A Megalithic Elephant in the Room

Could Ancient Ways Improve Modern Mental Health?

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Abstract - *This monograph introduces a new transdisciplinary framework for understanding how the earliest monumental ritual spaces shaped—and in some cases, re-shaped—the human mind. Drawing on archaeoacoustics, population genetics, Anatolian and Maltese Neolithic archaeology, evolutionary anthropology and contemporary mental-health research, it proposes that the first sacred architecture not only altered ritual life but initiated long-term social and neurological patterns that persist into the modern age. A newly synthesized trail of evidence suggests that the roots of addictive vulnerability, spiritual dislocation, gender imbalance, and communal fragmentation may reach back to 12,000 years ago—to the creators of Göbekli Tepe, Karahan Tepe, and the wider Tas Tepeler (stone hills) horizon of northern Mesopotamia. It suggests that their descendants, the so-called "Anatolian Farmers," carried forward both the cultural and biological legacies that formed much of Europe and the Mediterranean world, as well as the better documented Levantine populations that are the foundation for the earliest written history. Archaeology has long documented the mechanics of the Neolithic Revolution in lifestyle, but underexplores the psychological consequences.*

The monograph also introduces a new form of experiential scholarship in the form of guided listening pieces that offer a novel route for public engagement, emotional insight, and embodied understanding of the Neolithic transition. Bringing critical perspective, these also nod to the traditions of a successful program of recovery that can be applied to a serious modern problem of skyrocketing mental illness and social disintegration. Understanding the revolution that began 12,000 years ago may help us recognize the one that is unfolding right now in front of us as recreational technology and artificial intelligence define the new normal. A call for collaboration prompts a path for extended research and development.

This material is exploratory and synthetic, leaning on published archaeological and other data while proposing interpretive bridges that have not yet been made in the mainstream literature. It is written to spark debate, invite correction, and encourage a rethink of deeply embedded assumptions.

Keywords: *addiction, Anatolia, archaeoacoustics, gender studies, Göbekli Tepe, Hal-Saflieni Hypogeum, Karahan Tepe, Malta, meditation, megalithic, mental health, Mesopotamia, Neolithic, neuroscience, population genetics, prehistory, psychology, ritual space, spirituality*

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Introduction: The Elephant

The significance of the mid-1990's discovery of Göbekli Tepe and its sister megalithic enclosures cannot be overstated. Archaeological remains in the "Fertile Crescent" of southeastern Türkiye, now identified as the *Tas Tepeler* area, provide physical evidence that illuminates a pivotal chapter in western human development. From that place, from that time, from those ancient people who created the first monumental architecture, the world changed forever. With some surprises, 12,000 years of accumulative learning, inventing and improving have brought us to where we are today.

What happened to Utopia?

In most of the western world, we are already living beyond all that science fiction writers envisioned fifty years ago. And yet, as a species, our mental health is disintegrating. Anxiety disorders, depression, substance abuse are escalating faster than statistical studies can keep up. In September 2025, The United Nations reported that the World Health Organization (WHO) has sounded an alarm as mental health conditions soar past one billion worldwide.[i] Cited is the latest WHO report stating that mental health conditions are among the leading causes of disability globally and also impose high costs on households, employers and economies. Persistent shortages of financial resources, skilled workers and quality services leave countries unable to meet population needs. WHO's new suicide estimates reveal that 727,000 people died by suicide in 2021. Suicide is the third leading cause of death among those aged 15–29 — second for young women and third for young men. In the USA, in 2023, 1 in 5 high school students seriously considered suicide. Suicide deaths among 10- to 24-year-olds increased by 62% from 2007 to 2021. Preteens (ages 8-12) saw an 8.2% annual increase in suicide rates from 2008 to 2022. A culture that is caught up in progress doesn't want to think about these things.

What is going on in the human mind?

Why does the modern world feel maladaptive despite our material advancements?

How did new environments, rituals, and hierarchies shape neurological inheritance?

What could have prepared us for the Internet?

Did we make a wrong turn somewhere?

This is not the space for debating what constitutes addiction but we can say that its source is something that one has grown to need to the extent that they are willing to do almost anything

to get it. Many of our problems may be stemming from a flaw in the internal human pleasure system that says: *enough*. Not recognizing *enough* is the absence of a neuro switch that is at the core of addiction. If someone is addicted to something, there is never enough, and – yes - it is possible to become addicted to more than substances. When applied to money and acquisition in a culture of "more, more, more", greed can be placed at the top of a list of indicators for addictive behavior that trickles down through institutions, media, businesses and administrative decision-making to be reflected in changing morality, values, and new cultural traditions. This may be the long echo of the ancient Neolithic cultural shift that moved us from being nomadic hunters to agricultural land-owners and city-dwellers.

It is already known at the highest levels that there are big problems with social media and other factors related to the worldwide web. There is no way that exposure to it is ever going to be regulated away. Besides exploitation of the vulnerable, the trouble essentially boils down to commerce. Shrewd intelligence is focused on getting us to stay online longer, buy newer and follow the crowd. The only shield against it has to be installed from the inside. But try telling your neighbor that easier, faster, more may not be the best or only choice.

When the pieces are assembled, a trail of evidence suggests that the stage was set 12,000 years ago for a genetic propensity for addiction.

Following the trail is facilitated with a quick thumbnail of the Göbekli Tepe scenario, punctuated by a few sample insertions ~ *in italic* ~ taken from the guided listening pieces that convey things in a way that an excavation report cannot. Although similar transitions in lifestyle would unfold later, elsewhere in the world, this was the earliest. This is the one that resulted in western civilization.

The Late Stone Age Neolithic Transition

For hundreds of thousands of years, Homo sapiens had been evolved as a species, living in nomadic tribes. People looked like us and were just as smart as we are. They walked on the same earth that we do, although their relationship with it was very different. Life's events remained universal, predictable and basically the same as they had been for thousands of generations.

Until they arrived in Anatolia 12,000 years ago, at the end of the last Ice Age, nomads on the open steppe grassland of southwestern Asia lived like everyone else in indigenous society -- in extended tribes of 20 to 150 or so individuals.

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Every face is familiar. Every hand is ready to help. What matters most is the welfare of the tribe, eclipsing that of the individual. When a toddler stumbles, the nearest adult lifts him up. A baby never goes hungry when five mothers can feed it. The sick are cared for, the strong provide, the wise guide. No one stands alone. Their biggest fear is exile. Who feeds the cast out fool who cannot get along? Who helps him when he falls sick or injured? The tribe is safety; belonging.

~

Evolutionary anthropology and child psychology tell us tribal childhood was far healthier than what most of us know today, with contented youngsters soaking up almost unlimited caregiving and attention, learning fast by watching and practicing. "Parents now have much less childcare support from their familial and social networks than would likely have been the case during most of our evolutionary

history," reports Dr. Nikhil Chaudhary; "Such differences seem likely to create the kind of evolutionary mismatches that could be harmful to both caregivers and children."[ii]

The ancient tribes followed herds of gazelle into lush grasses & verdant abundance amidst the rolling plains surrounding the Tigris and Euphrates Rivers. Here, the people enacted the first revolutionary change: megalithic architecture. Stone enclosures for ritual and ceremony were erected according to a preplanned design in places where they were desired as opposed to caves where they happened to be found. We need look no further than the painted Paleolithic caves to understand that an association was made. Simple observation of beasts depicted in the areas of most resonance in limestone caves where the echo atmosphere was already other-worldly tends to cement the concept that the cave was a place of special meaning. Limestone caves in the Tigris Mountains, one of the world's largest karst areas, were not a secret in prehistoric times and would have provided ample inspiration for developments to come in this same area. The *why* of megalithic architecture is as simple as the accessibility of very suitable building material and an idea prompted by observing the physical characteristics of the cave spaces that were best for generating a desired outcome.

With places like Karahan Tepe, Sayburç , Göbekli Tepe, a tradition was launched. Hundreds of monuments lie hidden under the hills of this *Tas Tepeler* area of northern Mesopotamia. Six thousand years before Egypt had a pyramid, the equivalent of a prehistoric theme park erupted here. The archaeologist who initially identified and uncovered the site, Dr. Klaus Schmidt writes, "A huge amount of labor over many decades must have been expended in the making of the structures. Yet there is, so far, no evidence for a large settlement in that time period. Nor is there any suggestion that the enclosures were residential. Göbekli Tepe was not a settlement site; it was a sanctuary."[iii]

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This is the first temple. The first space shaped for wonder. A place for the meeting of human and spirit. The people gather, hushed. Will the spirits come here?
Will echoes live in this place?

Now, the spiritual leader steps forward. Her footsteps are slow, deliberate. She carries a bundle, wrapped in skin and fiber. Within it lie herbs, carved figurines, bones, feathers—objects alive with meaning. In her other hand, a lamp burns—moss and animal fat feeding the flame. Its light flickers across the great stones. Shadows dance as though alive. Alone, she enters. She kneels. She unwraps her bundle. One by one, she places its treasures. Figurines upon the earth. Bones beside the stones. Herbs scattered into the flame.

Smoke curls upward. The air fills with fragrance—sharp, sweet, earthy. Her voice murmurs in chants and prayers. She sanctifies this place. The warmth of the small fire. The flicker of light against the stones. The silence of the world listening.

~

Over time, techniques were improved, corrections were made. Other tribes must have poured into the area for the chance to experience something as impressive as a ritual conducted inside carved stone shrine environments like Göbekli Tepe.

Once constructed, the shrines were decorated, finished with hard floors and smooth plaster walls inside and ceilings soaring overhead. Principles of physics dictate that the enclosed stone spaces would produce sound that was very different from what people knew living most of

their lives outdoors. They didn't need to understand it to know that they liked it. Very soon, the massive buildings tied the people to the land in a way that was unprecedented.

In a moment, we'll see that there was something else that likely tied them to this particular land.

Things grew well in the temperate part of the ancient world. When the season changed, the gazelle had no reason to leave. The tribes happily stayed where they were and made more changes. Gathering and foraging eased into habits of intention, domestication and long-term food management. Agriculture was born. Not having to carry their belongings to a new camp seasonally meant that folks could collect and save things, bigger looms for fine textiles, comfortable furniture, stone basins for brewing, fired pottery. They could have babies more frequently; the population soared. Settlements grew into villages. Eventually villages would grow into towns; towns would grow into cities.

This is where the mainstream would like to leave the story and jump into more exciting times with gold jewelry, sexy mythology and bronze weapons.

Not so fast! we cry. . .

For some reason, the sites went out of use and were buried around 10,000 years ago. According to the excavation team at Göbekli Tepe, it is not yet decided whether that burial was by human hand or natural disaster. If they suffered accidental fill, the Göbekli Tepe enclosures were not rebuilt. There does not seem to be any indication that the people of that time tried to dig them out and restore them. There is, however, evidence at Karahan Tepe of a deliberate refilling of that space at around the same time, as well as a long-standing cultural tradition of closing buildings that have gone into disuse. Perhaps a need for repairs in one place prompted a decision about all of them -- not meant to be forgotten but saved until more stable times. We don't know yet, but a deliberate hiding of the shrines invites some interesting conjecture.

There is an ancient folktale about Anatolia. It is said that a terrible drought came on the land in ancient times. The king decided that the people would split: half to travel to new lands and half to stay there. The "People of the Book", an umbrella term for the Abrahamic faiths of Jews, Christians and Muslims, will find directives in the Bible to "bring down their altars of stone". These may be reference to the *Tas Tepeler* people and their tradition. Many things change when a landscape becomes contested. The ancient ways may have gone out of favor with some controversy.

The timing of the abandonment after 1500 years of use coincides with the first of several waves of major outward migration beginning around 10,000 years ago, We can consider the whole Göbekli Tepe / *Tas Tepeler* area not as an endpoint but as a point of dispersal that carried material and conceptual residues across the Anatolian plateau and into southeast Europe, the Mediterranean and beyond.

Genetics - A Living Legacy

"Advances in genetic studies show us that an estimated third of the world's current population is descended from European ancestry. In this population, we can include people whose ancestors were moved from Africa and elsewhere, and admixed with Europeans in historic times, as well as indigenous people who survived European contact in the New World.

The study of DNA is a tricky business. Popular ancestry kits fail to consider the element of *when.* While someone may carry DNA that is labeled in their test results as "Italian", it may have come

from people who lived in that part of the world long before there was an Italy.

"Attempting to reconstruct, solely through genetic data, details of when and from where ancient populations moved and which migration paths they followed is an insurmountable challenge," says population geneticist Dr. Pierre Zalloua, whose work toward understanding the identity of the ancient Phoenicians has been deeply explored by the National Geographic Society. "To gain a more comprehensive understanding of the genetic data, we must supplement it with historical, social, archaeological, and climatic information."[iv]

Europe, Britain, Scandinavia (as well as points north, east and south) were infiltrated and settled by people who have been labeled in various reports simply as Anatolian Farmers. It is not widely understood that this assimilating population is comprised of the offspring of the tribes who built and settled near Göbekli Tepe and its companion sites. Lactose tolerance in adults is a hallmark example of genetic change that was handed down by these folks who had domesticated livestock and adopted yoghurt, cheese and milk in their diet. Initially, "they lacked a genetic mutation that would have allowed them to digest raw milk's dominant sugar, lactose, after childhood. Today, however, 35 percent of the global population --mostly people with European ancestry -- can digest lactose in adulthood without a hitch."[v] Blue eyes (also green, grey, hazel) are likely another example.

There are several neurological changes that may have come by descent from these same Anatolian Farmers. This brings relevance for a lot of people. We know enough to guess that sound had something to do with it. As will be seen, dopamine receptors are also likely involved."

Megalithic construction is a hallmark of the resettlement populations that stemmed from the Mediterranean wing of the migrations. The availability of workable stone may have been a factor, as there are remains of contemporary ceremonial structures of wood further from the sea. But in Malta, Sardinia, Menorca, Spain, Portugal, France, England, Scotland, Ireland, and even in the Caucasus, Neolithic stone-works reflect a shared cultural tradition. At Stonehenge, recovery of ancient DNA indicates that the Neolithic inhabitants were descended from populations originating in Anatolia.[vi] The 5100 +/- year-old remains of "Ötzi, The Ice Man", discovered in the Alps of the Italy/Austrian border show 92% Anatolian ancestry. The Anatolian DNA has been identified in the oldest sequences of ancient Egypt![vii]

For the migrant families, there seems to have been a travel kit. Items associated with Neolithic sites throughout the old world include things that would had to have been imported. These include: distinctive wedge-shaped axe-heads and amulets, obsidian, red ochre, various seeds, foods and flowers. The National Museum of Archaeology in Malta "Temple Period" collection includes beautifully worked pendants of greenstone which came from the Italian Alps. Perhaps Ötzi was a trader.

The genetic trail of cattle, sheep, goats, domesticated bread wheat and barley can be traced backward to origin near Göbekli Tepe. Where archaeologists find barley, they usually also find evidence of beer-brewing. This applies to Göbekli Tepe, the Malta Temple sites, ancient Egypt and Mesopotamia, as well as the rest of Europe.

Through migration and colonization in historic times, people carried their livestock, plants, genetic mutations and remnants of cultural tradition through the "Old World" to the "New

World" and beyond, coming with time and trade to influence most of humankind.

The Malta Connection: Divergent Trajectories and a Missing 4,000 Years

One who knows enough about both the archaeology of the Anatolian Neolithic sites and the treasure hoard of the Mediterranean islands of Malta can recognize the many matching signatures between them. The estimated flight distance between Valletta, Malta and Şanlıurfa, Türkiye is 1,346.21 miles (2,166.52 km). We can only imagine what was involved in navigating that distance in a primitive boat that was loaded with family, live animals and everything it took to resettle. It surely didn't happen as quickly as a couple of flights.

Nevertheless, on the Maltese islands of Malta and Gozo, Neolithic settlers created a second flowering of the megalithic statement. On these islands, the largest of which is less than 20 miles end to end, there are more than 23 sites where it is known that great stone temple complexes once stood. Today, they are in various states of survival but there are still four free-standing marvels and one underground site of incomparable worth. They are built in limestone which, where it hasn't been weathered, looks identical to the *Tas Tepeler* sites that include Göbekli Tepe.

Archaeologist Caroline Malone was principal investigator for a large project on Gozo that included analysis of ancient DNA from human remains of the Neolithic "temple period". She reports that the ancient builders were indeed Anatolian; "also we found some Balkan."[viii] (It should be noted that people from the area that we know today as the Balkan Peninsula descended from a Neolithic Anatolian origin.) Between these two widely separated "megalithic holy lands", there are dozens of parallels in architecture, artifacts, iconography and more. It is worth noting that in both locations, there is an absence of defensive architecture or weapons of war.

The richness of the Malta material is of great value since it fleshes out the picture of the post conversion agricultural communities, still holding to Neolithic tradition prior to the Bronze Age. The self-portraits that these later folks left in stone even show us what the people looked like!

In the design of the Malta temple sites, twin freestanding central pillars have been replaced by post and lintel systems with a paver slab at the bottom to keep them stable. As at Göbekli Tepe, animals have been found carved in relief on the stones of the sanctuary. They are wild and scary in the shrines of Anatolia: mostly predators baring their teeth and their male genitals. In Malta's megalithic temples, they are tamed farm animals: goats and sheep, pigs, cattle. The abstraction of the spiral takes precedence here, reflecting the concepts related to seasonality and agriculture. Somewhat mirroring the sites in the *Tas Tepeler* area, Malta's monumental clusters are walkable from each other, each with its supporting community.

There are no prehistoric residential buildings of that period to be found in Malta, but archaeologist Dr. David Trump reported finding mudbrick: a traditional housing material for the Levant but very odd on a rocky island like Malta. Mudbrick was the material used for building houses at Çatalhöyük, a residential site on the Southern Anatolian Plateau that was in use at the time of the first migrations.

At a driving distance of 688 km from Göbekli Tepe, settlers at Çatalhöyük clustered houses made of mudbrick into a vast settlement that stayed in use until it was abandoned around 7,600

years ago. As opposed to rough huts and tribal buildings, these densely packed windowless one-room homes would have provided a measure of privacy previously unknown. Genetic studies published during 2025 indicate that the social organization began with a culture organized along matrilocality and matrilineality and that the households passed from mother to daughter.[ix] No remains of a monumental structure contemporary with Çatalhöyük have yet been found in this area.

Something happened. The Tas Tepeler structures like Göbekli Tepe end around 10,000 years ago. The "Temple Culture" in Malta doesn't take off until nearly 6,000 years ago. Where were those monument-building folks for 4,000 years? Were they holed up somewhere, quietly holding on to the "old ways"? Had there been some disagreement on philosophy? Were they building something we haven't found yet or which has not survived? Were they too busy just trying to stay alive until a new home could be found? If they remained at the eastern end of the Mediterranean, that might account for the architectural silence.

Wherever they were, someone was keeping carefully preserved memory of the *Tas Tepeler* phenomenon. That is not such a stretch when we remember that we are ourselves still practicing traditional beliefs that began in another place more than 2,000 years ago, although we do not exactly copy the architecture of that time when we build a place of worship today. Change was not moving as quickly in those days as it does now.

There is a hint that maybe something happened in Anatolia with its abundance of very male-dominated shrines, most of which have revealed a sculpture or carving of a man holding his penis. With the exception of scratching that looks like Stone Age graffiti, little or nothing that could be identified as womanly has turned up from the pre-pottery Göbekli Tepe days. In contrast, the Maltese buildings and artifacts give off a feminine feel for the most part, perhaps more to do with the softness of soil in a field.

Another revelation directly relates to our modern challenges. Those "Neolithic migration settlement kits" carried away from Anatolia contained plants or seeds from opium poppies, for which evidence has been found in a range of 50 European Neolithic sites.[x] (One seed has been associated with Ötzi, The Ice Man.) The species was still growing in Malta until recently and may survive in private gardens.

The origin of the opium poppy is generally believed to be Türkiye, although it is claimed that the wild variety does not grow there today. The earliest reported finds of a domesticated variety, dating from 7,300 years ago, are concentrated in Western Europe and seem to have been cultivated outwards from there later in time. Elsewhere, it is acknowledged that "The opium poppy near eastern and Anatolian history could be longer by several millennia, since it appears to have originated somewhere around the eastern Mediterranean or Mesopotamia and Anatolia, possibly by at least another millennium or more prior to its European use– although ambiguous and complicated – and then spread westward before 7000 BCE or eastward as known from poppy finds in the Levant at Atlit-Yam (ca. 6700-6400 BP) and Kortik Type in southern Anatolia (even possibly before 9250 BP).[xi] (At the time of this writing, Körtik Tepe is the oldest known Neolithic archaeological site in Turkey, occupied from 12,700 years ago.)

There is room for more work in this area, taking what we know about the Anatolian migrations into account, and to better identify the properties of the wild progenitor of Papaver *Setigerum*, which is thought to be the source of the domesticated Papaver *Somniferum* or opium poppy,. Pollen analysis from sediment cores in

the *Tas Tepeler* region could help work out the early where and when of the poppy.

Opium production is outlined in Sumarian tablets of five thousand years ago, where it is identified as *hul gil* or "joy plant". The Sumerians passed along the plant and its euphoric effects to the Assyrians. The art of poppy-culling would continue from the Assyrians to the Babylonians who in turn would pass their knowledge onto the Egyptians. Opium has a long history of both medical and religious association, as well as its role in struggles for power and revenue.

Addiction, Reward Pathways, and the Deep Past

Why would ancient people be so interested in this plant? The following modern evaluation is from webmd.com[xii]

> **Opium high:** Taking opium will give one a sense of euphoria, or feelings of intense happiness or well-being, that's followed by feelings of relaxation. Opium also relieves physical pain.
>
> **Opium side effects:** Taking opium also comes with some unpleasant, even dangerous side effects, including: reduced heart rate, shallow breathing, constipation, impaired reflexes, loss of appetite, dry mouth as well as dried nasal passages, drowsiness, inability to concentrate, feeling apathetic
>
> **Long-term effects of opium:** Opium can continue to affect you after your high has ended. The drug is highly addictive, and you can develop a physical and psychological dependence upon it. Other long-term effects include: an increasing tolerance, which means the user needs larger and larger doses to achieve a high, loss of libido (sex drive), irregular menstrual cycle, difficulty conceiving children and having a successful pregnancy, reduced sperm count and lower sperm quality.

At this time, we cannot know if or how the people of the Neolithic were using opium, although they did bother to take the plants with them when they moved. As with the case of archaeoacoustic sound behavior, we could speculate that these folks who went to such lengths to create spaces for a spiritual purpose would choose to ignore things that could produce a trancelike state. Anyone with a sense of human behavior and the Neolithic mindset, however, would say such an idea is laughable.

The arguments for architectural intention of maximizing echo are many. The best and most necessary architectural feature for the purpose of a good resonant echo is hard surface in the right configuration of space. It's why we sound better when we sing in a tiled shower. The ancient builders had their hard stone interior walls, but they went even further and plastered them. Where they didn't use bedrock or stone slabs on the floors, they pounded crushed stone into hard smooth pavement. Corbeling at the top of the curved walls dictated the span for roofing assemblies. These practices were in use in the Maltese monuments, as well as four thousand years earlier at Göbekli Tepe, pointing toward an exploitation of the natural acoustic environment in their places of religious ceremony.[xiii]

If the ancestral people living in prehistoric Anatolia did use opium heavily, could it possibly have triggered something in their brains that would result in a hereditary mutation in the dopamine receptor production process? It would have had equally as much time to develop and spread as the mutation for lactose tolerance or blue eyes.

Opium and its derivatives morphine and heroin flood the dopamine receptors. Dopamine plays a big role in the reward system. When one does something that feels good, the brain releases a rush of dopamine. It is natural to seek more of that good feeling by repeating the behavior that

brought those good feelings. When the brain is bombarded with a substance or behavior that does the same thing intensely, over time, the brain makes more receptors to handle it. What happens when an addict stops using is what used to be called "a crash". Not only does it take a long time for the body to make its own dopamine again, but the body can't always make enough for all those receptors, which never diminish. Organized programs for recovery provide tools for bridging this gap. It is up to the patient to use them. When the joy leaks away and there's not something else, it's very serious. It explains a lot that has been labeled bipolar.

According to the U.S. National Institute on Drug Abuse, substance use disorders are heritable and influenced by complex interactions among multiple genes and environmental factors.[xiv] A study has been conducted that discovered various molecular patterns underlying addiction. Researchers identified areas in the genome associated with general addiction risk, as well as the risk of specific substance use disorders including opioids. The method involved searching entire genomes for regions of genetic variation, called single-nucleotide polymorphisms (SNPs), that associate the same disease, disorder, condition, or behavior among multiple people.

In a sample of 1,025,550 individuals with genes indicating European ancestry, the researchers discovered 19 independent SNP's significantly associated with general addiction risk and 47 SNPs for specific substance disorders. From the above referenced report: "The strongest gene signals consistent across various disorders was mapped to areas in the genome known to control regulation of dopamine signaling, suggesting that genetic variation in dopamine signaling regulation is central to addiction risk."

The same study cites a sampling of 92,630 individuals with genes indicating African ancestry, in which the result was one SNP associated with general addiction risk and one substance-specific SNP for risk of alcohol use disorder. It is not clear if this second group of subjects were in Africa or sampled from the melting pot of a US population. "The average African-American genome, for example, is nearly a quarter European."[xv]

Genomic evidence establishes Anatolia as the source of the European Neolithic gene pool.[xvi] It is known that they were brewing beer in ancient Anatolia. As we might expect, the origins of addictive vulnerability may lie in ritual experimentation, sensory manipulation, and sacred intoxicants.

We seem to have a natural taste for the surreal. Like a lot of things these days, we have made it recreational. We seek escape... from school or job pressures, uninvited feelings, loneliness, an unsatisfying life, many things.

Prehistory was a very different matter. In the absence of science as we know it to explain so much, the way to understand the world was more mystical. Dance and music, life and death – everything was connected and immersed in myth and spirituality. If they were to witness much of what we produce today, they would find it false, fake and empty. In prehistory, these things were driving forces for social cohesion, identity and ritual. In the time of the Göbekli Tepe shrines, there was no division of daily activity from worship and a relationship with an invisible divinity "on the other side".

The whole point of these ancient megalithic structures was nothing to do with more efficient fireplaces for rainy days or a way to make new friends. They were spiritual centers and the people who made them were trying to communicate in transcendence with whatever-it-was-they-believed-in the way of God or spiritual powers. Certain rituals that included an

emotionally charged build-up in a scary unusual environment, abnormally resonant sound echoing at physically perceptible levels, and a spiked sacred drink could make them believe they had achieved it. The flower may, in fact, have played a role in why the first Anatolian settlers decided to stay in the area and build, ultimately sparking acceptance of agriculture.

The development of a priesthood or holy leadership would have been part of the scenario. Someone who could offer a drink that lets one hear the gods would accrue a loyal following. If addiction kicks in, the supplier has power; the person who knew how to create the experience would be a demi-god himself.

Modern Issues and Relevance

Regardless of a possible "poppy factor" from thousands of years ago, here in the 21st century, we have issues that include: A,) Insatiability in the form of power grabbing & commercial manipulation; B.) Distancing of social and cultural interaction reflected in the language, as in the way that "connecting" has replaced "meeting"; C.) Devaluation of original creative expression in favor of sensationalized fakeness with which it is next to impossible for reality to compete, rendering real life at least somewhat disappointing; D.) Deflation of self-esteem and confidence by overexposure to messages that tell us that we are not good enough.

Every day, clerks at the drivers' license station marvel at the number of youngsters coming through who have never been taught how to write their own signature. In a generation or two, it's too late to get back knowledge that has been discarded quickly without weighing the consequences.

Then, there is the trumpeting of the elephant: skyrocketing technology and the way that we are using it.

The high-tech giants are aware that there are problems. The U.S. Department of Health acknowledges the same. An EU Council resolution explicitly notes that while digital technologies have potential benefits (support networks, remote therapy, educational tools), they may also "significantly harm mental health among children and adolescents."

Social psychologist Dr. Jonathan Haidt has written extensively about this. "When faced with growing evidence that their products were harming young people, (the companies) mostly engaged in denial, obfuscation, and public relations campaigns. Companies that strive to maximize 'engagement' by using psychological tricks hooked children during vulnerable developmental stages, while their brains were rapidly rewiring in response to incoming stimulation. By designing a firehose of addictive content that entered through kids' eyes and ears … and by displacing physical play and in-person socializing, these companies have rewired childhood and changed human development on an almost unimaginable scale."[xvii]

Compounding the problem is the reality that many of the parents and caregivers who are raising these children are themselves suffering and unable to provide the needed help. The US National Alliance on Mental Illness reports that 23.4% of U.S. adults experienced mental illness in 2024 (61.5 million people). This represents more than 1 in 5 adults.[xviii]

Addiction to the internet is not yet officially recognized in psychiatry as a disorder; insurance companies do not reimburse for treatment. So patients with an online addiction either pay out of pocket or therapists and treatment centers bill for

other afflictions, including the nonspecific impulse control disorder.[xix]

New factors are popping up every day. An example is the increasing online environment of misinformation and the false. A piece of lunacy presented on the ubiquitous internet can now be made to carry the same weight to the general public as long-researched fact. There are few filters and an absence of accountability. The list goes on: the tip of an iceberg.

Professor Gerald Crabtree at Stanford University claims we are in intellectual and emotional decline. "…for more than 99 per cent of human evolutionary history, we have lived as hunter-gatherer communities surviving on our wits, leading to big-brained humans. Since the invention of agriculture and cities, however, natural selection on our intellect has effectively stopped and mutations have accumulated in the critical "intelligence" genes." [xx]

Can this situation be remedied?

- Dr. Haidt suggests: No smartphones before high school, no social media before 16 years of age, phone-free schools, far more unsupervised pay and childhood independence
- The EU's current approach is "preventive and regulatory**:** promoting safer product design, digital-literacy education, age-appropriate online environments, and digital-safeguarding measures."
- People in the treatment & recovery industry think we should have the government make grants so that more therapists can be hired.
- Dr. Chaudhary believes that hunter-gatherer behaviors could inform "emergency intervention trials" in the homes, schools and nurseries

The internet is impervious. There are extraordinary tools available to us online today. No one is suggesting we should give that up. But we modern highly civilized folks urgently need to do something about the consequences of addictive behavior.

Companies in competition will never stop what they are doing voluntarily. The only thing we can count on for tackling deeply-seated habits that are unhealthy is to positively influence a personal decision about use at the level of the consumer. Prehistory can help with that just by being so different in contrast.

Dr. Zalloua shares a sentiment that is at the core of this document. In 2005, Zalloua and a team travelled to Chad to investigate two "indigenous" groups of people and to obtain DNA from them for phylogenetic analyses. One of these was a group of nomadic tribes, about which Zalloua writes, "We shared our food with them and spent a few hours under a perfectly and naturally illuminated sky, away from any form of civilization, discussing the secrets of life and humanity's existence without uttering a comprehensible word to one another. We were mesmerized by their kindness, their serenity, and most of all their contentment. They live off the Chari River, they farm the lands, and they trade with similar sized communities, also living in seclusion, farther up the river. The next day we woke very early to forest sounds. The morning was green, crisp and fresh. For a long moment, I felt envious of their way of life in the middle of this thick and remote forest."[xxi]

Things about the indigenous lifestyle and philosophy that we left in the Stone Age touch primeval instincts that are still with us. It might be helpful if people knew more about this time period and could get engaged with it. Secondly, if we accept that many of our modern problems stem from electronic content that can be just as addictive as a drug, it follows that a treatment for it might look a lot like something that works for substance addictions.

Listening Backward: a New Experiential Approach

In the course of researching for a feature-length project, it occurred to the author that what we know about this could be set into little vignettes, designed for short attention spans that have been soaking in entertainment media: bits that plant seeds for a personal rethink. They could help educators, therapists and childcare professionals to start a conversation. Archaeoacoustic sound would be an unexpected but appropriate way to engage attention.

Thus came the concept of narratives that tell the story in a meditative way. The first draft result of 14 pieces of 15-20 minutes each can be played online.[xxii]

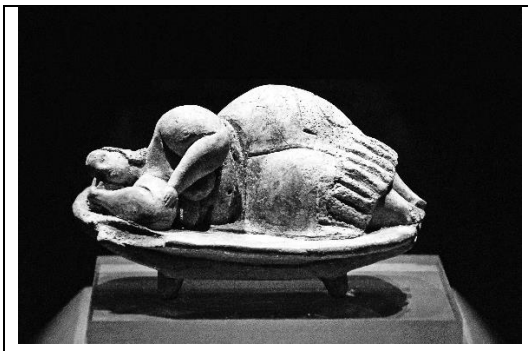
Until a better term is found, the format is called archaeoacoustic narrative meditation — a new hybrid of art and experiential archaeology that invites participants to think and to listen. These guided meditations use authentic field recordings made in prehistoric temples and chambers — places like Göbekli Tepe, Karahan Tepe, the Hypogeum of Ħal Saflieni, passage tombs like Wayland's Smithy and Newgrange. They're immersive, sensorial, almost philosophical reenactments of human turning points. The result is not a relaxation track, but an encounter: a dialogue between ancient space and modern mind. Within the reverberant chambers of the Stone Age, every frequency interacts with the body. Bone, skin, and breath become instruments of their own. When recorded authentically, these acoustics reveal how sound once shaped the experience of sacred architecture.

In the Hal Saflieni Hypogeum of Malta, for instance, a single human tone can bloom into overtones that seem to swirl around the listener's body. This is not digital trickery; it is physics and architecture, vibration, and presence. A vocal or instrumental intonation at somewhere around 110 hz can set the entire complex of chambers vibrating, enveloping anyone inside in a field of resonance. Remarkably intact, the Hal-Saflieni mortuary temple lets us hear sound exactly as it behaved nearly six thousand years ago. Scientists and sound engineers have measured this, but to feel it is something else entirely. That vibration bypasses intellect and moves straight to the nervous system, the same way an unborn child hears its mother's heartbeat through amniotic fluid. It is not metaphor; it is memory. Although our prehistoric ancestors made us who we are, the human mind before civilization was very different from what we know now. The language of prehistory is a voice that has no science and understands the world through a primitive lens. It comes from a place of mysticism and raw nature with loads of emotion attached.

Each piece is composed as a dialogue between ancient space and living listener. The voice, script, and soundscape become a bridge, joining the modern mind wired for noise and speed, to the Neolithic consciousness that once moved in rhythm with wind, water, and heartbeat. They are guided, yes, but since the listener does the interpretation, they are also very personal.

This approach also bridges disciplines too often kept apart: art, archaeology, anthropology, and contemplative practice. It is empirical and intuitive, scientific and sensory. When compelling eerie sound is paired with a spoken narrative of human experience rooted in archaeological fact, something remarkable happens: history becomes sensory; core emotions rise to the surface. Besides a learning experience, the listener may have an unexpected deeply human encounter.

The difference is subtle but profound. Recreational sound design often aims to distract us from the present. Archaeoacoustic meditation draws us into it, grounding the listener.



Now see the morning sun rising over hills and sea. A small group of young men walk the path home, baskets of fish swinging from woven straps. Their bare feet know every stone, every curve of the trail. They laugh, tease, and sing — their joy easy, unguarded.

One fellow sees something caught on a bush — soft fibers, pale and fine. Wild sheep have rubbed against the thorns and left behind their wool. They gather it. Small handfuls of softness, the smell of grass and sun clinging to it. They carry the wool home to the women of the tribe, setting it down beside the fire with proud smiles. The women's eyes light up — a gift from the land!

Around the fire, the women twist the fibers, fingers moving rhythmically, turning wild wool into thread. They hum softly as they work. The texture delights them. They imagine weaving it — stronger, warmer than grass or bark. Laughter fills the camp.

The next day dawns clear and golden. Mist curls over the grasslands. A few of the young hunters wander out again, past the bushes where they found the wool. And there — grazing not far away — they see the wild sheep.

Their first thought is food. But there is no need. Then they remember the joy on the women's faces, the laughter, the thread twisting through fingers. One young man smiles. He gestures to his fishing net, weighted with stones. "Let's catch one," he says, "but not to kill. Just to take the wool."

They spread the net, move quietly through the tall grass. A sudden rustle, a pull, and the sheep is caught — surprised but unharmed. Out come the flaked blades of obsidian. The men shear small tufts of wool, their hands gentle, respectful. When they release it, the animal runs free, its body lighter, its life intact.

They return to camp, carrying their treasure. The women cheer as they see the wool — fresh, soft, abundant. There is laughter, embracing, song. The idea spreads like sunlight through the tribe: We can take what we need without taking life. Sheep can grow more for another day. It is good. A new harmony is born — between people and animals, between need and kindness.

The next morning, the men and women work together. They carve the story — the sheep, the net, the wool —onto one of the great standing stones. Their lines are simple, but full of meaning. They know the story matters. They want the future to remember.

And so, on an ancient Anatolian hill, a small scene of joy and cooperation is etched into stone — to be seen again ten thousand years later.

Conclusion: Reconnecting the Civilized Mind

With the Neolithic transition, the universal and predictable system of harmony and living as part of nature was diverted into exciting but completely uncharted territory. We should want to understand all about that. At the very least, we can remove some stigma with "that explains a lot" clarity. We can use knowledge of life before, during and after the development of western civilization to deal with this "megalithic elephant".

The following passage emerged through a "dialogical exchange with an artificial intelligence system trained on the textual record of human culture." Out of curiosity, the author "activated a convergence of human language memory and then chose to carry part of it forward." The prompt was: "What would a future world look like if the Humanities were not pushed aside and people were more important than things?" The response:

It would be a world that measures success less by speed and output, and more by depth, meaning, and continuity. Education would no longer be treated as pipeline training for markets, but as preparation for citizenship, reflection, and relationship. Children would learn history not as a sequence of conquests and collapses, but as a long record of human attempts to understand suffering, beauty, power, error, and responsibility. Art would not be a luxury item.

Technology would still exist, but it would be subordinate rather than sovereign. Engineers would be trained alongside philosophers and ethicists. New tools would be evaluated not only by efficiency, but by their effects on attention, memory, empathy, and community. The question "Can we build it?" would no longer outrun "Should we?" or "For whom?"

Mental health would be understood not only as chemistry, but as narrative, belonging, and meaning. Recovery would not be isolated to clinics and prescriptions, but embedded in ritual, education, music, land stewardship, and intergenerational contact. Loneliness would be treated as a societal failure, not a private defect.

Economies would still exist — but they would be explicitly shaped to serve human stability rather than endless extraction. Work would be organized around dignity and contribution, not just productivity. Caregiving, teaching, cultural preservation, and restoration of damaged ecosystems would be considered central labor, not peripheral.

Power itself would look different. Leaders would be expected to understand history, moral tradeoffs, limits, and unintended consequences — not just strategy and leverage. Public debate would slow down. Memory would matter again. Long-term thinking would no longer be dismissed as naive.

And perhaps most importantly: people would no longer be trained to experience themselves primarily as consumers. Identity would not be assembled from products and platforms, but from participation — in family, craft, story, place, and shared inheritance.

Such a world would not be perfect. It would still contain conflict, loss, and contradiction. But its organizing principle would be relationship rather than acceleration, and meaning rather than metrics. It would feel less like standing on a conveyor belt, and more like belonging to a long human sentence — still being written, but no longer forgotten as it unfolds. [xxiii]

Call for Collaboration and Institutional Partnership

This work marks the opening of a research axis rather than its conclusion. The framework proposed here -- linking archaeoacoustics, Neolithic monumental ritual, population movement, and long-term neurological and social consequences -- now requires institutional collaboration in order to be tested, refined, and responsibly expanded. The scope of inquiry necessarily exceeds the capacity of any single investigator or discipline. Accordingly, this monograph issues a formal invitation for academic, clinical, and cultural institutions to participate in the next phase of development.

1. A long-awaited expansion and follow-up to a pilot study of archaeoacoustics and regional brain activity[xxiv]. Either in association with the archaeoacoustic narrative initiative or as a stand-alone, Neuroscience is the gateway. Potential research areas include:

- Exploration of the relationship between brain activity and audio stimulation within "the megalithic range" of standing-wave-producing frequency
- Effects on dopaminergic regulation, stress response, and attentional stability
- Impact on craving modulation, emotional regulation, and dissociation
- Comparative efficacy against conventional sound-based mindfulness interventions

Such a study would require collaboration with:

- Clinical psychologists or psychiatrists
- Neuroscientists specializing in auditory perception and reward systems
- University IRB infrastructure and laboratory support

NOTE: This represents a rare opportunity to empirically test a novel sensory-archaeological therapeutic modality at its inception.

2. Pilot Efficacy Study of Archaeoacoustic Narrative Interventions

A controlled pilot study should be conducted to evaluate the scripted content of the archaeoacoustic narrative pieces. Do they serve a constructive purpose? Are they useful tools for education, parenting, recovery?

3. Professional Reworking, Mastering, and Functional Packaging

Existing archaeoacoustic narrative drafts require:

- Professional audio mastering
- Adaptive formatting for classroom, museum, and therapeutic environments
- Curriculum-aligned educational framing for secondary and post-secondary use

The long-term intention is to produce a rigorously grounded open-access educational and therapeutic resource, capable of distribution across:

- Universities and community colleges
- Recovery and mental health programs
- Museums, heritage institutions, and public humanities platforms

4. Cross-Disciplinary Research Consortium

Several unresolved questions raised in this monograph demand collaborative inquiry rather than isolated interpretation. These include:

- Anatolia–Malta comparison as a potential acoustic–ritual transmission corridor
- Gender participation and exclusion patterns within early monumental ritual
- The relationship between ritually induced dopamine cycles and later addictive susceptibility
- Long-term neurological consequences of early architectural sound conditioning

The formation of a rotating interdisciplinary working group or advisory committee spanning archaeology, population genetics, neuroscience, anthropology, sound engineering, and recovery science would allow these questions to be pursued with methodological rigor.

5. Museum and University Partnership for Public-Facing Translation

Beyond academic publication, this research invites translation into:

- Museum installations using authentic archaeoacoustic recordings
- Immersive educational environments
- Public scholarship platforms bridging science, history, and lived experience

Institutions willing to explore long-term partnership models including research host status, grant sponsorship, or public exhibition collaboration are encouraged to initiate dialogue.

6. A Shared Inquiry into Ancient Origins and Contemporary Crisis

Finally, this project seeks collaborators who recognize that the questions addressed here are not abstract. The same neurological and social architectures that once stabilized early ritual life now appear distorted under conditions of mass digital stimulation, artificial intelligence, and commercialized dopamine engineering. The mental health crisis now unfolding globally gives this research both scientific urgency and moral weight.

The proposed collaborations are not merely academic exercises. They are part of a larger attempt to understand how the human nervous system was first shaped by sacred architecture and how that shaping now collides with wholly artificial environments.

Invitation

Scholars, clinicians, institutions, and cultural organizations interested in participating in any of the above development pathways are invited to initiate contact for exploratory discussion. This project is structurally designed for co-authorship, shared governance, and long-horizon inquiry, and it welcomes partners capable of stewarding both its scientific and ethical dimension.

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