



## Research Article

# The stuff of currency: Changing styles and uses of ear ornaments at Tikal

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### Abstract

This article revisits ear ornament data from Tikal—both material and visual—to better understand the varied roles of ear ornamentation in ancient Maya society over time. The author discusses relevant terms and terminology, then emphasizes the social aspects of ear piercing and stretching as well as the place of ear ornaments in economic exchange. Ear ornamentation was a critical aspect of socialization for ancestral Mayas, but the extent of this practice was classed. Whereas the styles of nonelite ear ornaments were more resistant to change over time, the jade earflares of elites became more standardized in form while growing in complexity. With this standardization, jade earflares achieved a status close to currency, not just to be coveted or collected but also to be displayed on the body to the fullest extent possible. However, like many currencies, jade earflares were more complex than simple tokens of exchange. The symbolic dimensions that gave these objects meaning and economic value were integral to their power.

### Resumen

Pocos objetos en el mundo del arte corporal maya antiguo son tan omnipresentes como los adornos para las orejas. Están bien atestiguados arqueológicamente y las representaciones antiguas los muestran en las orejas con tanta frecuencia que su ausencia a menudo indica penitencia o humillación. Los expertos han contribuido mucho a nuestra comprensión del significado simbólico e iconográfico de los adornos mayas para las orejas, pero sin una exploración sistemática de qué tipos de adornos para las orejas son cronológica y regionalmente diagnósticos, es difícil contextualizar los adornos para las orejas individuales dentro de patrones de uso más generales. ¿Qué entra y pasa de moda? ¿Qué es ampliamente popular y qué es idiosincrásico regionalmente? Además, ¿cómo se utilizan realmente los adornos para las orejas? ¿Son puramente ornamentales o también podrían haber contenido valor de cambio? Este artículo se centra en los contextos arqueológicos y la evidencia material de Tikal para comenzar a brindar respuestas a tales preguntas. La autora comienza con una contextualización ampliada de los datos materiales dentro de lo que se entiende actualmente sobre los adornos mayas para las orejas, las modificaciones corporales y la forma en que se valoraban los adornos para las orejas. Luego, después de considerar la distribución de materiales y tipos de adornos para las orejas de Tikal a lo largo del tiempo y en diversos contextos, la autora interpreta los patrones identificados en los datos. Fundamentalmente, la creciente popularidad de ciertos tipos de adornos para las orejas durante el Clásico Tardío parece reflejar la evolución de las funciones sociales de la ornamentación de las orejas para la élite más alta. Aunque la ornamentación de las orejas era un aspecto crítico de la socialización de los mayas ancestrales, el alcance de esta práctica fue dependiente en clase social. Si bien los estilos de los adornos para las orejas que no eran de élite eran más resistentes al cambio con el tiempo, las orejas de jade de las élites se volvieron más estandarizadas en su forma y crecieron en complejidad. Con esta estandarización, las orejas de jade alcanzaron un estatus cercano a la moneda, no sólo para ser codiciadas o coleccionadas sino también para exhibirse en el cuerpo en la mayor medida posible. Sin embargo, como muchas monedas, las orejas de jade eran más complejas que simples fichas de cambio. Las dimensiones simbólicas que daban significado y valor económico a estos objetos eran parte integral de su poder.

**Keywords:** Maya; Tikal; ear ornaments; earflares; value

Few objects in the world of ancient Maya body art are as ubiquitous as ear ornaments. They are well attested archaeologically, and ancient depictions represent them in ears so

frequently that their absence often signals penance or humiliation. Scholars have contributed much to our understanding of the symbolic and iconographic meaning of Maya ear ornaments, but without a systematic exploration of what kinds of ear ornaments are chronologically and regionally diagnostic, it is difficult to contextualize individual ear ornaments within more general patterns of usage. What goes in and out of style? What is widely popular, and

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what is regionally idiosyncratic? Moreover, how are ear ornaments actually used? Are they purely ornamental, or might they have also stored wealth? This article focuses on archaeological contexts and material evidence from Tikal to begin providing answers to such questions. The author begins with an extended contextualization of the material data within what is currently understood about Maya ear ornaments, body modification, and the way ear ornaments were valued. Then, after considering the material and type distribution of Tikal ear ornaments over time and in various contexts, the author interprets patterns identified in the data. Crucially, the growing popularity of certain ear ornament types during the Late Classic period seems to reflect evolving social functions of ear ornamentation for the highest elite.

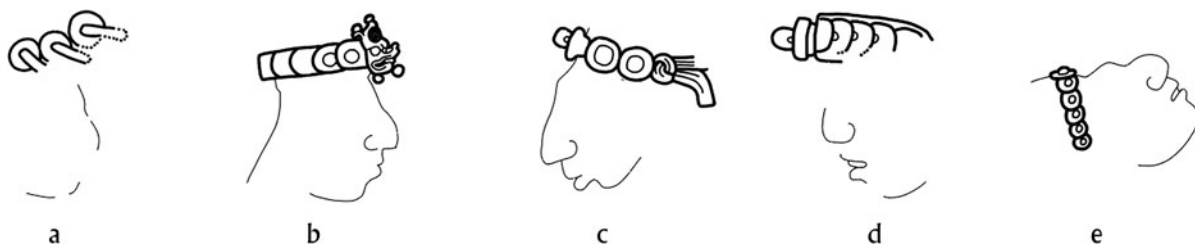
Several key factors make Tikal a strong choice for the focus of this study. First and foremost, Tikal is a major political center. Its status and the sustained excavations there have yielded an incredible variety and number of ear ornaments. The breadth of Tikal's visual corpus is another important advantage, given that stelae and provenienced polychrome ceramics from the site provide ample evidence about local ear ornament styles and trends over time. Most important for a study of this kind, data from Tikal are not only abundant but well reported and accessible. Generally, ear ornaments published in site reports receive uneven levels of attention depending on the project. Reports that mention ear ornaments do not always depict them, nor do they always provide their weight, their size, their material, or access to information about their context and dating. Online archives (e.g., the Kerr database) and museum collections published online usually have the opposite shortcoming. Ear ornaments published in these kinds of resources are often exemplary; however, despite having appropriate and accessible photo documentation, they frequently lack context due to looting. Given that the author did not physically have access to ear ornament collections during the time this research was conducted, the available detail in relevant publications was critical. Moholy-Nagy's (2008) report on ornamental and ceremonial artifacts at Tikal is meticulously descriptive, includes an abundance of images (both drawings, black-and-white photos, and color plates), and clearly references the information that is needed to better understand the contexts of ear ornaments found at Tikal and

their distribution at the site (available on the Digital Archaeological Record [tDAR], courtesy of the University of Pennsylvania Museum of Archaeology and Anthropology).

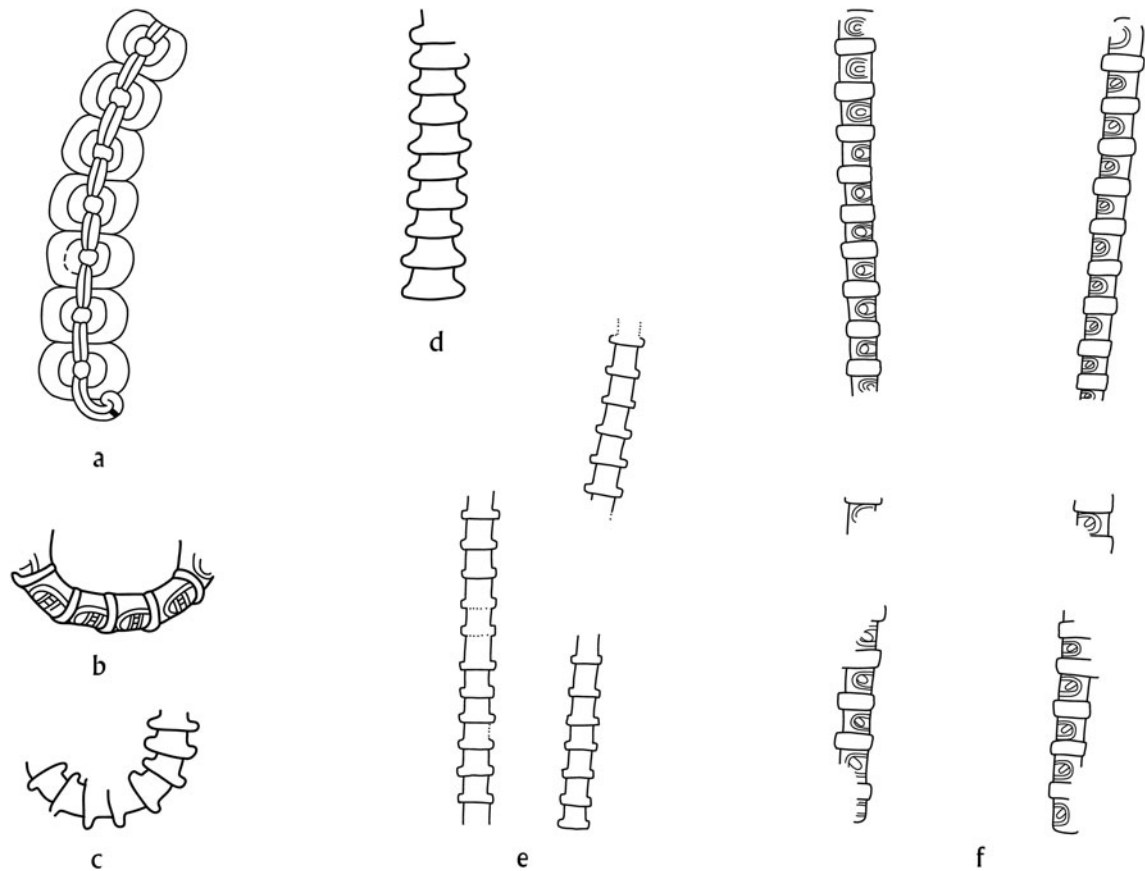
The author expands on Moholy-Nagy's (2008) documentation of material through synthesis and interpretation of other kinds of ear ornament data, supplementing visual evidence from Tikal with ethnohistoric and ethnographic evidence when possible. In the Tikal iconographic corpus, jade earflares not only adorn the ears but also form many other elements of kingly regalia. For example, monuments at Tikal show strings of earflares around necks or raised high; other ear ornaments stud the ears of miniature jade masks on belts; and others cling to headdresses, diadems, and ornamental assemblages fixed to waistbands. Carter's (2020: Figure 6.11) image of Tikal Stela 31, which uses line boldness to emphasize the frequency and ubiquity with which earflares appear in the costume of Sihyaj Chan K'awiil II, is a useful example showcasing their decorative versatility. To be sure, there are ways earflares were incorporated into ritual dress that are not unique to Tikal. Earflare diadems are regularly featured in stelae at other sites (see Figure 1), and they often seem to be used as beads in more ornate examples of regal costume. However, Tikal's case remains exceptional for the combined variety of these uses in surviving imagery. Depictions of strings of large earflares—as seen on Tikal Stela 1, 2, and 31—have only a few parallels in the Maya iconographic record (see Figure 2). The author is only aware of similar examples at Coba (Stela 1–6, 9, 11, 20–21), Copan (Stela P, Stela 2), and Quirigua (Stela F). Another example, though unprovenienced, is a jade plaque at Dumbarton Oaks (PC.B.586). These displays of ear ornaments in multiples—whether as multiple elements of a costume, as a string of multiples, or both—seems to highlight ear ornament collections as hoards of cumulative wealth. This not only indicates their fungibility or capacity to store monetary value but directly establishes their dual functions as both bodily ornaments and mediums of exchange.

### Maya ear ornaments: Terminology and general summary

In this article, “ear ornament” is a general term for describing any object that was worn in the ear or that resembles



**Figure 1.** Diadems featuring ear ornaments in monumental iconography: (a) detail from Xcalumkin Jamb 5, drawn after Ian Graham, *Corpus of Maya Hieroglyphic Inscriptions*; (b) detail from Piedras Negras Stela 12, drawn after David Stuart, *Corpus of Maya Hieroglyphic Inscriptions*; (c) detail from Yaxchilan Lintel 45, drawn after Ian Graham, *Corpus of Maya Hieroglyphic Inscriptions*; (d) detail from Piedras Negras Stela 4, drawn after David Stuart, *Corpus of Maya Hieroglyphic Inscriptions*; (e) detail from Piedras Negras Stela 12, drawn after David Stuart, *Corpus of Maya Hieroglyphic Inscriptions*.



**Figure 2.** Strings of earflares: (a) detail from Tikal Stela 31, drawn after William Coe (Jones and Satterthwaite 1982:Figure 51); (b) detail from Copan Stela P, drawn after Annie Hunter (Maudslay and Goodman 1974:vol. I:Plate 87); (c) detail drawn from unprovenienced incised belt plaque, Dumbarton Oaks PC.B.586; (d) detail from Tikal Stela 2, drawn after Jones and Satterthwaite 1982:Figure 2; (e) detail from Coba Stela 1, drawn after Ian Graham, *Corpus of Maya Hieroglyphic Inscriptions*; (f) detail from Quirigua Stela F, South Face, drawn after Annie Hunter (Maudslay and Goodman 1974:vol. II:Plate 36).

any such object. Some ear ornaments, such as the Pomona flare (Kidder and Ekholm 2011 [1951]:431), were too large to have been worn by humans (see Drucker 1955:51–52; Hirth and Hirth 1993:185); others, such as miniature flares (also called “buttons” or countersunk flares), at times had other ornamental functions (see Figure 3). Common types of ear ornaments include earflares, which are open in the center and are flared only on one end; earspools, which are open in the center and are flared on both ends (see Figure 4); and earplugs, which are solid cylinders that may be flared on one or both ends. Ear plaques—flat disks found in pairs (see Figure 5)—are also common and were usually fixed to the earlobes with attached shafts or stem backings. These stem backings were often made of materials that do not preserve well (e.g., wood, thread, stucco, adhesives). Other subtypes include “rosettes and pegs,” which are annular objects that were fixed to ears with pegs (see Figure 17h), and “L-shaped objects,” which can be broken up into further subtypes but generally consist of a spool or plug with a flange extending from one side of the object (see Figures 6 and 17g). This article also refers to “ear ornament assemblages,” which the author uses to describe ear ornaments with additional beaded parts, either dangling

from the front of the ear ornament or as counterweights in the back of the ear ornament (see Figure 7). These additional parts may consist of cylindrical beads, miniature flares, spherical beads, or other carved beads that would have been attached to the ear ornament with thread.

Many ear ornament types (or subtypes within these types) are chronologically or regionally diagnostic, but a truly interregional ear ornament typology is beyond the scope of this article. Instead, the chronological summary below provides general comments about ear ornament trends over time, followed by some new interpretations about what such patterns might mean. As a disclaimer, the examples from which the following generalizations are made are almost always from elite contexts and will not necessarily reflect what was true for nonelites. With that in mind, there are some changes in style over time among the higher echelons of Maya society that might have wide-reaching implications.

Two major earflare subtypes require definition before a discussion of chronology is possible. Again, earflares are ear ornaments that are open in the center and are flared only on one end. Moholy-Nagy (2008) identifies three earflare subtypes: Small (see Figure 17b), Large



**Figure 3.** An example of a miniature jade earflare, also known as a countersunk flare or a button. © Dumbarton Oaks, Pre-Columbian Collection, Washington, DC.

(see Figure 17a), and Disk and Stem (see Figure 17c)]. Moholy-Nagy's Small and Large earflares otherwise correspond with what Kidder et al. (1946:106) called Type A and Type B earflares, respectively. The author suggests a correspondence between Moholy-Nagy's and Kidder's types because of their overlapping descriptions. Small/Type A earflares have "regular, circular plan[s]"; long stems relative to their smaller, gently everted flares; and wide central perforations (Moholy-Nagy 2008:43; for a photo example, see Figure 8). Large/Type B earflares have irregular, often uneven plans; short stems relative to their large, sharply everted flares; and narrow central perforations (for a photo example, see Figure 9). Unlike Small earflares made of stone, Large earflares made of stone tend to



**Figure 4.** An example of an earspool. Metropolitan Museum of Art, Bequest of Arthur M. Bullowa, 1993, 1994.35.556.



**Figure 5.** Pair of incised ear plaques with profile heads. Peabody Museum Expedition, 1911. Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 116-20/C5619.

have imperfectly drilled stem interiors as a result of either biconical or bilateral hollow drilling. Note that for Moholy-Nagy (2008), the above differences in craftsmanship are the key traits distinguishing Small and Large earflares, not diameter, because both subtypes at Tikal measure up to 9 cm across. Both subtypes also appear in Early Classic Tikal contexts. However, in the Late Classic period, Small earflares maintain their popularity, whereas Large earflares are uncommon.

Moholy-Nagy's (2008) "Disk and Stem" earflares—composite ear ornaments with ear plaque frontals—are most popular during the Early Classic period. This is true at other major centers as well as Tikal. These sometimes had stems with wooden cores, which improved their stability and provided a surface for adhesives or stucco (see especially Kidder 1947:Figures 27–28; Kidder et al. 1946: Figure 143). Drilled holes in them suggest that thread also held parts together for added security. Several of these kinds of ear ornaments were designed with mosaics that sometimes included more than one kind of precious stone. Reports from Caracol describe shell pairs with obsidian tesserae (Chase and Chase 2003:Figure 58) and pyrite tesserae (Chase and Chase 2005:Figure 20c). Plaques of slate, shell, and limestone inlaid with jade tesserae are also reported at Uaxactun (Kidder 1947:Figures 27–28), El Zotz (Carter et al. 2012:Figure 6), Kaminaljuyu (Kidder et al. 1946: Figure 143a, 143e, 143f), and Tikal (Moholy-Nagy 2008: Figure 85). Because these were crafted of multiple parts, they often used less precious material. They would have also required less effort to craft than earflares made as solid pieces. Where they usually outperform their more valuable counterparts, though, is in their tendency for figuration. If not inlaid or mosaicked to form naturalistic representations, plaque frontals are often decorated with intricately incised figures, including avians, reptiles, profile heads, and human bodies. There are provenienced examples of these incised plaque frontals, such as the pair shown in Figure 5, which are from Holmul (also see examples from Altun Ha in Pendergast 1982: Figure 70a, 109a–b), but provenienced examples may not be as numerous as



**Figure 6.** Wooden L-shaped earflare with incised flange. Although many L-shaped earflares are worn with the flange coming out of the back of the earlobe, this example was likely worn with the flange coming out of the front of the earlobe to showcase the design. Peabody Museum Expedition, E. H. Thompson, Director, 1907–1910. Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 10-71-20/C6709.

unprovenienced ones (see, for example, K7544, K6725, K5086). Dating these is therefore problematic, but based on iconographic style alone, it seems that the popularity of incised, figurative decoration skews toward the Early Classic period. Indeed, such incised figuration is not limited to Early Classic ear plaques but also decorates other kinds of ear ornaments from the Early Classic period—namely, jade earflares (see [Figure 10](#); also see K3166).

As we start getting into the Late Classic period, ear ornaments with figurative designs largely disappear from the archaeological record. A strong possibility is that ear ornaments became less important as loci for bespoke designs, individualism, and personal identity; even nametagged ear-pools with hieroglyphic inscriptions are uncommonly found in contexts dating long after the Early Classic to Late Classic transition (to the author's knowledge, the latest example is known from Pakal's tomb in Palenque; [Ruz 1973](#)).

Instead, Late Classic ear ornaments—particularly those made of jade—seem to reflect greater labor investment into formal standardization. The Small or Type A earflares that are more common during this period represent an



**Figure 7.** Jade earflare assemblage. Gift of Dr. Charles Peabody, 1910. Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 1056-20/C5945.

overall improvement in craftsmanship from the Large (Type B) earflares, which are far more varied in appearance. The former are overwhelmingly circular and smooth surfaced, whereas the latter are more irregularly shaped, are more likely to have uneven surfacing, and more often feature imperfections. Moreover, the styles in which earflares are worn in the Late Classic period, and to some extent the contexts of their discovery, suggest a general preoccupation with accumulation. Miniature flares are commonly



**Figure 8.** An example of Type A earflares with throat disks. Metropolitan Museum of Art, Gift of Arthur M. Bullowa, 1989, 1989.314.2a, b.

found at this time, especially in association with large flares and long, narrow beads. These are often components of complex assemblages worn in the ear, but they were also used in other ornamental assemblages such as diadems. These diadems seem to be commonly depicted in iconography, but only a few archaeological examples have been recovered (see Coe 1959:Figure 48; Moholy-Nagy 2008: Figures 115e, 121e). The apparent shift of labor investment away from decorative elaboration and toward standardization and multiplication instead suggests that these objects were fungible and that they likely stored wealth.

### Ornamentation and socialization

Changes in ear ornament usage should in part be understood in terms of what ear ornaments do best: ornament. Objects intended for this function are a particular subset of dress and are therefore relevant to discussions of dress more broadly—a topic that has deep roots in anthropology. Questions about what kinds of people wore what kinds of ear ornaments, when and why this changed, and why the practice of ear ornamentation was so widespread are all relevant here. Fundamentally, ear ornamentation forms part of the ancient Maya “cultural uniform,” which is tied to local



**Figure 9.** An example of Type B earflares. © Dumbarton Oaks, Pre-Columbian Collection, Washington, DC.

standards of beauty and bodily presentation. As an aspect of dress, it alters the single most important locus of individual identity—the body—a surface upon which one’s participation in society is made public (Turner 2012:486).

Dress, along with more permanent modifications to the body, is not only essential to human experience but also essentially human. Unlike other beings, humans uniquely and persistently “refuse to let nature alone dictate their appearance” (Reischer and Koo 2004:297). For ancient Mayas and other ancient Mesoamerican groups (Joyce 2000:476), body modification in particular was conceived as a means by which humans differentiated themselves from animal counterparts. Manual shaping of the body was therefore considered necessary; a modified body is a domesticated one, signaling civilized upbringing. Indeed, certain modifications to the body—such as head flattening, dental filing, and tooth inlaying—were likely considered integral to the process of becoming a fully realized human being (Scherer 2018; Tiesler 2011). It is probable that ear piercing and stretching were conceived as similarly critical coming-of-age rites.

The age during which ancient Mayas pierced their ears is somewhat speculative. Representations of children are rather rare in the ancient Maya iconographic corpus. The two children depicted in the Bonampak murals do have ear ornaments (Bonampak Room 1, Presentation Scene; and Room 3, Bloodletting Scene), but their ages are unknown. Another well-known example would be the three-year-old girl shown on Piedras Negras Stela 3, but the carving is now too defaced to determine whether she wore ear ornaments. By comparison, ear piercing for Nahua counterparts took place in early childhood. Ear piercing was ritually administered every four years during a feast celebrated in the month of Izcalli (Sahagún 1951:159–166). Thread retained the fresh piercings (Sahagún 1951:170), though it is not clear how long children wore thread in their ears before replacing it with jewelry. A distant parallel to Sahagún’s description may exist on a Late Classic Maya vase (K9294), which depicts male adolescents with only thread through their ears (see Figure 11).

Sahagún (1951) does not specify the age or event during which Nahuas stretched their earlobes, nor does he describe the method. The effect could have been achieved by using weights or gradually increasing the size of the insert in the ear. In the ancient Maya corpus, there may be visual evidence for the former method: Toniná Monument 183 and a mirror back from the Xultun vicinity (Figure 12) depict male adolescents with earflares not through their earlobes but suspended from them. With time, this passive stretching would be enough to allow the insertion of the flare directly into the earlobe.

In the ancient Maya context, it is likely that extensive earlobe stretching was classed. Regardless of material, the largest ear ornaments are generally found in elite burials or monumental structure caches. The functional reason for this difference in stretching is straightforward enough: larger earlobes can display larger ear ornaments, and larger ear ornaments are more visible. This is especially important if certain sets of ear ornaments were worn ceremonially or



**Figure 10.** Earflare pair with baktun bird (left) and saurian beast (right), drawn after Alexandre Tokovinine (Houston and Tokovinine 2013: Figure 3).

in ritual performances. Unlike the ears of their less privileged counterparts, the stretched ears of elites could easily accommodate impressive displays of wealth that were meant to be seen and admired.

Given that class difference at least partially depends on such displays, it is worth noting that elites may have felt compelled to maintain the appearance that they owned particular status symbols (such as jade jewelry) even if they did not. When performing their ritual dance during *Izcalli*, Nahuatl high lords wore ear plugs and nose rods made of genuine turquoise or “made of wood painted like turquoise” (Sahagún 1951:164). This false turquoise functioned much like costume jewelry: even if certain high lords lacked the

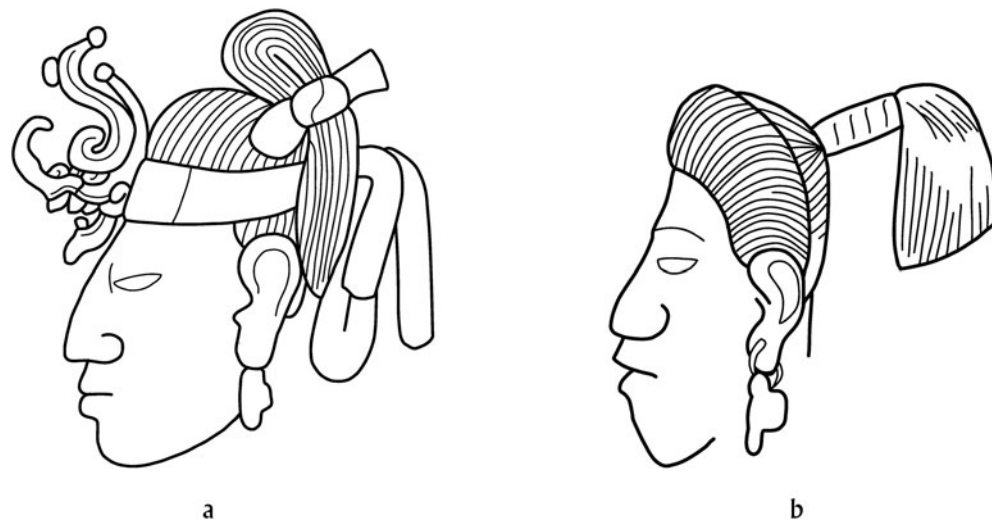
means, they still had to dress the part. Beads of false jade—clay painted blue—have also been found at Piedras Negras (Coe 1959:Figure 58), which is in an area where jade was otherwise uncommon. These probably substituted for jade during ceremonial events similar to the Nahuatl example that Sahagún (1951) describes above. The use of counterfeits in these contexts suggests that elite standards of dress and beauty may have required a capacity to display certain high-worth materials, regardless of whether these materials were authentic.

At a basic level, changes or perceived improvements to one’s appearance are meant to be seen by others in one’s community, but there is more at stake here than vanity: the extent to which self-beautification is achieved is deeply hierarchical. Sumptuary laws can be used to restrict access to the most coveted forms of dress, as was the case among the ancient Aztec (Anawalt 1980:33–34). Sumptuary laws were also in place for the Inca, among whom nobles wore large earpools. This earned them the Spanish epithet *orejones*, so called for their stretched earlobes (Cobo 1979 [1653]:245; Dean 1999:126–128; Lechtman 1984:10–11). Evidence is uncertain, but sumptuary laws likely dictated the circulation of jades among ancient Mayas as well. Although commoners may have been allowed to possess the odd jade bead or two, the largest jade objects and the largest quantity of jade objects were restricted to elites. Many are large enough that their weight and size probably made for awkward and unwieldy accessories (Halperin et al. 2018:659). Unfortunately, their weight often goes unpublished in museum catalogs and site reports. In one site report from El Zotz, paired earflares (~4 cm) weigh about 14 g each (Garrido López et al. 2016:Figures 10.1 and 10.2), but larger examples, such as those measuring up to 9 cm across at Tikal, would have been far heavier.

Despite the restriction of large jade ear ornaments—and perhaps other large ear ornaments made of alternative materials—to the elite, the practice of ear ornamentation



**Figure 11.** Detail from a polychrome vase showing a bloody-nosed adolescent male with thread through his earlobe, drawn after K9294.



**Figure 12.** Young men with earflares hanging from their earlobes. Earflares may have been worn in this fashion to gradually stretch earlobe piercings until they were large enough to accommodate larger jewelry: (a) detail of Toniná Monument 183, drawn after David Stuart, *Corpus of Maya Hieroglyphic Inscriptions*; (b) detail drawn from Xultun mirror back (Houston 2018:Figure 27).

was widespread and was probably a basic form of self-beautification. Small ear ornaments of less valuable materials, such as ceramic, are found in nonelite contexts. Small wooden ear ornaments are rarely found, but it is possible that they were commonly used. The most well-known examples of wooden ear ornaments were recovered from the Cenote of Sacrifice at Chichen Itza, where wet conditions prevented their decomposition (see Coggins and Shane 1984). Small ear ornaments of marine shell frequently appear in both elite and nonelite contexts, and they were likely worn by well-to-do commoners in addition to less privileged elites. In depictive evidence, humans are rarely shown without ear ornaments, and when they are shown without them, the context is often humiliation (e.g., they are forcibly removed) or penance (e.g., they are removed for the purpose of blood-letting) (see Figure 13). Humans are not the only beings that seem to always be equipped with ear ornaments in Maya iconography; ear ornaments are featured on agentive beings of all kinds, including supernaturals, animals, and nonanimals (e.g., animated mountains).

The reason for the ubiquity of ear ornamentation is probably closely related to concepts of personhood described above; no matter an individual's status, ear ornaments were much like the body's final touch, not just improving its appearance but completing it. A metaphor elucidating this idea relates to the Classic Mayan word *pet*. Translating to “island,” the PET logogram is a circle within a circle, a sign that likely originated as a depiction of an earflare. When derived into the verb *pəhtaj* (“it is rounded”), it expresses “the creation of some rounded thing and, less literally...the completion of a carving” (Houston 2020:n4). Although this reading helps explain the iconographic origins of the sign, it also seems that the metaphorical aspect of *pəhtaj* is performed when earflares are worn, because they represent these same qualities in the bodies they adorn. They signal a status of wholeness—a status that can only be

achieved after reaching a certain age, and for many unlucky captives, could even be deferred (Carter 2020:101).

The fact that bodily adornment and, therefore, beautification must have been the foremost purpose of these objects suggests that corporal matter—like stone to be carved or a jewel to be polished—is also rough, unworked, and in need of refinement. Of course, a crucial point in the transformation of mere rocks to ornaments is the process of drilling, which was thought to bring beads to life (Taube and Ishihara-Brito 2012:140). The implements used for drilling beads—bow drills and pump drills—are the same that would have been used to make fire. Drilling holes was a practice that was therefore functionally tied to fire drilling and its ancillary effects: engendering heat and vitality. Nahuatl children were believed to be animated in a similar way. A Nahuatl child was ensouled when creator gods breathed the *tonalli* (vital heat or coesence) into the child and “ignited a fire in its chest in an action analogous to making fire with a drill” (Furst 1995:65). Nahuatl newborns were similarly described as “precious green stone[s]” cast and perforated by the creator gods (Sahagún 1969:183, 202).

These ideas behind ear piercing and stretching—and body modification and ornamentation more generally—exemplify the way that self-beautification is moralized and therefore proper. Gonzalo Guerrero, a Spaniard who is renowned for arriving to Yucatan during the conquest, becoming enslaved, and then eventually assimilating to Yucatec culture, was compelled to tattoo his face and pierce his ears “to wear earrings like the Indians” (Tozzer 1941:8–9). His companion, who escaped enslavement and returned to Cortés, reported that Guerrero’s “nostrils, lips, and ears [were] pierced, and his face painted (*pintado*) and his hands tattooed (*labradas*) according to the custom of that country” (Tozzer 1941:236). Although it is not clear when in his life Guerrero modified his body in these ways, it is not farfetched





**Figure 13.** Captive without earflares inscribed on a bone (Tikal Bu. 116, side B; drawn by the author after Moholy-Nagy 2008:Figure 200c).

to think that these modifications helped Guerrero earn the esteem of the Yucatec lords he served. His acceptance and implementation of local body modification practices was a necessary part of his transformation in becoming the proper kind of person.

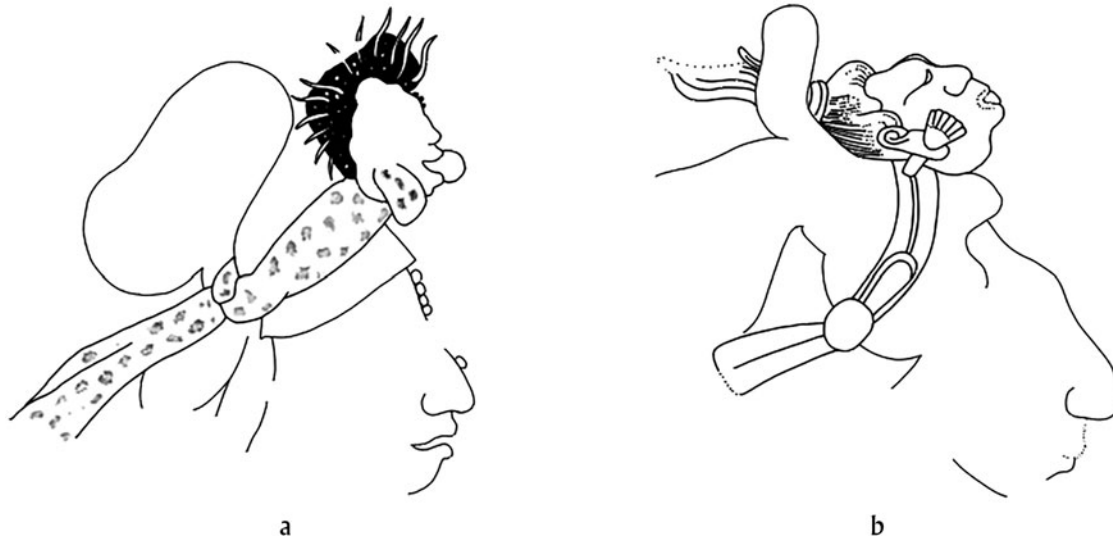
The association between bodily aesthetics and morality exists in several modern Mayan languages, and etymological links show a strong relationship between terms that mean beauty, rectitude, and human craftsmanship. In Chol, the word for beauty (*t'ojlawib*) is derived from the transitive verb root *t'oj*, meaning to cut meat, stone, or wood (Aulie and Aulie 1978). The Yucatek word *hats'uts'* (“pretty, beautiful”) literally means well worked or well crafted (Vásquez 1980). Similar notions are reported among Ch'orti' Maya (Wisdom 1950:579–581), for whom beauty relates “to the body but also to human effort (polishing, cleaning)” and is associated with “goodness, value, usefulness...[and] remedy.” Beautification through the insertion of ear ornaments

may therefore be a moral obligation, but the bodily modification necessary for their use is arguably a refinement of the body's surface. Not all ancient Mayas exercised the same level of refinement—that is, the same degree of ear stretching—but it seems that they all pierced and adorned their ears, and that this was a standard rite of social integration and individual beautification.

### Ornamentation and value

That early currencies often derive from ornamental materials is neither unique nor surprising; ornamental materials—such as metals, precious stones, and brightly colored shells—are often understood as having intrinsic value and are therefore often used to represent value itself (Graeber 1996:5; 2001:85). This point offers a straightforward explanation about how and why things such as jade and shell came to have standard exchange values that could be traded for goods or services of commensurate value. What is complicated about Maya jades and similar valuables is that the value attached to them is often also derived from their history of ownership. Adapting Annette Weiner's (1992) concept of inalienability, Kovacevich (2013:95) writes that objects with inalienable value are indefinitely endowed with some element or memory imparted by their original owner(s) or producer(s); even if these objects are “gifted, bequeathed, cached, interred with the dead, or ritually destroyed, the connection to the original owner(s) is rarely forgotten and can be what adds value to the object[s].” This means that “inalienable” value often stands in the way of fungibility; two objects that are otherwise the same but differentially valued because of their ownership history are not commensurable.

The degree to which something such as a pair of jade earflares is considered inalienable is difficult to understate, because they seem to be metaphorically understood as parts of a person's body. In Classic Mayan inscriptions, alienable possessions are in fact grammatically differentiated from inalienable, or inherent, possessions (Zender 2004). Inherent possessions tend to be literal, such as body parts, but some other things—namely earflares—are also inherently possessed. Like other nouns in Classic Mayan, inherent possessions are made possessive when affixed with an ergative pronoun. Unlike other nouns, however, inherently possessed nouns are unmarked when they take a possessive form. When they do not take a possessive form, they are marked, and they must be suffixed with the particle “-*aj*” (Houston et al. 2001:42–45). For this reason, a possessed earflare is expressed as “ergative + *tuup*” (e.g., *u-tuup* [“his or her earflare”]) and an unpossessed earflare is expressed as “*tuup* + *aj*” (i.e., *tuupaj* [“earflare”]). The question this raises is whether inherent possession in grammar actually reflects, in this case, the belief that earflares are fundamentally attached to the self. A productive analogy is Kockelman's (2007) study on inherent possession in Q'eqchi' Mayan, which might be applicable for Classic Mayan. In Q'eqchi', the types of things that can be inherently possessed (e.g., kinship terms, body parts, and things such as one's clothing, name, or family) might also be conceptualized as conditions



**Figure 14.** Diadems with trophy heads attached: (a) detail from Room 3 of Bonampak Str. 1, drawn after Houston et al. 2006:Figure 2.13b; (b) detail from Yaxchilan Lintel 24, drawn after Ian Graham.

of being a full person (Kockelman 2007:351). The more a community member possesses such things, the greater the extent of their personhood.

The idea that bodily ornaments would be conceived as an extension of the body is hardly specific to the ancient Mayas. Indeed, the conception carries over to clothing generally. As a “visible envelope of the self” (Entwistle 2000:327), it is close enough to the body to become a metaphor for it (also see Davis 1992). Schneider and Weiner (1986:178) similarly posit that cloth, by virtue of its use in covering the body, is metonymically related to the self. Gell (1993) wrote that more permanent ornaments—tattoos—could be understood in Polynesia as a “double skin.” Beyond this additional skin, a body with tattoos “multiplies; additional organs and subsidiary selves are created” (Gell 1993:39). The link between the body (as well as its modifications) and the self is surely metaphorical in some cases (see, e.g., Bragdon 2017:111; Reischer and Koo 2004:300), but in other cases, the link should not be considered so symbolic.

In his study of the role of cloth in the Inca state, Murra (1962:718) writes that the imperial desire for cloth superseded “matter-of-fact clothing or ornamental needs.” Clothing had magical properties, and victors’ removal of prisoners’ clothing after military triumphs served to further disempower them and literalize their dehumanization. Moreover, getting hold of an enemy’s clothes, putting them on an effigy, and ritually killing and disrespecting the effigy was believed to kill or at least harm the enemy (Murra 1962:718).

These examples remind us that the function of dress—and in this case, adorning the ears—is not simply ornamentation. Regardless of the quality of the ear ornaments, their usage is bound up in moralized beauty standards, various intersections of identity, and maintenance of a proper body. While working with the Ch’orti’ Maya, Wisdom (1940:37, 118–119) noted that men and women wore ear ornaments as bodily decorations and also as charms. It is

notable that the principal ornaments used for this purpose were silver pesos. Men wore them in the outer ear opening (the conchal bowl) to relieve earache and prevent the entrance of evil winds into the ear, and both men and women hung perforated silver pesos from their pierced earlobes to protect themselves against sorcery, malevolent spirits, and apparitions. In this way, these pesos served both a medicinal and magical purpose. Finally, Wisdom (1940:34) remarks that men would also wear a silver peso in the outer ear opening while at the market as a sign to merchants that they had money to spend.

Although the Guatemalan government began to withdraw silver pesos from circulation in 1924, the Ch’orti’ refused to give them up, maintaining skepticism about the legitimacy and intrinsic value of newly issued quetzal money (Wisdom 1940:33). Because banks would no longer accept them for deposit, Ch’orti’ commonly kept saved quantities buried underground (Wisdom 1940:37). Unlike the new money—especially paper money—the silver pesos were valuable for their silver content, and Ch’orti’ noted a specific “feel” and weight to them that the new currency lacked. Silver pesos therefore continued to circulate in Jocotán, where the Ch’orti’ population is concentrated. Ch’orti’ commonly perforated the pesos for ornamental use; Wisdom (1940:37, n21) remarks that “a third of the coins collected by the bank agent at Jocotán were perforated. Despite the extensiveness of this practice, “neither the Ladino merchants nor the bank agents would accept or pay for perforated coins,” so those that were reintroduced into circulation had holes that were “filled with copal gum to make them appear whole” (Wisdom 1940:37, n21).

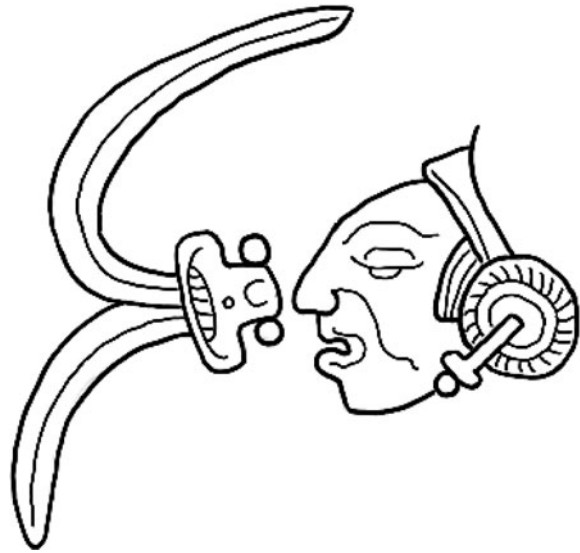
The situation Wisdom’s (1940) ethnography describes resonates strongly with what is known about ancient Maya ear ornaments. They served a variety of functions beyond bodily decoration, including not only to protect their wearers from physical or spiritual ailments but also to signal disposable wealth. The burying of silver pesos

recalls the strings of ear ornaments, which may have been ritually deposited in caches while not in use. Finally, the units themselves were intrinsically valuable. Silver pesos might have been a necessary part of personal dress, but they could always be repurposed for money if required. Jade earflares could similarly be used as units of exchange, parted from their original costume elements (whether indeed attached to the earlobe or worn elsewhere) and traded. They could even be broken into smaller pieces and reused to create elements of other jade objects (e.g., Nadal and del Campo Lanz 2010:116).

Wisdom's (1940) ethnographic case is a reminder that coined currency need not constitute the epitome of commensurable exchange value. In certain contexts, coins have served the same kinds of economic and ornamental functions as beads, perhaps with similar functional interchangeability. Coins have never just been money; even if we do not accept Engels's (2020 [1978]:149) suggestion that coined money initially functioned as magical rather than economic instruments (for discussion, see Graeber 1996:10, 2001:92), there is no doubt that coins in the medieval Mediterranean were used as magical charms (Maguire 1997) and as bodily adornments. Coins were often placed in earrings, pendants, and ring settings (Liampi et al. 2017; Perassi 2021).

Kovacevich and Callaghan (2023:164) express frustration that so much scholarship, especially in Maya archaeology, is focused on finding the exchange value of commensurable goods to the detriment of understanding other kinds of value imbuing these goods. Their adaptation of Crook's (2019) three types of value to Maya jades and their subsequent discussion shows not only that there are multiple avenues through which to understand value but also that all of those avenues must be pursued to understand the economic function and role of jade. Following Crook's model, Kovacevich and Callaghan's (2023) approach to value in the Maya Classic period is broken into three parts: Moral ( $V_3$ ), Esteem ( $V_2$ ), and Measure ( $V_1$ ). As they explain, "the values and morals ( $V_3$ ) of the society lead to esteem of the object ( $V_2$ ), which may develop through time into measurable value ( $V_1$ )" (2023:164). In short, the value of jade begins with the way pre- and postcolonial Maya understood jade. Its moral value derives from its association with core cultural concepts, such as maize, the world center, and the breath soul (Taube 2005; see Figure 15). The esteemed value of jade (its desirability) could be understood in terms of the amount of effort it takes to carve and polish jade, but things such as a particular object's history or past owner(s) also affect its esteemed value. A masterfully crafted jade object could represent not only precious animated rock but also the worth of its owner, the reputation of its craftsman, and hundreds of hours of skilled labor. Beyond all this, there is the measured value of jade. If a string of 20 jade beads is commensurate with one bride (see, for example, Torquemada 1615:vol. II:460), there is a baseline rate at which jade might be exchanged for things of greater or lesser value.

According to Graeber (2014:133), things take on measured value when they are used to pay life debts—that is, payments that compensate for a loss of life (a felled warrior)



**Figure 15.** Detail from an unprovenanced vase showing a figure with an earflare "breath bead" (Drawn by the author after Taube 2010: Figure 5.10).

or a life traded (a bride, a slave) are what lead to measured value. Kovacevich and Callaghan (2023) make the point that jade's ability to retain the breath essence of deceased individuals (see Coe 1988) literalizes Graeber's assertion: jade not only substitutes for human life but encompasses it. It is this power, as well as its movement between hidden and displayed contexts, that would have made jade so ideal for commoditization. This can be taken even further with jade ear ornaments. Early designs of these objects, especially in elite contexts, make it clear that they were highly individualized. One of the pairs of ear ornaments recovered from the tomb of Yax Nuun Ahiin I (Moholy-Nagy 2008:Figure 85) are specific enough in appearance that they are recognizable elements of his costume on the sides of Stela 31 (Figure 16). Other early examples, as mentioned previously, were incised with name tags. Ear ornaments are closely tied not only to personal identity but also to personhood. The status of being a person was not guaranteed; it had to be achieved with the proper modifications, and even then it could still be lost (as was often the case with captives).

What is unclear about the way earflare hoarding emerged is how and why these hoards accumulated. One possibility is that they were collected from captives, sacrificial victims, and victims of battle. This practice of collecting and periodically displaying earflares (e.g., ceremonially wearing or holding strings of them) may have led to growing perceptions of their fungibility. Moreover, the exchange value implied by such practices would be rather straightforward: one pair equals one life. The obverse implication is that a person with multiple pairs has more life. Of course, much of this is speculative, but if we follow this logic, it gives some perspective on how the earflare form became meaningful in itself. Miniature jade flares, which became popular in the Late Classic period, would be used as further



**Figure 16.** Profile of Yax Nuun Ahiiin I represented on the Tikal Stela 31 (left), drawn after John Montgomery (The Montgomery Drawings Collection, FAMSI.org).

embellishments to ear ornaments as well as adornments to other costume elements. In other words, they were basically beads in the shape of earflares, and they were almost certainly fungible in the same way.

If beads already existed to serve the function of fungible jade currency, why did miniature flares become popular? Graeber (1996:5; 2001:85) writes that things such as tiny copper axes were also “the stuff of currency.” In his example, copper axes represented a value meaningful enough to warrant reproduction in the miniature. If Graeber’s argument is right, miniature jade flares—more so than jade beads—represent whatever value it is that is particular to jade earflares. Part of this has to do with the fact that jade’s value is not merely moral, or esteemed, or even measured. Jade represented life to ancient Mayas and was believed to be capable of capturing it. However, miniature flares were made of materials other than jade, as well. These alternatives were usually shell, but cheaper substitute materials that do not preserve may have also been used. What this means is that the form itself mattered. Ear ornaments were metonymic of the body and probably metonymic of the head in particular; after all, that is where they were usually worn. The collection of earflares and the display of this collection might be symbolically comparable to taking trophy heads and bejeweling oneself with them (see Figure 14), although doing so would be slightly less literal than using trophy heads to represent the number of human lives a successful warlord has taken. That said, trophy heads might have made more frequent appearances on diadems (instead of the miniature jade flares that are otherwise much more commonly seen) if they were anywhere near as enduring.

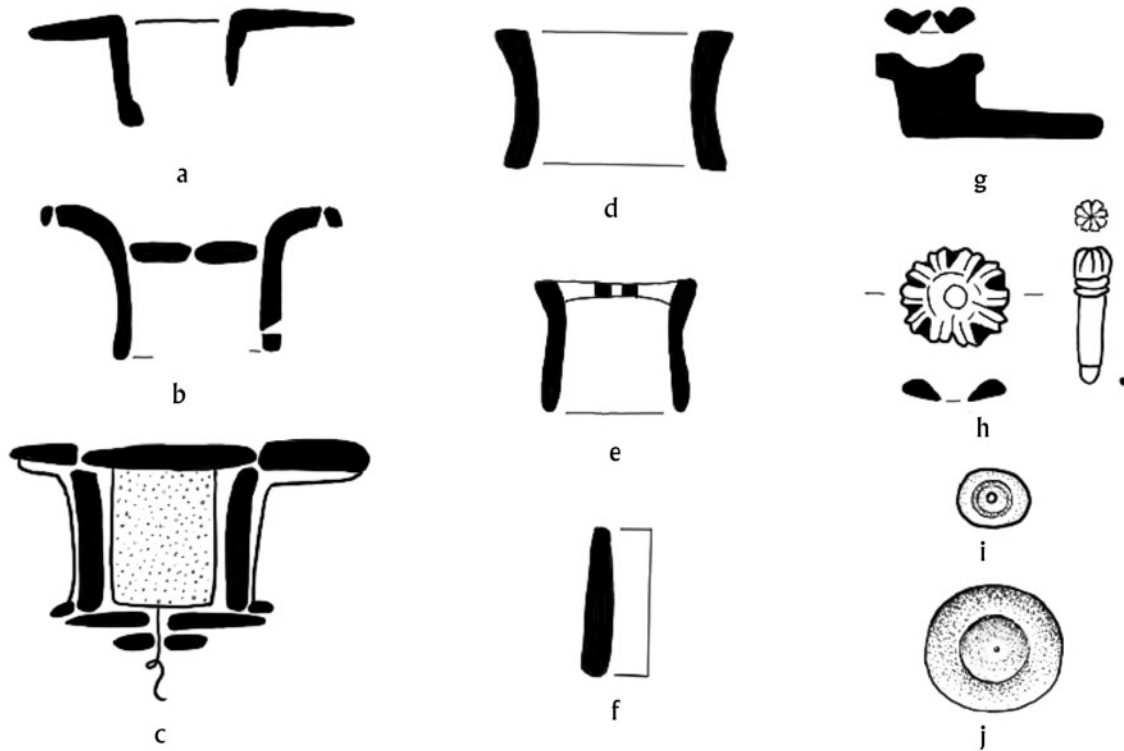
### Ear ornament types, chronology, and distribution at Tikal

The previous sections explored multiple avenues for understanding the cultural and economic dimensions of ear ornaments. The section to follow affords the same holistic consideration to ear ornaments recovered from Tikal (as reported by Moholy-Nagy 2008). Emphasis is placed on type, variety, and distribution to highlight what kinds of ear ornaments are found where. The fact that ear ornaments are recovered from nonelite contexts with such frequency is a clear indicator that ear ornaments were not restricted to elite use. Instead, they were basic elements of dress, fundamentally constitutive of personal identity, regardless of class or gender. Though there is not much change in the chronology of ear ornaments found in non-elite contexts, jade ear ornaments found in elite contexts become more standardized in appearance over time, with the addition of increasingly more divisible parts. This lack of individuality or individualization in later elite ear ornament styles, along with visual evidence suggesting that certain elites hoarded jade earflares in vast sums, suggests that jade earflares—like beads—were being used as fungible units of wealth.

#### Earflares

When possible, Moholy-Nagy further classified Earflares ( $n = 69$ ) into the following subtypes: Large ( $n = 22$ ; Figure 17a), Small ( $n = 15$ ; Figure 17b), and Disk and Stem ( $n = 17$ ; Figure 17c; Moholy-Nagy 2008:43). Some earflare fragments she could not classify further ( $n = 15$ ) (Moholy-Nagy 2008:43). As mentioned in an earlier section, the “Small” and “Large” distinction is somewhat misleading because the diameters of the largest examples from each are the same. For that reason, and to avoid confusion, the author will hereby use Kidder’s terminology (Type A for “Small” and Type B for “Large”).

An overwhelming portion of Type B earflares dated to the Early Classic period ( $n = 19$ ) (Moholy-Nagy 2008: Table 4.12; Figure 18), and they were usually made of jade ( $n = 15$ ) (Moholy-Nagy 2008:Table 4.08). The majority of Type A earflares also dated to the Early Classic period ( $n = 9$ ). However, more Type A earflares dated to the Late Classic period than Type B earflares. It seems, then, that this style was also popular during the Early Classic period, but unlike Type B earflares, Type A earflares remained popular into the Late Classic period (Moholy-Nagy 2008: Table 4.12; Figure 18). As was the case with the other earflare subtypes, Disk and Stem earflares mostly dated to the Early Classic period. However, Disk and Stem earflares persisted into the Terminal Classic period (Moholy-Nagy 2008:Table 4.12; Figure 18). Disk and Stem earflares were particularly varied in material. Most were made of seashells ( $n = 8$ ), and some were composite ( $n = 4$ ). Only a few were made of jade ( $n = 3$ ) or alabaster ( $n = 2$ ) (Moholy-Nagy 2008:Table 4.08, 43). Although Type B earflares and Disk and Stem earflares remained in use after the Early Classic period, in the Late Classic period, Type A earflares seem



**Figure 17.** Examples from each ear ornament type and subtype recovered at Tikal: (a) Large/Type B Earflare (drawn after Moholy-Nagy 2008: Figure 102d); (b) Small/Type A Earflare (drawn after Moholy-Nagy 2008:Figure 112a); (c) Disk and Stem Earflare (drawn after Moholy-Nagy 2008:Figure 105c); (d) Earspool (drawn after Moholy-Nagy 2008:Figure 131d); (e) Variety P Earspool (drawn after Moholy-Nagy 2008: Figure 218a); (f) Variety D Earspool (fragmentary; drawn after Moholy-Nagy 2008:Figure 218q); (g) L-Shaped Object (inlaid with Small Flare; drawn after Moholy-Nagy 2008:Figure 122a); (h) Rosette and Peg (drawn after Moholy-Nagy 2008:Figure 145q); (i) Small Flare (drawn after Moholy-Nagy 2008:Figure 121e); (j) Small Plaque (drawn after Moholy-Nagy 2008:Figure 115e).

	ND EF	Var. D EF	Var. L / Type B EF	Var. S/ Type A EF	L-Shaped Object	ES	Var. D ES	Var. P ES	Pegs	Rosettes	Small Flares + Plaques
Unspecified Pre-Columbian					1	1	2				
Terminal Classic (869 C.E.–950 C.E.)	1	2							2	4	
Late Classic (554 C.E.–869 C.E.)	5	2	2	6	9		1		3	9	77
Late Classic–Early Postclassic (554 C.E.–951 C.E.)					4					2	
Early Classic (250 C.E.–554 C.E.)	2	12	19	9		1				2	8
Classic (250 C.E.–950 C.E.)	3	1	1		1	1				2	
Preclassic (350 B.C.E.–250 C.E.)								3		1	1
Preclassic and Classic (350 B.C.E.–950 C.E.)	4										
Total	15	17	22	15	15	2	3	4	5	20	86

**Figure 18.** Summary of ear ornament and small flare chronology: ND = Not Determined; Var. = Variety; EF = Earflare; ES = Earspool. This table is based off of Moholy-Nagy (2008:Table 4.12). The author created it by collating and compressing the chronological data Moholy-Nagy presents. Fine-grained subdivisions for each period were collapsed to facilitate general comparisons. It should be noted that the table on which the above data is based contains an error that the author chose to correct to maintain consistency and avoid confusion. In the original table, Moholy-Nagy (2008:Table 4.12) includes a fourth Variety P Earspool under “Unspecified Pre-Columbian,” but this is contradicted by Moholy-Nagy’s (2008:45) explication of the data. She describes one generic Earspool—not a Variety P Earspool—dating to the pre-Columbian period. The above table has been adjusted to corroborate this prose.

to have been favored. Moholy-Nagy (2008:44) has described this shift in popularity as a growing preference for smaller earflares, but as mentioned, the largest examples from both subtypes have comparable diameters. The real difference between these subtypes is craftsmanship, which seems to improve over time. Again, Large/Type B earflares tend to have uneven surfaces, irregular plans, and imperfectly drilled stem interiors. To an extent, these features may have simply reflected aesthetic preference. It is arguable that so-called imperfections in jade were thought to represent the innate and vital qualities of the rock, which were to be emphasized and facilitated rather than reduced (Houston 2014:91; Stuart 2010: 285). What may have changed is the desire to bring out these idiosyncrasies; sameness in appearance, rather than difference, may have become ideal.

Type A earflares, although recovered less frequently overall than Type B earflares, were much more likely to be recovered from chamber burials (Moholy-Nagy 2008: Table 4.11). Disk and Stem earflares were more likely than Type A or Type B earflares to be found in general excavations. Disk and Stem earflares were recovered in temple or shrine caches just as frequently as Type B earflares, but ear ornaments that were cached in palaces were almost exclusively Type A earflares. The overwhelmingly elite contexts in which Type A earflares are found seems to indicate the extent to which they were thought to represent value. The idiosyncratic craftsmanship of earlier forms may have had more to do with personal style and individual identity, whereas formal standardization seen in the Type A earflares may reflect an emerging link between earflares and fungible value.

### *L-shaped objects*

Although they have received less attention in discussions of Maya ear ornaments, L-shaped (or “shoe-shaped”) objects (Figure 17g) made of white marine shell, ceramic, limestone, and wood examples have been reported at several major centers, including but not limited to Tikal, Piedras Negras, Uaxactun, Caracol, Chichen Itza, and Dzibilchaltun (Chase and Chase 2012, 2017, 2018; Coe 1959; Coggins and Shane 1984; Kidder 1947; Moholy-Nagy 2008; Taschek 1994; also see Taschek 1994 for discussions of intersite distributions of these objects).

At Tikal, L-shaped ear ornaments trend in the latest periods of occupation more than any other ear ornament type. All examples with securely dated contexts dated from the Late Classic period to the Early Postclassic period (Moholy-Nagy 2008:Table 4.12; Figure 18). They were made of white marine shell ( $n = 11$ ) and unslipped ceramic ( $n = 4$ ) (Moholy-Nagy 2008:44, Table 4.08). Most L-shaped ear ornaments were recovered from general excavations ( $n = 7$ ) (Moholy-Nagy 2008:Table 4.11). The rest were recovered from minor burials ( $n = 4$ ) and chamber burials ( $n = 4$ ). The eight that came from burials comprised four pairs. All were made of white marine shell and inlaid with miniature jade flares that were either fitted into cavities or secured with a thread passing through the small flares and the L-shaped backings. The use of these miniature flares in ear ornaments at this time is consistent with their general

popularity during this period, given that they were used not only in ear ornaments but also in other ornamental assemblages. The latest examples of L-shaped ear ornaments, recovered from general excavation and dating from the Late Classic period to the Early Postclassic period, were the four made of unslipped ceramic. Because the emergence of this type seems to be linked to the emergence of the miniature flare (to be discussed shortly), they seem to have become popular as a way to fasten such miniature flares to the ear. This style would have required smaller earlobes than those that would have accommodated the larger styles discussed so far. They may have been worn by the members of an emerging “upper middle class,” who had access to jade but may not have been socially permitted to stretch their earlobes more than a centimeter or so.

### *Rosettes and pegs*

Rosettes and pegs (Figure 17h) are composed of two parts. The former are annular objects, often disk shaped, as at Caracol (Chase and Chase 2018:Figure 56e–h), although examples from Tikal exhibit much higher degrees of modeling in comparison. Many evoke a floral pattern, whereas the pegs look like stamens. More than any other type of ear ornament found at Tikal, rosettes had a sprawling temporal distribution, present during all periods of the site’s occupation. Out of 20 rosettes total, one dated to the Preclassic period, two dated to the Early Classic period, two dated to the Classic period, nine dated to the Late Classic period, four dated to the Terminal Classic period, and two dated from the Late Classic period to the Early Postclassic period (Moholy-Nagy 2008:Table 4.12; Figure 18). The rosettes were recovered only from general excavation ( $n = 12$ ) and minor burials ( $n = 8$ ) (Moholy-Nagy 2008:Table 4.11). The pegs, also all made of marine shell (Moholy-Nagy 2008: Table 4.08), were similarly only recovered from general excavation ( $n = 2$ ) and minor burials ( $n = 3$ ). Rosettes and pegs that were recovered from minor burials were dated among the latest periods represented in this sample, specifically during the end of the Late Classic and the Terminal Classic (Moholy-Nagy 2008:45). The material, recovery contexts, and possibly even the small size of rosettes and pegs suggest they must have been worn by well-to-do commoners. The pegs—thinner still than the shafts of L-shaped objects—required minimal earlobe stretching.

### *Earspools*

At Tikal, earspools seem to be the most problematic ear ornament to identify and type. They are seldom recovered whole, making it difficult to estimate a general size range. Furthermore, most of them are recovered singly from general excavations. One pair of earspools, which were identified tentatively, were nonetheless recognized as ear ornaments because they paired. The earspools of Tikal also appear very similar to the “annular ornaments” documented at Tikal, which are comparable in material, style, and size. Many of these ornaments, which were all without a pair, were recovered from a problematic deposit (PD. 74). These

were not included in Moholy-Nagy's analysis of earspools, although she does note that three fragments constituting an apparent pair are probably earspools (Moholy-Nagy 2008:Figure 216).

The objects that Moholy-Nagy (2008) classified as Earspools ( $n=9$ ) (Figure 17d) were further specified as Variety D (Figure 17f) or Variety P (Figure 17e). Variety D ("direct") earspools ( $n=3$ ) were named for their direct rims, which is to say they were not flared but straight and cylindrical. They were made of unslipped ceramic. Variety P ("polished") earspools ( $n=3$ ) were named for their polished gray slips and were closed on one end. The closed ends were decorated with incisions and punctations full of red pigment (Moholy-Nagy 2008:45). The three remaining earspools included one made of obsidian from an unknown source, one made of El Chayal obsidian, and one plainware ceramic earspool with traces of blue pigment.

All three Variety P earspools were recovered from general excavation (Moholy-Nagy 2008:Table 4.11–12). Moholy-Nagy (2008:45) suggests that Variety P earspools may be a good chronological marker for the Early Late Preclassic period. The Variety D earspools were more problematic chronologically, because only one was recovered from a datable context. The one that could be dated was from a Late Classic minor burial; the other two, which paired, were surface finds. The unspecified earspools were similarly problematic. One obsidian earspool may have come from an Early Classic problematic deposit with human remains (PD. 111), but the other two were from general excavations. One of these two dated to the Classic period, but the date on the other could not be specified (see Figure 18).

#### *Miniature flares and plaques*

Miniature flares and plaques are not directly inserted into the ear but constitute parts of ornamental assemblages, including not only ear ornament assemblages but also headbands and other costume elements. Although they are not strictly ear ornaments, miniature flares (Figure 17i) and plaques (Figure 17j) constituted the most well-represented category related to ear ornaments. Together, they totaled 86, with 85 of them made of jade and one made of spondylus (Moholy-Nagy 2008:46). Although they were in use throughout the site's occupation, most of them dated to the Late Classic period ( $n=77$ ), with 67 dating specifically to the end of the Late Classic period (Moholy-Nagy 2008:Table 4.12). Miniature flares and plaques were overwhelmingly recovered from contexts that included human remains—namely, chamber burials ( $n=68$ ), minor burials ( $n=3$ ), and crypt burials ( $n=1$ ) (Moholy-Nagy 2008:Table 4.11). The rest were recovered from temple or shrine structure caches ( $n=12$ ), or—more rarely—general excavation ( $n=2$ ) (Moholy-Nagy 2008:Table 4.11).

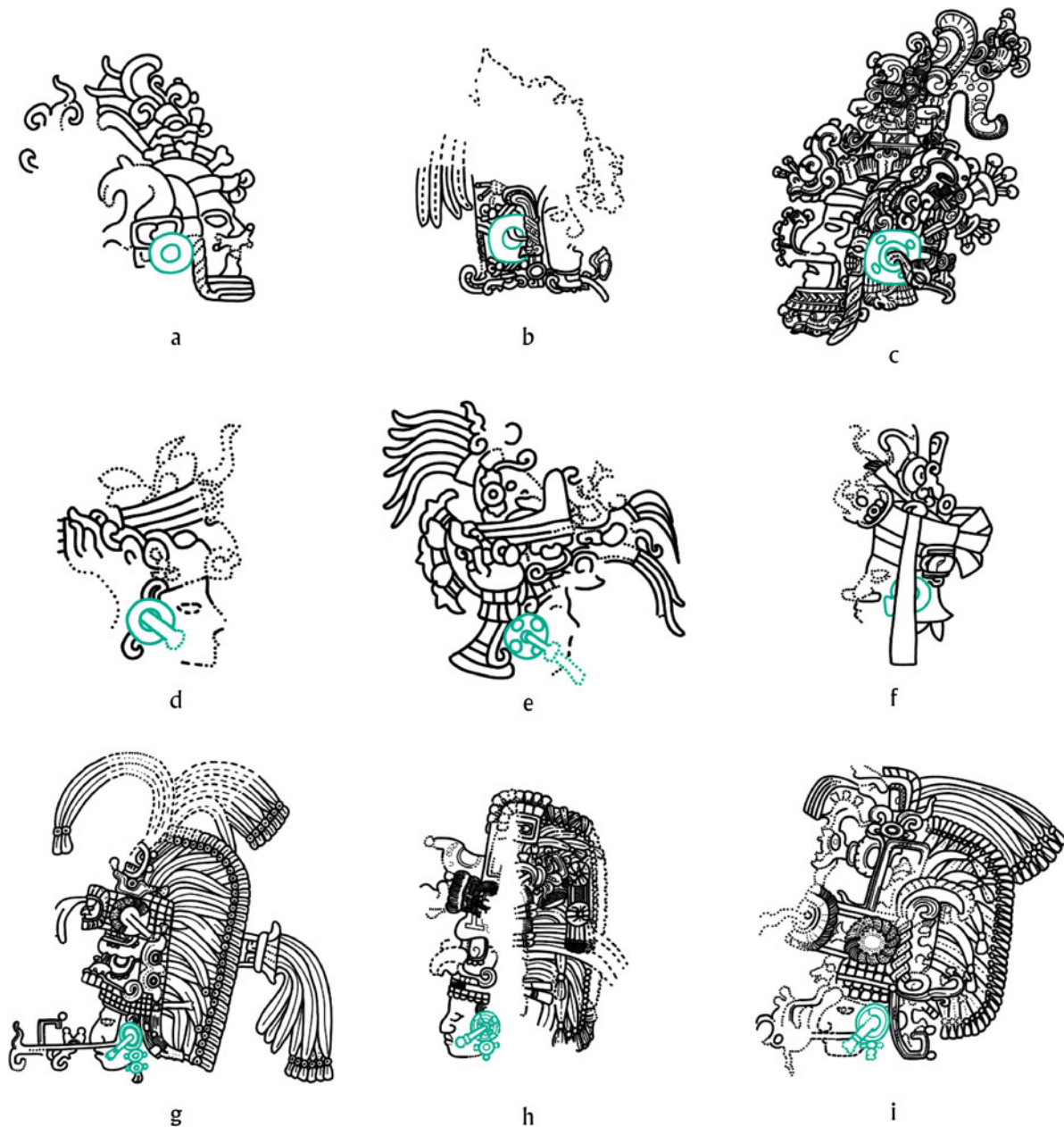
Most of these objects came from two specific contexts: the diadems from Burial 196 and Burial 77. The 12-piece diadem from Burial 196 was composed of miniature plaques, and the 36-piece diadem from Burial 77 was composed primarily of miniature flares. In this way, miniature flares and plaques function much like beads.

Even if they are not ear ornaments per se, miniature flares often do appear in ear ornaments, especially as inlays or counterweights (as noted in the discussion about L-shaped objects). Again, the proliferation of these types in somewhat standardized forms across various sites in the Late Classic period suggests a certain level of fungibility. That they can then be strung into other assemblages makes them both portable and wearable in a way that must have befitted the wealthiest elites.

#### **Discussion**

The Tikal data reflect that the size and complexity of ear ornaments was linked to class status. The largest and most elaborate ear ornaments found at Tikal were also those of the rarest materials, and the combined expression of these appears to have been tightly controlled. This corresponds with monumental imagery at the site, which depicts rulers wearing large earflares throughout the site's occupation (see Figure 19). Later periods do not show discernible differences in earflare size, suggesting that large-diameter earflares never went out of style. Instead, Early Classic monuments show large but simple earflares (e.g., Stela 29, A.D. 292; Stela 1, A.D. 395–475; Stela 31, A.D. 445; and Stela 2, A.D. 464–544; see Jones and Satterthwaite 1982). Large earflares with simple bar and bead assemblages come into style at the end of the Early Classic period (e.g., Stela 13, A.D. 445–525; Stela 9, A.D. 475; Stela 7, A.D. 495; and Stela 15, A.D. 495; see Jones and Satterthwaite 1982). These bar and bead assemblages remained popular into the beginning of the Late Classic period, whereas stelae from the end of the Late Classic period begin depicting more complicated assemblages, including still more beads and small flares (e.g., Temple II Lintel 2, A.D. 671–791; Temple I Lintel 2, A.D. 695; Temple I Lintel 3, A.D. 695; Stela 16, A.D. 711; and Stela 22, A.D. 771; see Jones and Satterthwaite 1982).

The pattern evident from depictive and material data is one that suggests that accumulation and abundance were integral to elite presentation. Preoccupation with abundance and the appearance of this abundance on the body are clearly seen on stelae. The strings of large earflares shown as kingly appurtenances on Tikal Stelae 1, 2, and 31—all from the Early Classic period—make clear that wearing wealth for others to witness had long been an elite prerogative. Indeed, the blue clay beads found at Piedras Negras (Coe 1959:Figure 58) raise questions about whether outwardly projecting the semblance of jade wealth remained a necessary component of elite dress even when such wealth was lacking. With time, miniaturized versions of earflares emblemized what earflares had come to represent over time. They would have been smaller units of wealth, probably accessible to merchants or other members of an emerging middle class—the prime economic context for the introduction of increasingly standardized currency. That said, the small ear ornaments of less valuable material from minor burials remind us that ear ornaments in and of themselves were not exclusive. Indeed, it is unusual for individuals to be shown in representational media without adorned ears unless they



**Figure 19.** Ear ornament styles at Tikal over time. Figures a–c are from the first half of the Early Classic period, Figures d–f are from the second half of the Early Classic period, and Figures g–i are from the Late Classic period: (a) detail from Tikal Stela 29, drawn after William Coe (Jones and Satterthwaite 1982:Figure 49); (b) detail from Tikal Stela 1, drawn after William Coe (Jones and Satterthwaite 1982:Figure 1); (c) detail from Tikal Stela 31, drawn after William Coe (Jones and Satterthwaite 1982:Figure 51); (d) detail from Tikal Stela 13, drawn after William Coe (Jones and Satterthwaite 1982:Figure 19); (e) detail from Tikal Stela 9, drawn after William Coe (Jones and Satterthwaite 1982:Figure 13); (f) detail from Tikal Stela 7, drawn after William Coe (Jones and Satterthwaite 1982:Figure 11); (g) detail from Tikal Stela 16, drawn after William Coe (Jones and Satterthwaite 1982:Figure 22); (h) detail from Tikal Temple II Lintel 2, drawn after William Coe (Jones and Satterthwaite 1982: Figure 71); (i) detail from Tikal Stela 22, drawn after William Coe (Jones and Satterthwaite 1982:Figure 33).

are captives. This is almost certainly because ear ornamentation was fundamental to dress, regardless of class status.

### Conclusion

The jade earflare—both in form and in material—is a symbol of many of those things held sacred to ancient Mayas, like

breath and the cosmic center. They likely also represent access to and from supernatural realms (Taube 2010), as well as the privileged extent of elite sensibility (Houston et al. 2006:156). Taken together with their portability, physical durability, and fungibility, jade earflares served as tokens of value par excellence. Despite being the dominant ear ornaments recovered archaeologically, jade earflares were



probably not as common as those made of less durable and more inexpensive materials, such as clay or possibly wood, which must have been widely worn. If the visual corpus is to be taken at face value, ear ornaments were not exclusive forms. Indeed, their ubiquity is vital to understanding the symbolic import of these objects and their multidimensional capacity to represent value.

This study has focused on interpreting ear ornament data at Tikal, the detailed nature of which has provided tight controls on chronology, material, size, and context. Visual evidence, ethnohistory, ethnography, and theoretical frameworks based in dress and value have informed these interpretations. Given that the argument of this article is grounded in the way ear ornament types have changed at Tikal, one of the benefits of this work has been a clarification of what exactly those types are. This may be of use to scholars producing typological studies or reports of ear ornaments. Although there has been an attempt here to include comparative data from other sites, including other site imagery, this study could be expanded and improved through working with physical collections from a variety of sites. A problem with using data from Tikal to understand ancient Maya ear ornaments more generally is that jade is somewhat overrepresented at Tikal, and not all large centers had access to such great amounts of it. An analysis that includes a deeper look into sites with fewer examples of jade would add much to the bigger picture of ear ornamentation. Tracking the emergence of miniature flares across sites might also produce relevant results, especially because many sites have examples of miniature flares that are not made of jade but shell. The reproduction of this form in mediums other than jade may have to do with attempts to assign a standardized symbol of exchange to fungible units of differential value.

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