

Symmetry and the Sacred Date Palm in the Palace of Ashurnasirpal II, King of Assyria

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Abstract

This paper examines the use of mathematical symmetry in the stylized depiction of the date-palm on the sculptured stone wall reliefs decorating the royal palace of the Assyrian king, Ashurnasirpal II in the 9th century BC. Although the significance of the date palm in Neo-Assyrian iconography is still debated, the frequency of its appearance on the palace walls indicates that it played an important role in Assyrian apotropaic ritual. We argue that one of the keys to unlocking the mystery of the ritual is to understand the principles underlying the formal depiction of the date palm.

The Assyrians were a Semitic people who inhabited the northern part of what is now Iraq and had profound cultural connections with their southern neighbors and hereditary enemies, the Babylonians. For the three centuries between approximately 900 and 600 BC, Assyria was the major power of the Near East, ruling over the largest empire the world had ever seen. The Assyrian king, Ashurnasirpal II (883-859 BC), who was instrumental in founding the empire, commemorated his achievements by rebuilding and expanding the city of Nimrud (ancient Kalhu). The focal point of the project was a massive royal palace, which the king had lavishly decorated with carved orthostats, most of which depicted apotropaic *apkallu* and *utukku* demons, the stylized date palm, or the king undertaking various ritual activities usually involving the demons and the tree. Although archaeologists have not yet excavated the entire palace, more than eighty rooms have yielded hundreds of relief panels and more than two hundred representations of the sacred tree [5].

The date palm played an essential role in the daily life of ancient Mesopotamians, who relied on the fruit of the tree for sustenance and used the palm fronds and other parts of the tree for things as disparate as furnishings (matting or roofing) and exorcistic rituals. Artistic representations of the date palm or its flower appear in all periods of Mesopotamian history on all types of objects including cylinder seals, furniture, jewelry, and monumental art [2; 4]. What is especially curious about the prevalence of the image at Ashurnasirpal's palace is that the date palm is not indigenous to Assyria, and will not thrive there because of cold winter temperatures [7, p.17]. The emphasis on the date palm in the decorative scheme of Ashurnasirpal's palace cannot be a

simple reference to the productivity of Assyrian husbandry, but must have some more symbolic meaning.

In fact the tree does not usually stand alone, but appears as part of a larger scene in which the demons seemingly pollinate the female flower clusters on the tree with a male flower which they carry (figure 1) [7, p.15]. In the throne room, the king takes part in the scene, but he stands in the standard pose of worship between the demons and the tree (figure 2). The demons, who appear with the tree, were supernatural and belonged to the sphere of the divine. It had to be immediately apparent to the viewer that the world depicted on the walls was not the mundane one he/she inhabited, but the domain of power and magic. The king could appear in that world because he was the intermediary between the divine and the terrestrial.

The tree is always rendered schematically rather than naturalistically in these scenes because it represents, not a real tree, but a special, divinely perfect tree. Assyrian artists were capable of rendering a naturalistic date palm, but they did so only when they meant to evoke the natural world. The so-called Black Stone of Esarhaddon (ruled 680-669 BC) depicts the date palm in each of its different realms (figure 3). The bottom register shows a date palm as it appears in the real world, but on the top register where the king is shown worshipping before an altar, the date palm has become stylized because it is part of the ritual world.

Attempts to determine the sacred significance of the stylized tree in Assyrian art have been frequent and sometimes controversial. Generally, scholars understand the pollination scene to represent, “a symbolic cross-pollination of the tree by supernatural beings, and thus the gods’ gift of abundance to mankind” [7, p. 5; 4, p. 125]. Recently, the Finnish scholar, Simo Parpola, has suggested that the positions of the date palm flowers on the tree correspond to the mystical numbers that are sometimes associated in Assyrian esoteric literature with the key deities of the pantheon. According to Parpola, the tree image was chosen to depict metaphorically the relationship between individual divinities (flowers and branches) and an overarching divine whole or godhead (the tree) [6]. His arguments concerning numerology and inchoate monotheism are problematic [3], but the notion that there is meaning in the spatial arrangement and decorative organization of the tree itself is borne out by an examination of the design principles – including mathematical symmetry – which underlie all depictions of the tree.

No two trees from Ashurnasirpal’s palace are exactly alike, yet all trees share certain features: a central trunk capped with a palm spray, intertwining branches, and linked (mostly) seven-petaled palm flowers. The number of flowers, branches, and central joins to the trunk can vary substantially, as can the tree’s height and proportions. Some trees are short and squat, others tall and narrow, depending on the space to be filled. Trees in the same room are usually homogeneous up to a point. That is, they all tend to have the same general structure. For example, all the trees in room F have a double row of flowers (figure 4), while the trees in room L have the more common single row. There is usually some variation in the number of flower clusters on different trees in the same room. The number of flowers on trees in room L ranges from twenty one to thirty five. At this point it is impossible to determine whether the tendency to visual uniformity within a room fulfilled a ritual purpose or only aesthetic requirements. Nor can we tell if relief scenes depicted in a room were tied to the room’s function in any way.

Although the arrangement of the orthostats on the palace walls was not strictly symmetrical, it is clear that the ancient sculptors and architects made an effort to achieve an overall coherence and balance in their decorative program [5]. Likewise, the pollination scenes give an impression of symmetry without actually being symmetrical. At first glance the demons look identical, but neither they nor their positions are true mirror images of one another. This is also true of the

sacred tree itself. Each one has an overall approximate symmetry; the trunk and palm spray of each tree are symmetrical. However the sculptor has taken care to break – delicately – the actual symmetry of the intertwining branches, the arrangement of the flowers, and sometimes even the flowers themselves (figure 1). There is often subtle variety in the number and positions of the central branches (figure 4). Although each side of any given tree has the same number of flowers, they may not be placed exactly opposite each other. If we analyze the ring of flowers as a frieze, then we see that (usually) each flower has vertical symmetry and so the flower ring has, according to standard notation, symmetry type $pm11$, or vertical reflection only.

One might be tempted to ascribe such sculptural variation to general inconsistency on the part of the ancient artists. After all, many different sculptors worked on the reliefs and there is a detectable range in artistic technique [8, p. 17]. The fact that examples of design symmetry executed with near perfect regularity appear elsewhere in Ashurnasirpal's palace belies such a conclusion. Figure 5, a floor slab sculpted to mimic a carpet, offers a good example of the types of symmetry sometimes employed. The “carpet” slab depicts a central two-dimensional pattern with 60 degree rotation and reflections, type $p6m$. Considered as linear patterns, the two rosette bands have both horizontal and vertical reflection (type $pmm2$), while the two remaining bands, one of palm flowers and the other of lotus flowers, each only have vertical reflection (type $pm11$). Importantly, each band does have translational symmetry; that is, each of the rosettes, palm flowers and lotus flowers is identical. Assyrian artists were perfectly capable of depicting different types of symmetry with fine precision, but in the case of the sacred trees they chose not to. It is the deliberate manipulation of symmetry – not just its use – that is particularly significant.

The ancient sculptors of Ashurnasirpal's palace, who clearly intended to give an overall impression of balance and symmetry, also found it necessary to disrupt that balance through careful management of individual design components. Both the symmetry and its violation were, in fact, essential to the proper depiction of these ritual scenes, and were inextricably bound up with the Near Eastern concept of the *salmu* (usually translated “image”). In ancient Mesopotamia every image could be an individual being.

“That is, rather than being a copy of something in reality, the image itself was seen as a real thing. It was not considered to resemble an original reality that was present elsewhere but to contain that reality in itself. Therefore, instead of being a means of signifying an original real thing, it was seen as ontologically equivalent to it, existing in the same register of reality.” [1, p. 127]

Since there could be no real duplicate of the king, for example, each portrayal of him had to be individually charged with the royal character, and thus each image had to be unique in order to be efficacious.

Compositional symmetry expressed the order inherent in the divine; subtle shifts in balance rendered each figure (including the king) unique, and therefore uniquely imbued with the proper attributes. Had all trees and all demons been identical, their power would have been dangerously diluted. Had the king's images been mere duplicates, they would have been lifeless, powerless cartoons. As a result of the ancient concept of the function of the image within reality, their art always manifested a certain tension between uniformity, which was necessary to convey the correct image category – “king”, “sacred tree”, “supernatural being” – and uniqueness, which was essential to the activation of the image. A properly rendered image, therefore, existed in

perpetuity; hence, the correct depiction of rituals represented ongoing, continuous sacred activity.

The decorative program of Ashurnasirpal II's palace at Nimrud contained a complex message, all the nuances of which have yet to be decoded. However, our study has shown that artists cleverly manipulated symmetry in order to fulfill the required tenets of their art. The image of the stylized date palm, so prevalent in the palace, offers a perfect example of the principles underlying the sacred art of Assyria. Not only was the tree always depicted in abstract form so as to be recognizably of the divine sphere, but artists also chose to regulate its depiction through symmetry, which could be easily and delicately altered in order to create the necessary individuality for each tree.

Illustrations

All illustrations appear courtesy of the Trustees of the British Museum



Figure 1: *Female demons pollinating the sacred tree. From room I.*



Figure 2: Demons, the king (shown twice), the divine disc and the date palm. Throne room relief.



Figure 3: The Black Stone of Esarhaddon.
asymmetry of the



Figure 4: Tree from room F. Note the double row of branches and the slight the interior flowers

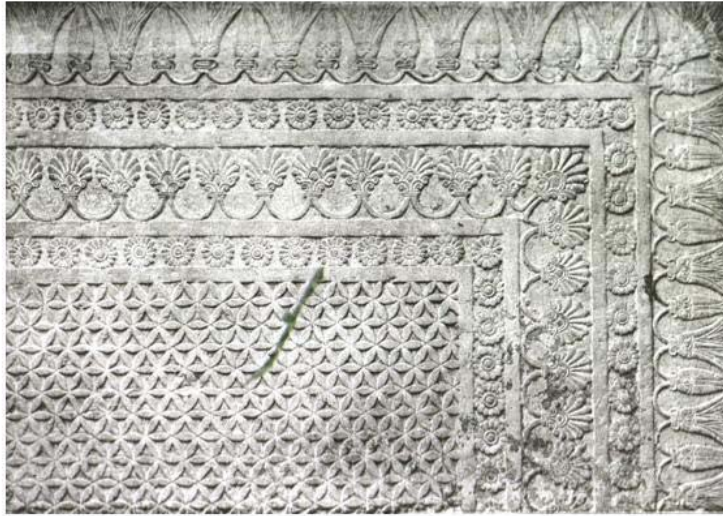


Figure 5: Stone “carpet” from Ashurnasirpal’s palace

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