Cognitive Science and the Ancient Near Eastern Religious Imagination

By Brett Maiden

Religion comes naturally to humans because of the unique way our brains evolved. What's more, the past few thousand years is too short a time in evolutionary terms for human cognition to have undergone substantial change. This means that current discoveries about the human mind can be used to understand not just different cultures throughout the world, but also throughout history. How, then, can cognitive insights inform our understanding of religion in the ancient Near East? To explore this question, we can survey some recent breakthroughs in the cognitive science of religion and then apply these findings to our ancient evidence.

Now, since culture is made up of ideas and concepts, let us consider how concepts spread among people in the first place. To do this, it is helpful to take an epidemiological approach to culture. In other words, the human mind is susceptible to certain concepts in much the same way as human organisms are susceptible to diseases. From this point of view, some concepts are more effective than others at infecting human minds and spreading throughout society.

When it comes to religion, what makes supernatural concepts so effective, so contagious? It turns out that successful religious concepts tend to follow a simple recipe: they start with ordinary everyday categories and tweak them in special ways.

Psychologists and anthropologists have shown that starting in childhood, people across the world develop natural understandings about different objects – such as persons, animals, plants, and artifacts. But unlike ordinary objects, supernatural concepts don’t obey the normal rules of these categories. For example, a ghost is a person without a material body, a virgin birth involves an individual with special biology, and a talking snake is an animal with the ability to think and speak. These concepts are “minimally counterintuitive,” which just means that they violate our ordinary category expectations.

What makes these types of concepts so successful? First, they confound our intuitive expectations, and this makes them captivating and attention-grabbing. At the same time, they remain coherent enough to be remembered and communicated. Supernatural concepts therefore hit the sweet spot between being salient yet familiar. Too boring and nobody cares, but too complicated and nobody will remember.

Many experimental studies have shown that such counterintuitive concepts are cognitively optimal and more likely to stick around in human minds – to become what we refer to as “culture.” However, the opposite is also true: some concepts can be too complex or too counterintuitive. So, for instance, a talking snake is minimally counterintuitive. But a talking snake that is invisible, made of cashmere, exists in all places at once, and gives birth to zebras, is too difficult to process and remember.
When we turn to the ancient Near East, we encounter countless images of hybrid creatures, monsters, and demons. These supernatural figures are so widespread – so contagious – that they cry out for a cognitive explanation. Sadly, we cannot access the mental lives of ancient Mesopotamians by scanning their brains with fMRI machines or by inviting them into the laboratory for clever psychological experiments. Nevertheless, by combining ancient iconographic evidence with modern cognitive theories, we can penetrate the ancient religious imagination in new ways.

Hybrid Creatures in Iconography and Cognition

The ancient artistic record is brimming with a variety of human-animal hybrid figures. The minor winged deities called apkallu, for example, appear on many Neo-Assyrian wall reliefs, but also smaller amulets and seals. By adding wings to a human figure, these hybrids mix body parts from different biological species and therefore become minimally counterintuitive.

Assyrian Relief panel, Nimrud, ca. 883-859 BCE. Metropolitan Museum of Art.
Next, the winged “griffin” has the hind legs and tail of a lion, and the head and talons of a falcon. Similarly, ancient Egyptian art is replete with animal-headed deities. In a classic scene from the Book of the Dead, for instance, the jackal-headed Anubis escorts the recently deceased, the ibis-headed Thoth records the results of the weighing of the heart, and the falcon-headed Horus presents the individual before Osiris.
The last type of hybrid is the sphinx figure, with winged lion body and human head. Sphinxes often served as massive protective statues at the entrance to royal palaces, but also appear commonly on smaller objects. Notably, these sphinx-like figures served as the inspiration for the biblical cherubim found in the biblical book of Ezekiel.

Seal, Lachish, Iron Age.
These hybrid images all combine parts from different species (human, lion, bird, etc.) and therefore may be regarded as counterintuitive and cognitively optimal. So far so good, but what does our cognitive framework have to say about more complex figures?

Bronze Pazuzu-Lamaštu Plaque, Neo-Assyrian Period
To explore that question, let us consider the Mesopotamian demons Pazuzu and Lamaštu. They are not only the most fantastic and frightening creatures from the ancient Near East, they are also the most conceptually complex. On a bronze statue, for instance, Pazuzu is identified by his canine face, jaws, and teeth, bulging eyes, caprid horns, scaly body, bird talons, massive wings, scorpion tail, and erect snake-headed penis. Likewise, Lamaštu is depicted with the face of a ferocious lion, a naked, spotted fur-covered body, donkey ears and teeth, bird talons, and long, sharp claws, and occasionally with wings and tail. In short, the iconography of these demons is not just minimally but radically counterintuitive.
Bronze Pazuzu statuette, Assyrian or Babylonian, early First Millennium B.C.E.

Stone Lamaštu amulet, Assyrian, ca. 800-550 BCE.
However, despite these unique and complex artifacts, this is not necessarily how ancient people represented Pazuzu and Lamaštu in their minds. First, material images made out of clay are not the same as the mental images stored in the mind and memory. Artifacts are fixed and permanent, but ideas in the brain are constantly mutating. Indeed, highly complex concepts are difficult to process and remember and as a result they are often either forgotten or spontaneously simplified into more manageable forms.

In fact, this is precisely what we find when we look at the full collection of Pazuzu and Lamaštu artifacts. For example, there is a massive assemblage of apotropaic Pazuzu heads that were mass-produced and worn around the neck by women during pregnancy for protection against evil spirits. These more simplified objects far outnumber the full-body figurines we saw above.

We have fewer Lamaštu artifacts, but throughout the iconographic record the distinctive identifying feature is always her claws). Moreover, like Pazuzu she is always depicted in an upright anthropomorphic posture, which shows that the form of both demons was modeled on a simple human foundation.

So, as it turns out, the majority of Pazuzu and Lamaštu images were more limited in their conceptual complexity. Pazuzu is mostly depicted with an anthropomorphic head and face, while Lamaštu is characterized above all by her sharp claws. Altogether, these images reflect a more intuitive and cognitively optimal notion of the demons among ancient people.
As we have seen, cognitive science offers a valuable tool for studying ancient cultures. In the case of ancient hybrid creatures, it helps explain why these figures tend to take the forms they do and, more importantly, why these figures were so popular and widespread in the first place. The answer lies in their ability to “infect” human minds.

With Pazuzu and Lamaštu, cognitive science reminds us that there was not just one way of imagining these ancient demons. Although some artifacts are very complex, the majority are less elaborate and more cognitively optimal. The ancient artistic record therefore converges with cognitive theorizing and reflects a more intuitive, optimal understanding of the demons – one that gets us closer to how they would have been imagined most of the time in everyday life. Cognitive science sheds light not just on modern human minds, but on all human minds. By bridging the gap between modern and ancient thought, the religious mindset of the ancient Near East becomes a little less distant, a little less alien.

_Brett Maiden is the author of_ [Cognitive Science and Ancient Israelite Religion, New Perspectives on Texts, Artifacts, and Culture](https://example.com) _(2020)._