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Voices of the Gods: How We Lost Our Minds to Agriculture

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In addition to its well-documented adverse effects on human health [1,2], the agricultural transition that began in the Levant transformed human societies from the freest and least authoritarian (foraging tribes), to the most rigid and authoritarian (god-kingdoms with palace economies) [3,4]. Furthermore, these early Middle Eastern civilizations all fell nearly simultaneously, during the Late Bronze Age Collapse c. 3200 Kya [5].

Why did the first farmers transform their societies far beyond the simple logistical requirements of primitive agriculture, socially, politically, and economically? Why did they subject themselves to god-kings and palace economies, build giant stone monuments to no practical purpose, and worship and obey statues as if they lived and spoke [4]? And why did these empires all collapse nearly simultaneously [5]? There are many competing theories, but no consensus explanations [6].

Julian Jaynes hypothesizes that humans were not conscious as we understand it today until well into the historical era. [4] He makes a strong case that early civilizations were centered completely around idols, ritual worship, and monument-building, to a degree we find difficult to comprehend today, because their people were what he calls “bicameral.” In bicameral consciousness, what we today call “executive function” was understood, interpreted, and obeyed as if it were commands from the gods, and no distinction was drawn between external and internal motivations. Thus, the people of Sumer, Akkad, Babylonia, Ancient Egypt, and even Mycenaean Greece were, by modern standards, frankly schizophrenic. [4]

In light of multiple first contact reports showing no traces of bicamerality amongst extant ancestral hunter-gatherer cultures [7,8], I modify Jaynes’ hypothesis to posit that the agricultural transition caused bicamerality to become the dominant and socially accepted mode of consciousness.

Wadley and Martin hypothesize that the adoption of agriculture in the Levant was primarily driven by addiction to dietarily-novel opioid peptides, known as gluten exorphins, in wheat and other gluten grains [9]. Wadley further hypothesizes that grain consumption was also driven by alcohol addiction, via beer, thus multiplying the addictive potential of gluten exorphins [10].

Since consumption of gluten grains, even in modern times, is strongly linked to schizophrenia [11], I further posit that bicameral consciousness in these ancient empires was primarily caused by increasing consumption of biologically addictive gluten grains amongst a gluten-naive population, causing a positive feedback loop of both cultural and genetic selection pressure to consume more wheat. This feedback loop of addiction and schizophrenia first caused foragers in the Levant to abandon hunting and gathering, and adopt sedentary agriculture, to increase their wheat intake – and led inexorably, over thousands of years, to empires completely based on wheat addiction and the bicameral voices of the gods. (The ancient Egyptian kingdoms paid their workers in beer and bread, which also served as currency. [12])

Finally, I posit that the Late Bronze Age Collapse, thousands of years later, was caused by the collapse of these addiction-based empires under the weight of the endless rituals and massive monument-building [13,14] required to maintain bicameral consciousness as – once bicamerality became the cultural and behavioral norm – selection pressure acted to reward resistance to gluten-induced schizophrenia.

In support of this hypothesis, I present additional evidence from the monoliths of Gobekli Tepe, which predate farming but postdate wheat gathering and consumption [15,16], the 7kya male genetic bottleneck [17], and the dramatically increased prevalence of schizophrenia amongst gluten-naive populations adopting a Western diet [18,19].

In conclusion, I hypothesize that beer and bread addiction created a positive feedback loop of increased wheat consumption, both genetic and cultural, that not only caused us to invent and adopt agriculture – it literally *changed the nature of human consciousness* for thousands of years. This hypothesis explains the rise of the first Middle Eastern civilizations, their cultures of endless divine rituals and giant stone monuments, and their eventual simultaneous collapse. Further, the genetic and behavioral legacy of thousands of years of wheat-induced bicamerality explains many apparently maladaptive modern phenomena and behaviors, such as schizophrenia; divination and fortune-telling; the voices and visions of our saints and martyrs; our reverence for beer and bread; our willing submission to authority and hierarchy, especially when couched in formal ceremony and religious mystery; and many other manifestations we will no doubt discover as we interpret our past, and our present, in light of this hypothesis.

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