscious and is, in that sense – functional.

The conclusion that neuroscientists come to is that emotions are a prerequisite of morality - as it were - though it is incredibly complex with myriad interconnections. The same would be true of spiritual (and religious beliefs). The materialist generalization that "All spirituality is unreal" and beliefs in the supernatural are "completely superstitious nonsense" is false and distorts the "Truth" horrifically.

Lastly, I should re-emphasize that an inescapable conclusion would be that the materialist view that "All spirituality is unreal" or that transcendental spirituality is automatically and necessarily completely and totally "superstitious nonsense" is false — and horrifically biased and unscientific. It would blatantly self-evident that a spiritual-religious motivation existed in order for the worldwide stone megalith structure to have been constructed. But that is repressed in mainstream social science literature.

<sup>&</sup>lt;sup>25</sup> Lewis, Jason E., and Sonia Harmand. "An earlier origin for stone tool making: implications for cognitive evolution and the transition to Homo." Philosophical Transactions of the Royal Society B: Biological Sciences 371, no. 1698 (2016): 20150233.

#### Philippine thunderstones

As a point of information, in my research – while I found no stone megaliths in the Philippines, I did stumble across "thunderstones!" in "prehistoric" Philippine culture. "In particular, ancient edge-ground artefacts are widely classified as teeth of the lightning (or thunder) by rural people in Indonesia and the Philippines, and valued for their perceived mystical properties. Such beliefs are strikingly similar to historically known conceptions of stone implements, in particular axes (i.e. thunderstones or thunderbolts), elsewhere in the world, especially in folk traditions of Europe. I consider how these apparently highly arbitrary connections between empirically unrelated phenomena could have arisen among widely separated, and culturally and linguistically unrelated people in our region and further afield. Natural phenomena are identified that can potentially account for the recurring link between these empirical categories" Lightning teeth and Ponari sweat: Folk theories and magical uses of prehistoric stone axes (and adzes) in Island Southeast Asia and the origin of thunderstone beliefs Adam Brumm.

## <u>A New Map-Model of religion vs Geertz's outmoded 1965 map-</u> definition

Geertz's "Universally" accepted (in social sciences) definition of religion
Ira Chernus: "One of the most influential figures in this social-scientific approach to religion is
the anthropologist, Clifford Geertz. In an essay titled "Religion as a Cultural System" (1965), he
[Geertz] spelled out a definition of religion that many others have borrowed, adapted, and
employed in studying religion...."(1) a system of symbols (2) which acts to establish powerful,
pervasive, and long-lasting moods and motivations in men (3) by formulating conceptions of a
general order of existence and (4) clothing these conceptions with such an aura of factuality that
(5) the moods and motivations seem uniquely realistic."

Shortcomings of Geertz's Universally Accepted Definition of Religion
Clifford Geertz's definition of religion has effectively been THE Accepted Definition of
Religion in the humanities! However, Geertz's definition is missing any concept or idea of
"spirit" in Geertz's definition. Brian Hayden, the author of Shamans, Sorcerers, and Saints and
anthropologist (whose book I happened to be reading at the time), "agreed" with my
"assessment" of Geertz's definition of religion - in spite of the fact that in his book he cites
Geertz's definition of religion and "agrees" with Geertz's definition of religion. Basically,
Hayden said that "Yes, Geertz's definition of religion is flawed and off-track in leaving spirit out.
Now, in light of the fact that much of his writing dealt with spiritual rituals, it would seem
offhand that Geertz, of all people, would definitely not have left "spirit" out of a definition of
religion. In Geertz's "universally accepted definition of religion [Chernus]," there is 1) no
community, 2) no social consciousness – teachings 3) no role for the teachings of religions, and
4) no spirit. All my "connections" that I consulted agree the following are self-evident truths and
obvious religious aspects that should be included.

#### Point of Order

1. "Proper knowledge maps or mirrors the actualities of the real world!" - K Gergen

2. "To understand something, whether we are aware of it or not, depends on choosing a model! - Iain McGilChrist

New Map/Model of Religion – for perspective

- 1. Religions are groups and communities.
- 2. The teachings of religion are an important aspect of religions.
- 3. "Spirit" is pivotal in religious beliefs
- 4. Spiritual and religious beliefs are a form of social consciousness & a system of symbols
- 5. In which Identity and way of life are very salient and pivotal factors
- 6. Evolutionary Adaptive Selective attention trait as a pivotal psychological function which focuses attention and over-rides competing needs desires to assure total commitment to huntergatherer goals.

## Religious Beliefs Social and Spiritual Self

Paloutzian and Park observe, "religion and spirituality are more or less coherent, culturally elaborated meaning systems embedded in and acquired through social relationships and institutions situated in complex natural and built environments." In principle – in light of the fact that there is a consensus among scientists that above all human beings are "social animals – then, relationships would be a primary "characteristic" of humanity – and religions. (p. 12,)

Musical Spirituality is an excellent illustration of a social and spiritual self - and worth reviewing. Musical Neuroscience also concludes that music is interconnected intimately with speech, singing, dancing and is pivotal in the development of a social self. So "stone worship would be no different and interconnected with different processes and function – including very likely the development of a social self

Synopsis of Musical Research – Spiritual and Social Self – counterpoint to Materialist Ideology "Spirituality is a natural human predisposition. It is more primal than institutional religion and concerns a person's sense of connectedness with self, others, and the world (or cosmos)." (Kate Adams Bishop Grosseteste University College Lincoln & Brendan Hyde Australian Catholic University)

FACT: "It is more primal than institutional religion"! As Anton Killin observes: "Music is a fascinating topic for evolutionary theory, natural philosophy, and narrative construction: music is a highly valued feature of all known living cultures, pervading many aspects of daily life, playing many roles. And music is ancient. The oldest known musical instruments appear in the archaeological record from 40,000 years ago (40 Kya) ...." In addition. Killin argues that musical capability may date as far as 275.000 years. For perspective, it is intriguing that there are remarkable similarities in prehistoric flutes from China and Germany – which are separated by 7219 km, or 4485 miles (from California to New York is 2,900 miles) (Prehistoric European And East Asian Flutes Victor H. Mair)

Music as an Evolutionary Adaptive Trait: Spiritual & Social Self: "Since Darwin (1871), more and more scientists believe that human music must be a biological adaptation." Musical Research provides a very salient counterpoint to the academic norms that "There is no psychology of groups" (social psych - Allport 1927) and the academic norm that "All spirituality is unreal" which is widespread misunderstanding due to the Materialist maxim-fallacy that spirituality is "intangible" and unmeasurable – which is a fallacy and false. Besides musical spirituality there are studies of compassion which show a correlation with spirituality.

If I wasn't a physicist, I'd probably be a musician. I often think about music. I am living my dreams in music. I see my life in terms of music. - Albert Einstein

## 1. Schulkin and Raglan:

Jay Schulkin, Greta B. Raglan observe that "Music is a core human experience and generative processes reflect cognitive capabilities. Music is often functional because it is something that can promote human well-being by facilitating human contact, human meaning, and human imagination of possibilities, tying it to our social instincts. Music is a fundamental part of our evolution – and functional because it facilitates "human contact" and out "social self!"

- 2. Ian Cross: Ian Cross states: It seems likely that proto-musical capacities and their cultural particularizations as musics were crucial factors in precipitating and sustaining the social and cognitive versatility that mark modern humans (Cross, 1999). In effect, musicality can be interpreted as complementing language in human evolution, filling in the 'gaps' in language function through its combination of embodiment, entrainment, and transposability of intentionality. (p. 5-6)
- "Cross-culturally, at a first approximation, 'musical' behaviours involve not just patterned sound, but also overt action; 'musicality' is a property of communities rather than of individuals; and music is mutable in its specific significances or meanings." (p.1)
- 3. Tianyan Wang states: "Since Darwin (1871), more and more scientists believe that human music must be a biological adaptation (Wallin et al., 2001; Mithen, 2009) .... The social functions of music are so important, that many scientists argue that music originated and developed from social activities: strengthening the mother-baby connection (Dissanayake, 2000; Trehub, 2003) and social cohesion (Brown, 2000a; Freeman, 2000; Mithen, 2007). And there are also many hypotheses on the origins of musical emotions (Wallin et al., 2001; Brattico et al., 2009; Perlovsky, 2010; Altenmüller et al., 2013; Juslin, 2013; Patel and Iversen, 2014)." (A hypothesis on the biological origins and social evolution of music and dance HYPOTHESIS AND THEORY ARTICLE Front. Neurosci., 18 February Tianyan Wang)
- 4. "Morality and musical creativity in the Harry Potter fandom" C. Hall

The contemporary-modern popularity of Star Wars and Harry Potter, and the numerous other imaginative fandoms, provide -= as sociological evidence - massive data and evidence of the existence of unconscious spiritual symbolism. Rhiannon Grant in The Sacred in Fantastic

Fandom, Grant observes in 2001, the British government ran a regular census, but they included a new question about religion. In response, almost 0.8 percent of the total population said they were a "Jedi" or Jedi knight!" (p. 38) Those results were repeated in Australia and New Zealand. Catherine Hall, in her article, 'Reading and [w]rocking': Morality and musical creativity in the Harry Potter fandom, observes, "Wizard rock, often stylized in written form as 'wrock', creatively engages with and augments the content world of Harry Potter through musically and lyrically diverse performances. Fan studies centred on Harry Potter have often discussed the application of fictional heroism to real-world issues, and wizard rock musicians are frequently cited as fandom activists. However, there is little analysis of the music, lyrics and performances of wizard rock as it relates to the moral messages of the series..... Similar to their heroes in the books, these musicians imbue their music and their self-images with the series' morals, historical tropes and archetypes. They make this morality tangible by donating proceeds of compilation albums or music subscription series sales to nonprofit organizations, and by weaving these messages into their music. I argue that the wizard rock community's application of fictional heroism through music, lyrics and performance encourages fellow Harry Potter fans to embrace heroic qualities in the real world."

(CATHERINE HALL Florida State University 'Reading and [w]rocking': Morality and musical creativity in the Harry Potter fandom; Journal of Fandom Studies Volume 4 Number 2 © 2016 Intellect Ltd Article. English language. doi: 10.1386/jfs.4.2.193 )

# <u>Addendum The Materialist Map-Model of Spirituality = the Maladaptive Stereotype that "All spirituality is unreal!"</u>

## Death is a Figment of Your Imagination

"Proper knowledge maps or mirrors the actualities of the real world!" <sup>26</sup>- K Gergen

## "To understand something, whether we are aware of it or not, depends on choosing a model!"<sup>27</sup> Iain McGilChrist

The psychologists, William R. Miller and Carl E. Thoresen, state in their article, "Spirituality, religion and health: an emerging field of research": "A philosophical basis for this perspective <u>is</u> <u>materialism</u>, the belief that there is nothing to study because spirituality is intangible and <u>beyond the senses."</u> That the pivotal part of that argument is a fallacy – specifically the "Definist fallacy" because it uses "loaded" terms which prevents any real dialogue or communication.<sup>28</sup>

<sup>&</sup>lt;sup>26</sup> Gergen, Kenneth J. "The social constructionist movement in modern psychology." (1992).

<sup>&</sup>lt;sup>27</sup> McGilchrist, Iain. The master and his emissary: The divided brain and the making of the western world. Yale University Press, 2019.

<sup>&</sup>lt;sup>28</sup> Miller, William R., and Carl E. Thoresen. "Spirituality, religion, and health: An emerging research field." American psychologist 58, no. 1 (2003): 24.

## <u>Peer Reviewed Critique of Materialism Endorsed by Four Very Prominent Psychologists and Medical Researchers</u>

The critique – dating from 2017-2018 has had well over 10,000 views and zero criticisms (between academia.edu, LinkedIn and FB science groups (before I stopped posting on FB) is peer reviewed - and then some

- 1. Dr. Paul Wong, Professor Emeritus of Trent University edited two large volumes of The Human Quest for Meaning
- 2. Dr. Harold Koenig, a medical doctor-psychiatrist, a well published and very well-known author and researcher stated about this article: "Charlie makes perfect sense to me,
- 3. Dr. Stephen Farra: Columbia International University Emeritus "Definist Fallacy (leading to a closed Materialism) is spiritual poison, and has hurt us all
- 4. Stefan Schindler, an award-winning author, and retired psychology-philosophy professor Spiritual Poison: Academic Maladaptive Stereotype: On the subject of the materialist Definist maladaptive stereotype "All spirituality is unreal"! Dr Stephen Farra, wrote:

"Charles, I strongly agree that the Definist Fallacy (leading to a closed Materialism) is spiritual poison, and has hurt us all! Frankl writes about how a closed Naturalism leads to a suffocating Reductionism, which leads to a mental and emotional Nihilism and the kind of Moral Corruption he experienced in Auschwitz and Dachau....."

The Materialist "Map-Model" that "All spirituality is unreal" goes far beyond "unscientific to hideous and destructive!"

## <u>Death is a figment of your imagination!</u> "It is not true if the major premise is not true" – Justice Rehnquist

Narrative explanation: Not too long ago, I happened to be talking with a Filipina college graduate at a street restaurant in General Santos, Philippines. I explained the materialist argument as explained by Miller & Thompson in the NIH article – that spirituality is unreal and nonexistent because you can't measure it – "the belief that there is nothing to study because spirituality is intangible and beyond the senses." I was a bit surprised when the Filipina college graduate I was talking with emphatically agreed with the argument that spirituality is unreal and nonexistent because you can't measure it.

So, I asked her to consider – for a moment - the concept of "death". I pointed out that "death" is way beyond quantification or measurement. I then added that if you follow the logic and reasoning behind the materialist argument then "Death then would be a "figment of her imagination and superstitious nonsense." She paused for a second then agreed with my reasoning – which is a major success for me. Bargh observes that most people just really don't want to believe that any unconscious factors could influence their thinking - without their knowledge.

Researcher Bias:

Academics rarely admit (never actually) that their thinking has been influenced by unconscious materialist academic norms. Yet it is clear in discussions with academics that their thinking is badly skewed – an obvious researcher bias. Here are some of the comments I heard on FB "science" groups: "mental illness," "Santa Claus", "fairies," and so on. In one instance I checked and questioned a member of a FB psychology group who referred to spirituality in terms of "Santa Claus" Any objective review of the social sciences and deficiencies and un-information when it comes to spirituality, social consciousness, and religion reveals a readily apparent researcher bias.

The Filipina who agreed her views had been skewed by a maladaptive stereotype-fallacy is really no different from academics who are clearly influenced by unconscious stereotypes. As John Bargh, the Unconscious researcher observes, Unconscious influences are pervasive and often powerful: Imagine for a moment that you are a psychology professor who does experiments on conscious awareness. You keep finding that your subtle manipulations of people's judgments and even behavior are successful—causing your experimental participants to like someone or to dislike that same person, to feel happy or sad, to behave rudely or with infinite patience. However, none of your participants have a clue as to what caused them to feel or behave in these ways. In fact, they don't believe you, and sometimes even argue with you, when you try to explain your experiment to them and how they were caused to feel or behave. Now, let's say you are home with your family for the holidays or on vacation. Your aunt or brother-in-law asks politely what your job is like. You attempt to explain your research and even some of your more interesting findings. Once again you are met with incredulity. "This can't be so," says your brother-in-law. "I can't remember this ever happening to me, even once."

## **Addendum: Divine Inspiration in Music**

"Music is the donum Dei, the gift from God, and therefore is only secondarily a human art or science." Martin Luther (16th century Germany)

The most ancient historical music – which were expressions of divine inspiration - comes from India - Hinduism "We worship Nada-Brahman, that incomparable bliss which is immanent in all the creatures as intelligence and is manifest in the phenomenon of this universe. Indeed, through the worship of Nada are worshipped gods Brahma, Vishnu, and Siva, since essentially, they are one with it ´... Nada is differentiated into twenty-two grades which, because of their audibility, are known as Srutis. From the Srutis arise the seven musical notes." Sangita Ratnakara of Sarngadeva (13th century India)"

Dr. Wong observes "The most beautiful thing we can experience is the Mysterious" [Einstein].... Awe is always a mixture of emotions, encompassing reverence, fear and a sublime sense of marvel and amazement. You may experience a tingling on your skin or a weakening of your knees. You may feel the stirring deep in your soul. As long as the spell lasts, you are transported from your mundane existence to a different realm filled with surprises and possibilities. Let's begin with music, the invisible bridge to Heaven. After George Frederic Handel) had completed the "Hallelujah Chorus", he exclaimed to his servant with tears in his eyes: "I did think I did see all Heaven before me, and the great God Himself!" Music had opened his inner eyes for God's glory in spite of his blindness. Since 1742, whenever Handel's Messiah is performed, the audiences automatically rise to their feet as they hear the majestic, aweinspiring "Hallelujah Chorus".

Spirituality-Music in prehistory: T'boli creation myth

Manolete Mora observes, "An examination and interpretation of the making of Boi Henwu's symbol within the context of the Lake Sebu creation myth is of considerable importance for the study of T'boli instrumental music. This myth alludes to important features of T'boli music making. Firstly, it points to underlying compositional components in instrumental music, and secondly, it indicates an intrinsic relationship between musical sound or pattern and extra-musical aspects. The expression of this relationship in the myth highlights a third important feature; namely, music as imitation or recreation of nature. A large portion of the instrumental repertoire is concerned with the imitation of natural sounds, and with the symbolic meanings ascribed to them. Finally, two additional key features or attributes of music making are indicated in the Lake Sebu myth. These are, firstly, the belief that music, like knowledge in general, is derived from the spirit realm through inspiration, and, secondly, the idea that instrumental music serves important social functions in courting and as a boundary marker in ritual<sup>29</sup>. (The Sounding Pantheon of Nature: T'boli instrumental music in the making of an ancestral symbol' MANOLETE MORA (CLAYTON, VICTORIA, AUSTRALIA)

https://independentscholar.academia.edu/CharlesPeckJr

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<sup>&</sup>lt;sup>29</sup> Mora, Manolete. "The sounding pantheon of nature. T'boli instrumental music in the making of an ancestral symbol." Acta Musicologica 59, no. Fasc. 2 (1987): 187-212.