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Research Article

Hats and titles: Maya courtier dress and hierarchy in the late Classic Maya court

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Abstract

The Maya used dress to help them structure social interaction. Taking a behavioral chain and practice approach, I define dress elements of male courtiers and how they were combined into outfits during the daily practices of dressing and attending court. I identify two groups of headgear, Standard and Special, among courtiers on vases showing historical interaction among humans. Each vase is considered commemorative and must communicate to an audience. I identified six Standard hat types that were widespread in the Maya Lowlands. The distribution implies a basic set of recognizable roles that provided the political-religious structure of the typical Maya court, perhaps as early as the Late Preclassic period. Four of the hat types are connected to glyphic titles. Each titleholder's position in the vase's visual space implies a hierarchy of roles. The results support my hypothesis that dress does identify social roles in the Maya court.

Resumen

Los mayas usaban el vestido para ayudarlos a estructurar la interacción social. Tomando una cadena de comportamiento y un enfoque de práctica, defino los elementos de vestimenta de los cortesanos masculinos y cómo se combinaron en trajes durante las prácticas diarias de vestirse y asistir a la corte. Identifico dos grupos de sombrerería, estándar y especial, entre cortesanos en jarrones que muestran la interacción histórica entre los humanos. Cada jarrón se considera conmemorativo y debe comunicarse a una audiencia. Identifiqué seis tipos de sombreros estándar que estaban muy extendidos en las tierras bajas mayas. La distribución implica un conjunto básico de roles reconocibles que proporcionaron la estructura político-religiosa de la corte maya típica, tal vez ya en el Preclásico Tardío. Cuatro de los tipos de sombreros están conectados a títulos glíficos. La posición de cada titular en el espacio visual del jarrón es una jerarquía de roles. Los resultados apoyan mi hipótesis de que la vestimenta identifica los roles sociales revelados en la corte maya.

Keywords: Lowland Maya; glyph titles; dress; hierarchy; commemoration; polychrome vases

Many societies use dress to signal different social identities. Several overall studies of Maya dress have tried to connect dress to social identities, especially after identifying glyphic titles, but have produced few specific suggestions tied to how they dressed. The research reported here presents a model of the relationship among certain Maya titles and elements of dress, specifically headgear.

The Late Classic Maya polities varied in size, but most were governed by a hereditary nobility led by a sacred ruler—a *k'uhul ajaw*, or Holy Lord. It is likely that a Maya court contained nobles and other important people who helped manage the polity. Epigraphers have identified many titles, and Mayanists infer that those with titles

played some role administering their polity and consider them as part of the Maya court (Inomata 2001; Jackson 2009). How similar the Classic courts were to the ethnohistorical administrative systems of Yucatan and the Highlands is unknown. As we will see, if my model is correct, those with certain titles appear often in court scenes, and we should consider them as members of the Maya court.

Scholars have addressed titles, specifically exploring their relationship to the structure of the Mayan court (Coe and Kerr 1998; Houston and Inomata 2009:168–176; Jackson 2013; Jackson and Stuart 2001; Zender 2004). So far, epigraphers have identified two groups of titles for court personnel. Seated titles are those for individuals such as rulers who undergo a ceremony, called a "seating" (Houston and Inomata 2009; Jackson 2013; Stuart 1996), and are formally invested in their title. The second group consists of those for which we have no evidence for such seating.

The formally seated titles most often addressed are *aj k'uhuun*, banded bird (see Bíró et al. 2020 for recent translation), *sajal*, *ti'sakhuun*, and *yajaw k'ahk'* (Figure 1). The second group, without "seating" evidence, includes titles such as *lakam* (Houston and Inomata 2009; Stuart 1996) and *bahte'* (Houston 2008), or those associated with scribes (*tz'ihb*) or "wise one" (*itz'at*) (Stuart 1987, 1989). These could be occupations (Bíró 2011:292). The *anahb* title is undeciphered (Jackson 2013:66, n.1) and was "connected to courtly service in ways not yet understood" (Houston 2018:151). The term *ba* (head) was applied to both groups of titles; but those of the second group (such as *baah pakal*, "head shield") were achieved or appointed roles (see Graña-Behrens et al. 2012). However, some titles of the second group, such as *lakam*, may have been inherited in local lineages (Tsukamoto and Esparza 2015:39).

We are beginning to understand how people with seated titles received their titles and what they did in the court.

For example, at Palenque, the banded bird titles were inherited within a lineage associated with the royal lineage (Stuart 2005b). *Sajal* and *aj k'uhuun* can also be inherited. At Copan, however, each new ruler appointed their own *ajk'uhuun* (Jackson 2013:27–28)—at least at the end of the Late Classic period. They probably included members of the royal family as well as nonroyal nobles.

We have limited knowledge of the roles titled individuals played in the political-religious organization of the court and polity. Several studies tried to identify a title's function in society by translating and unpacking the meaning of the Maya words. Jackson (2013) traced the available life histories of title holders. More general approaches to the Maya court include, most notably, the two-volume work by Inomata and Houston (2001a, 2001b). Other studies have discussed the court and its nobles from a comparative perspective and summarized what was known about them and their behavior (Houston and Inomata 2009; Jackson 2009).
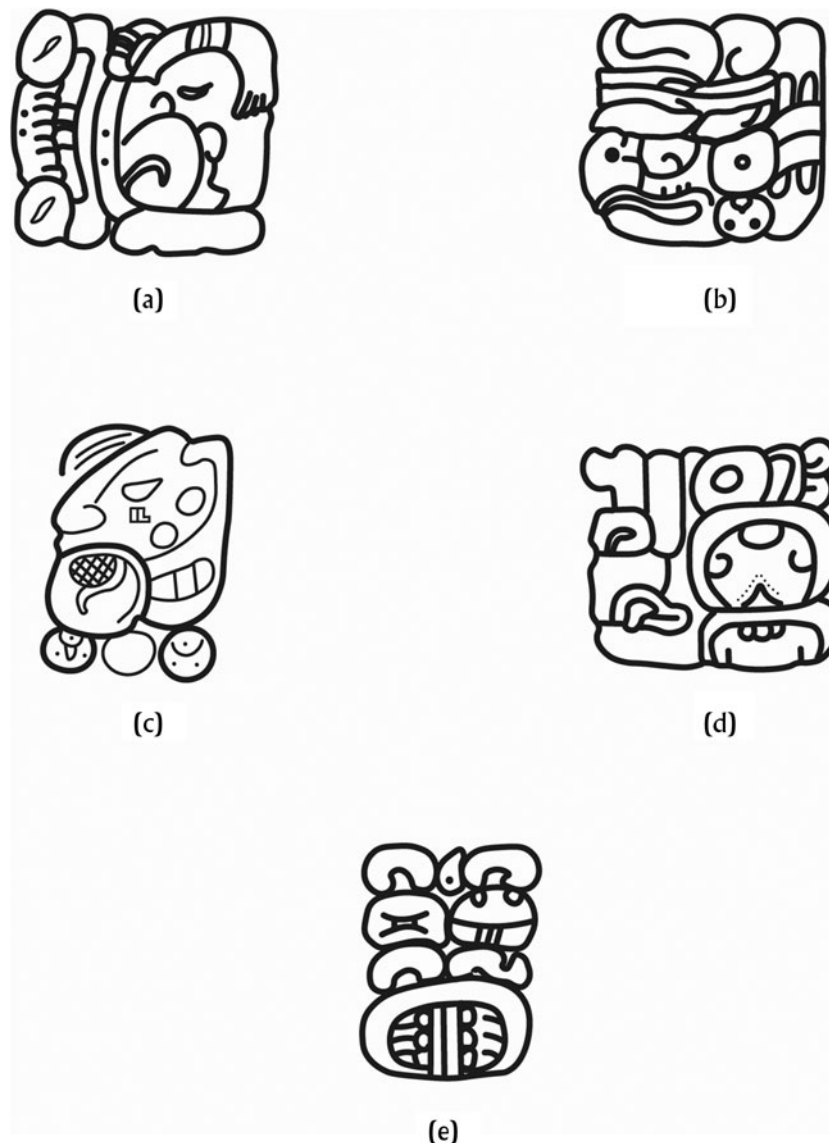
Figure 1. Maya seated titles: (a) *ajk'uhuun*; (b) banded bird; (c) *sajal*; (d) *ti'sakhuun*; (e) *yajaw k'ahk'*. Drawing by and courtesy of Péter Bíró.

Although the Maya in the Late Classic period often tagged individuals with their titles in both sculptural and ceramic media, they did not do it consistently. If we could identify titled positions by dress, it could help us understand more about the relationships among the different titles and the workings of the Late Classic Maya court.

In this article, after discussing methods and dress, I present a model of how the Late Classic Maya used certain headgear to signal their titles, and then I suggest that they used embellishments to signal other social markers, probably events and activities. I identify two groups of headgear: Standard and Special. Headgear in the Standard group have a specific standardized construction process and form. I call these "hats" to distinguish them from the Special headgear. The Special group consists of a wide variety of forms and construction processes, little of which is regularized. Then, I show that Standard hats are found throughout the Maya Lowlands, except in a few areas with limited pictorial evidence. I show that four titles can be linked to Standard hats. Using social space on the vases, I identify a hierarchy among the different titles by the frequency of their relative positions in the narrative scenes on vases. As discussed below, the model does not account for all examples because we do not understand all the contexts that are depicted, or all the rules associated with dress.

Methods

I use scenes that I and others consider to be depictions of historical narratives. However, although narrative scenes depict events, they are not photographs, and they likely depict an idealized representation of what court life should look like (Jackson 2009:73; Reents-Budet 2001:223).

Previous approaches have not focused on the study of nonroyal, nonritual dress, despite the various attempts to identify status and rank and social positions (Clarkson 1978, 1979; Taylor 1983; Tremain 2017). Most combined all media (except Tremain, who used just ceramics), which lumped ritual dress with everything else. Browder's (1991) descriptive inventory used just sculpture. Parmington's work (2003) used only sculpture and only ritual settings to identify clothing specific to *sajalob*. He concluded he could not differentiate between the clothing of rulers and sajals except in terms of elaborateness. Because he was using only ritual contexts, this conclusion is restricted to those ritual contexts. Recent work on Maya dress does not attempt to identify social positions but does include all media and all contexts and time periods (Carter et al. 2020). The primary focus of these recent articles is on royal dress, and they make interesting contributions, especially by examining materials and construction of dress. Attention to nonroyal dress is limited. Nonroyal "simpler headdresses" (headgear) worn by courtiers are treated in one paragraph in the two articles dealing with headgear and headbands (Carter and De Carteret 2020; Rossi et al. 2020).

Previous approaches have also used modern interpretations of scenes to group them into categories and describe the dress in those categories. Starting with interpretive contexts instead of first defining the dress elements can lead to confusion. You cannot extrapolate from what musicians are wearing in one context to other contexts, in which the rules of dress may be different. It is best to identify dress elements and then see if they occur in a pattern that could inform on past behavior.

This article comes from a larger study of Maya male courtier dress in historical scenes (Cheek 2020). Repeatable types of headgear occurred in different combinations in vase scenes. This suggested they had social meaning, as opposed to other clothing elements such as waist clothing that had little regularized differentiation from person to person in a scene. Waist clothing may be a quasi-uniform (Tremain 2017:75–76): an item worn by all in a group representing solidarity of the group with some individual variation—in this case, elite dress. Waist clothing had six basic elements: loin cloth, loin cloth apron (Proskouriakoff 1950), cummerbund (Greene Robertson 1983), hip cloth (Anawalt 1981), belt, and sash. Sometimes, men wear just the loincloth, and the cummerbund and sash seem optional or context specific. The Standard headgear is simpler, with three basic elements: the basic hat form: a cone, net, or tube; a pointed support cloth; and a hat tie (Figure 2). The latter two hold the hat on the head. Headgear in general, especially the Standard hats, often have additions and attachments.

Commemoration and audience

The implications of commemoration and audience, two important concepts in analyzing vases, have not been explored. Both vases and stelae commemorate specific but different important events. Narrative vases do not show contact with supernaturals or regulation of the spiritual welfare of the community, such as stelae (Stuart 1996, 2005a), but rather interactions among the ruling elite. For this reason, they should be intelligible to their target audience: other elites.

Rice (2009:145) has summarized the value of the vases for memory creation through commemoration: "The painted scenes materialize social memories of the political events that created or commemorated the statuses of the recipients, events that often occurred at critical junctions of time." She points out that these vases "were highly visible mechanisms strategically deployed to sustain geopolitical power and identities and reinforce divine status" (Rice 2009:145; see also Halperin and Foias 2010:393–395).

For painted scenes to be effective in "memorializing social memories" they must be understandable to their audience, who are Maya elites both in their own polity and in others. The intended audience places constraints on two groups: the makers (broadly conceived) and the patrons (see Schiffer and Skibo 1997:42–43).

The makers (both the patrons and the artisans) of vases that memorialize events had to know the intended audience to allow that audience to understand a scene. If an audience cannot understand a scene, it becomes a preciosity with a limited meaning. Other elite should be able to identify the social positions and status of the participants in the scenes. Dress and the position of the individuals in a scene can

Figure 2. Vessel K4030 showing Standard hats. From the left: Net Forward hat, Wrapped Backward hat, dog imitator, prime figure with Special Tied Hair and a Flower Circlet, Woman with hair pulled through jade spool, Net hat, Wrapped Forward hat. Note the pointed material supports at the base hat form. Photo by Justin Kerr. Justin Kerr Maya archive, Dumbarton Oaks, Trustees for Harvard University, Washington, DC.

provide this information, and they have done so in many cultures. Standard elements, even if idealized, help increase understanding even if the details are not exactly as they happened, and they enhance the visual performance of the narratives as communication.

I addressed position in social space by dividing the elite participants into the prime (the main figure facing forward, looking to his right), the opposing figure, and the attendees. Dividing the spatial positioning this way fits well with Bíró's (2007) observations on elite interaction and identity. He argues, "Texts are none other than documentation of special roles in rituals, and most elite persons had a well-defined position to each other according to participation and presence" (Bíró 2007:99–100). He proposes that the Late Classic language had five morphemes that "expressed joint action." The morphemes e(b')tej and *kab'i were connected to the main actor performing the action. The secondary actor who may have been performing the same action was connected to the action by *itaa. The meaning of *ila is "people who were passively present witnessing" or just "present." The fifth morpheme is *ichnal, a word that means "witnessing" in the sense of authorization (Houston et al. 2006:173–175). According to Bíró, "Classic Period politics was a constant struggle to be connected to these expressions, or better said to be in a position where status is recognized by participating in rituals and events where position in a text was formed around these five words" (2007:100). Bíró's interpretation implies that "text" of the commemorative vases documents the social position of individuals in the courts who are the intended audience. Jackson makes a similar observation about position reinforcing "messages about roles within the court" (Jackson 2009:73–76; 82).

The intended audience was also critical to the makers, including potters, drafters, and scribes. In many cases,

these were the elites themselves (Inomata 2007; Reents-Budet 1998). Those doing the drawing had to understand the features of court life to depict it accurately. In general, artisans wanted their audience to be impressed with their work as a prestige object that had "technical and aesthetic sophistication" (Reents-Budet 1998:85). For a narrative scene, it had to depict court life well enough for it to be understood as commemorating an event. Vessels that showed uncommon activities would have had a limited audience or would have been unintelligible.

Together, the constraints of the intended purpose of the vase as narrative commemoration and the intended audience made it necessary for a vase to depict at least an idealized version of an event in court life. If the structure of court life differed substantially from polity to polity, vases would not have had much social currency other than being admired as pretty curiosities. Consequently, if court life had a standardized structure of elite culture, it should be identifiable on a vase. Dress, as well as positioning, was key to communicating elite culture.

Dress

Anthropologists today define dress as "an assemblage of body modifications and/or supplements" (Roach-Higgins and Eicher 1992). This includes any visible way of decorating the body, which includes body modifications (scarification, head deformation, hairstyles, body paint) and supplements (sashes, headgear, jewelry). People use clothing and other kinds of bodily adornment to communicate a variety of cultural and social information, such as identities, values, and origins (Kuper 1973:365; Pancake 1991; Schneider 1987:412).

Modern anthropological study views dress as "created through agency, practice and performance" (Hansen 2004:370; see Orr and Looper 2014 for a similar discussion of trends in dress studies). In the past, Maya "clothing received only passing attention" and made clothing "an accessory in symbolic, structural, or semiotic explanations" (Hansen 2004:369–370).

Dress and its elements, as objects, provide information about activities and interactions with people (Schiffer and Miller1999). They can also affect how people interact with them (Robb 2015). Scholars have called people's ability to understand the message of a scene its visual performance (Schiffer 2016:90). Artists could use elements such as sign language (Ancona-ha et al. 2000; Miller 1983), various material objects, and even text to clarify the message.

I consider dress as a compound artifact that interacts with an individual to produce cultural conventions through daily actions. A behavioral chain perspective (Schiffer 2016; Skibo 2009; Skibo and Schiffer 2009) enables us to consider dress items as artifacts rather than just as items that illustrate a particular topic. This approach focuses our attention on how the Maya constructed an ensemble and helps identify the details of production and consumption (Dietler and Herbich 1998:241, 245–248). These are important because the artisans make decisions, called "technical choices," in response to anticipated interactions along the behavioral chain such as visual performance. The decisions lead to an object's formal qualities and contribute to performance characteristics (Skibo and Schiffer 2009:12–15). Objects like dress have visual performance characteristics by which people, such as the intended audience, judge whether they are useful for their purposes. Depictions of standardized dress are important for conveying information about participants and activities in narrative scenes. We should also not forget that standardized dress would create a sense of group identity among the elite and help to reinforce interelite cohesion.

My underlying strategy is to focus on repeated practices (Joyce and Lopiparo 2005) of daily dress. Dressing creates and recreates the role one is to play or the person one intends to be that day. Through repetition, these practices gain symbolic and social meaning that supports the social structure and makes the body the site of social identity (Dant 2004:26; Eicher 1995; Orr and Looper 2014:xxiv; Roach-Higgins and Eicher 1992:5; Wynne-Jones 2007). I concentrate on one segment of the actions involving dress—the acts of dressing and use. If a standard male courtier dress ensemble existed, we should be able to identify a set of practices—the interactions with material culture—that control its construction.

I have found that it is useful to define dress medium by medium—that is, initially focus only on vessels and then look at sculpture, murals, and figurines separately. Each medium has different audiences, and its makers manipulate what it displays to satisfy the communication needs of its audience.

The vases

The greatest amount of material for examining court structure comes from Late Classic vases with narrative scenes because they show court activities with human interaction. Most of these are polychrome, and they came from the digital Kerr Maya Vase Database (https://research.mayavase.com/kerrmaya.html; the Ks before a vase number refers to this database).

Most vases used in this study were looted, and therefore lack provenance. This makes it hard to explore whether Late Classic vases depict local or regional dress. Reents-Budet and Bishop (2003; Reents-Budet et al. 1994; Reents-Budet et al. 2000) attempt to correct this lack through the Maya Ceramics Project. However, not enough of my sample overlaps theirs to address regional issues. I added a few excavated vases with provenance. These include vases from Tikal (Culbert 1993), Tayasal (Chase 1985), Caracol (Chase and Chase 2001), Tamarindito (Valdés 1997), Motul de San José (Halperin and Foias 2010), and the La Ruta Maya Vase (Luin et al. 2015). I also added a few from museum collections. All contained scenes with Standard headgear.

The sample included 138 vases. The vases had 168 scenes with 645 figures and an average of about four figures per scene. Twenty-seven of the interactors on 18 vessels had some unclassifiable hats due to surface damage. I included them in the study given that they are only 4.2 percent of the figures, and their exclusion would have affected the interaction analyses. I was interested in interaction between individuals, so there was usually a prime and an opposing figure, or two groups facing each other. Most activity took place within a court setting.

I chose scenes that had Standard hats and, for the most part, at least two interacting opposing people. Many vases showed court scenes identified by the presence of a bench, throne, steps, or drapes. I excluded vases that contained mythical and warlike (except when warriors were in court) scenes because they may show rules for dress that differed from those for court. Mythical scenes could be identified because they contained well-known supernatural and mythical figures such as Chaks; Gods N, L, Hun and Hunapuh; the Moon Goddess; the Maize God; and figures with god markings, as well as other defined mythological creatures such as deer and snakes. I did not include vases that the Kerr database noted were altered heavily.

I excluded most scenes showing the following:

- Dances, given that participants wore special ritual dress
- Human sacrifice or ball courts
- Individuals that Coggins (1975) called "sitting lords": vessels having solitary individuals in separate panels. Many of these seemed to be supernaturals.

Headgear

I divided the headgear (everything covering the head) into two groups: Special and Standard (Table 1). Special headgear was much more varied and included headdresses, hairstyles, and other minor types of headgear. I use the term "headdress" for headgear that is like the ornate constructions worn on stone monuments by rulers. Prime individuals often wore headdresses. The Standard group consisted of hats; hats were less complex than headdresses, and their

Table 1. Headgear type by hat group and all hats.

Hat Group	Base Hat Type	Abbreviations	N	% of Hat Group	% of All Hats
Special	Military	MIL	6	2.1	0.9
	Cloth	CL	15	5.3	2.3
	Tied Hair	TH	15	5.3	2.3
	Woman	WO	18	6.3	2.8
	Obscured	OB	27	9.5	4.2
	Headdress	HD	32	11.3	5.0
	Other Hair	OH	40	14.1	6.2
	Zoomorphic	ZO	59	20.8	9.1
	Miscellaneous	MC	72	25.4	11.2
Special Total			284	100.0	44.0
Standard	Net Forward	NF	23	6.4	3.6
	Wrapped Upright	WU	47	13.0	7.3
	Tube	TU	58	16.1	9.0
	Net	N	62	17.2	9.6
	Wrapped Backward	WB	62	17.2	9.6
	Wrapped Forward	WF	109	30.2	16.9
Standard Total			361	100.0	56.0
Grand Total			645		100.0

construction was simpler and repetitive. Hats made up 56 percent of individual headgear, and at least one appeared on 73 percent of the scenes. The courtiers wore Standard hats in everyday court life. People in all three vase positions (primes, opposing, and attendees) wore Standard hats. Courtiers wore hats during court events. Headgear also had embellishments: things added to the base hat type.

If there were no difference in headgear in each position, then the two groups of hats should be randomly distributed over the different positions. If they are not distributed this way, then the two variables, the positions, and the hat groups have a relationship that is not random. The chi-square test of independence evaluates the existence of this relationship. Figure 3 shows that a relationship exists between position and headgear worn, and that it is significant. Standard hats were on fewer primes than Special hats, even though Standard hats were more common. Also, standard hats were more abundant—sometimes substantially so—in the other two positions. People sporting embellishments wore Standard hats much more often than did people sporting Special hats (Figure 4). Both analyses are significant statistically and visually, and they showed that the two groups were worn by people playing substantially different roles in court life.
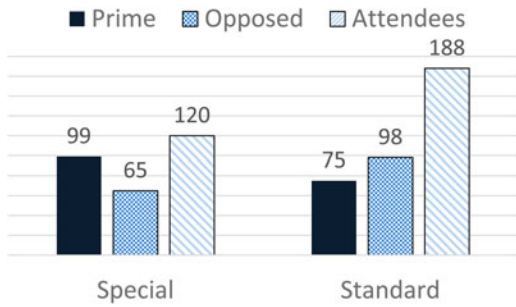
Standard headgear
I identified six hat types that appeared consistently on courtiers (Figure 5). All were constructed as a cone of cloth,

paper, or net (Table 2). The six were Wrapped Upright (WU), Wrapped Backward (WB), Wrapped Forward (WF), Tube (TU), Net (N), and Net Forward (NF).

The wrapped hats (Figures 5d–f) were those Coe called "wrapped napkin hats" (Coe 2001:275–276; Coe and Kerr 1998:106). Various people have referred to these as "wrapped" in a general sense, including Reents-Budet (1994:76, 136), and I use the term because that is the way they are constructed. Spanish commentators reported that Maya priests wore tall conical hats made of bark paper (Zender 2004:105–106) or other material, such as the Wrapped Upright type of hat. Previously, all the Wrapped hats in whichever direction they pointed were considered as one type (see Zender 2004, among others), but this seems unlikely. All varieties can appear together on the same pots, implying that the artist saw them as having different meanings.

I changed what Coe called a "headwrap" to a Tube hat (Figure 5c) because it is more descriptive of its structure. It was the only Standard hat seen on both men and women. The Net Forward hat could just be a variant of the Net, but I consider it a separate type because the wrapped hat types used the cone position to imbue social meaning (Figure 5a–b).

Hair rarely appears except on the TU hat (Figure 5c). The hidden hair in the other hats may have been a sumptuary requirement in court. In contrast, the primes often had exposed hair. A few vases have people with hair coming

Figure 3. Count of vase positions in visual space of Special and Standard headgear groups (chi-square *p*-value: 0.003).
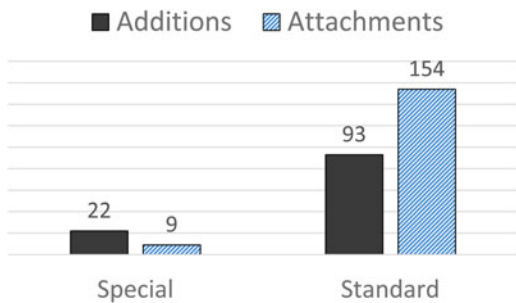
**Figure 4.** Count of embellishments on headgear groups (chi-square *p*-value: 0.001).

out of the back of another Standard hat type (K1563, K1790, K3463, K6984, K7020, K8089, K8469, La Ruta Maya).

Special headgear

Limited space prevents describing the Special headgear in much detail (Table 1). Headdresses were ornate and built on a wooden framework (Schele and Miller 1986:67). When warriors, carrying weapons, appeared in court, they wore headgear like that identified by Hellmuth (1996) as military headgear. Zoomorphic headgear included various kinds of animals and birds plus composite creatures. The cloth category includes various unique creations, such as turbans or complex head wraps. Women's headgear, except in one case of a Standard hat, consisted of hairstyles. The obscure category included headgear that was unidentifiable because of deterioration of the painting. Anything other than the two hair categories were placed in the miscellaneous category.

Tied Hair (TH) hair was long and not enclosed in a hat. Instead, it was tied with a series of cloth bands. It projected over the forehead of the individual and was only worn by primes. It is possible that a ruler wore it like this when he was impersonating Chahk, whose hair is often shown this way.

Other Hair (OH) types are all other hairstyles besides TH. I noted only one OH like those at Palenque. A lock of hair was pulled through a jade flower or disk on the forehead (K787, K1445, K5858). On vases, only prime individuals are shown with this style. Greene Robertson (1985:Type S10)
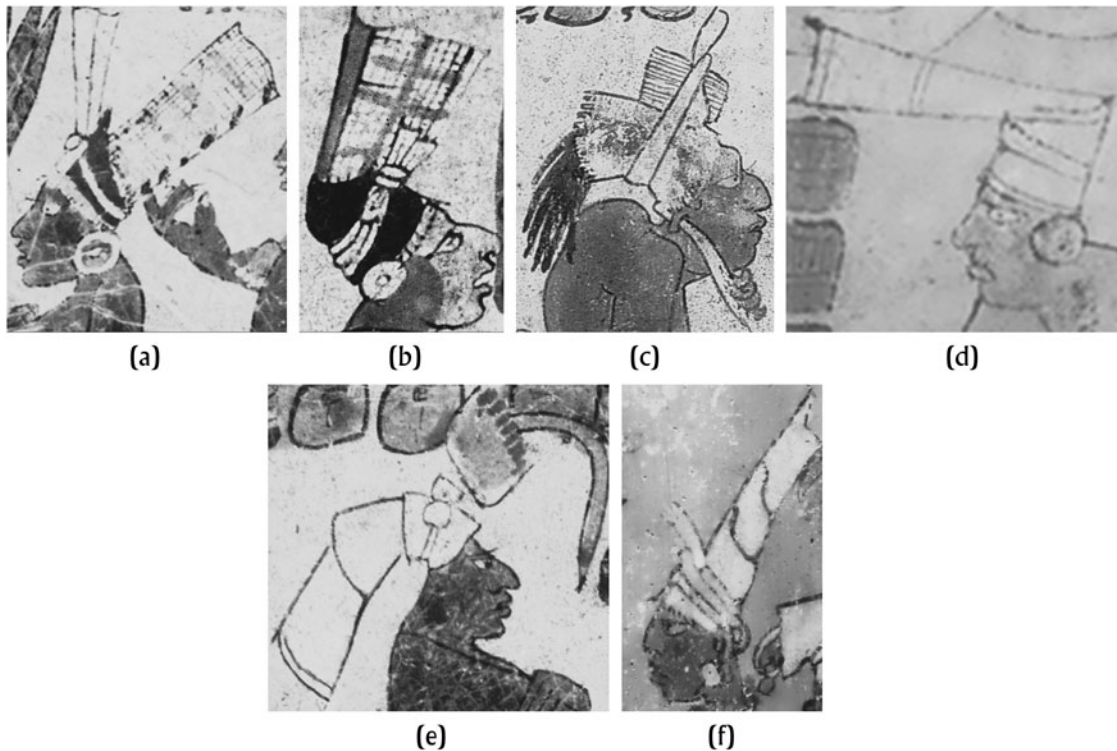
Figure 5. Standard hat types: (a) Net hat K4030; (b) Net Forward hat K7999; (c) Tube hat K1453; (d) Wrapped Forward hat K2732; (e) Wrapped Backward hat 8818; (f) Wrapped Upright hat K5738. Photo by Justin Kerr. Justin Kerr Maya archive, Dumbarton Oaks, Trustees for Harvard University, Washington, DC.

Table 2. Attributes of Standard hats.

Type	Base	Direction	Material	Support[4]	Tie[5]	Hair
Wrapped Upright	Wrapped cone	Upright	Paper or stiffened cloth[2]	Yes	Yes	Enclosed
Wrapped Backward	Wrapped cone	Backward	Paper or stiffened cloth	Yes	Yes	Enclosed
Wrapped Forward[1]	Wrapped cone	Forward	Paper or stiffened cloth	Yes	Yes	Enclosed
Tube	Rectangular cloth wrapped around head	Short: hugs the head; long: hangs down back	Fringed cloth: uncertain if cloth ends are overlapped or fastened	No	Yes	Projecting from rear
Net	Stiffened net	Backward	Stiffened cloth string joined by a dark strip[3]	Yes	Yes	Enclosed
Net Forward	Stiffened net	Forward	Stiffened cloth string joined by a dark strip	Yes	Yes	Enclosed

[1]A variation, often seen on dwarves, has a short vertical section before a sharp forward bend.
[2]Stiffened cloth-and-clay mask at Aguateca suggests that cloth could have been used (Beaubien 2002).
[3]Some versions are drawn as short with red net without the dark strip. Others had painted fret decorations.
[4]Strip of material with a peak that ties around the base hat that helps support the direction in which the base points.
[5]Cloth that ties the support and base to the head. It is often longer than necessary and usually on the side of the head.

assumed from contexts that this style was restricted to the royal family (for a discussion of hairstyles and color, see Greene Robertson 1985 and Miller 2018).

Embellishments

Embellishments included additions and attachments (Figure 6). Neither class can be addressed fully because of space limitations. Like the basic headgear types, they appear in different frequencies on Special and Standard hats (Figure 4). They are important because they affect the performance characteristics of the basic headgear types. The two additions, a Flower Circlet (FC) (Figure 6a) and a Spangled Turban (SP) (Figure 6b), do not identify separate Standard or Special hats. They are just added over the basic hat types. It is likely they signal different events a courtier was participating in or overseeing.

The attachments likely indicate that a person has a particular skill or function. They are fastened to the front, rear, or (rarely) to the top of both Standard and Special base hats (Figures 6c–e). The most often discussed attachments are brushes, stick bundles, and hooks.

Areal distribution of Standard hats

I postulate that, despite variation in Maya culture, the Standard hats represent social roles common throughout the Maya area. If they are standard, we should find these hats throughout the Maya Lowlands. If they are throughout the Lowlands, this would challenge the idea that no system of titles existed across that area in the Classic period (Houston and Inomata 2009:171).

To get a clear idea of the geographical extent of Standard hats, I looked at the less mobile media, such as sculpture, murals, and published excavated sherds and vases from known contexts or workshops (Table 3). At least some Standard hats appear at 38 sites found in almost every general part of the Lowlands: north, east, west, and central. This distribution matches that of titles documented by Jackson (2013:Maps 2–4). I did not include the Guatemalan highlands

in this study, thereby excluding several examples. None appeared in northern Belize or Quintana Roo; these areas did not depict court scenes on sculpture.

Most examples date to the Late Classic period. The earliest figure with a Standard hat wears a WF hat from the Early Classic mural at La Sufricaya, dated to A.D. 379 (Tokovinine and Beliaev 2013:180, Figure 7.7). The Uaxactun mural in structure B-13 dates to the same period—the Teotihuacan *entrada* into the Peten (Špoták 2017; Valdés and Fahsen 1995:32). People in the mural wear hats similar in concept to Standard hats. The paint deterioration makes the hats difficult to fit into the Late Classic categories, so I did not list the mural in Table 3. The latest example is Stela 17 from Caracol at A.D. 849 (Martin and Grube 2008).

The presence of Standard hats in these murals supports the idea that standard dress appears in Maya courts as early as the first noted appearance of titles on sculpture at Copan and Tikal (Zender 2004). The Standard hats could be even earlier, with records of early dynasties in the first or second centuries A.D. or even the Late Preclassic period (400 B.C.–A.D. 150), when the "core ideology and symbolism of ajaw kingship" were established (Martin 2020:77).

Others agree that the Late Preclassic sees the "basic patterns of iconographic convention" (Saturno et al. 2005:7; see also Looper 2012; Valdés 1993). The spread of E Groups across the Lowlands in the Middle and Late Preclassic periods "represents the coalescence of formal Maya communities that shared a unified belief system" (Chase and Chase 2017:32). This led to a "cultural standardization" based on religious practices structured by astronomical observations (Chase et al. 2017; Dowd 2017).

An example of this early use of standardized headgear comes from Stela 87 of Tak'alik Ab'aj, dating to the early part of the Late Preclassic period. The head in Glyph A1 (Schieber de Lavarreda et al. 2022:Figure 10a) appears to have a WF hat. The person has a pointed-forward item on his head coming from what could be a support holding the hat on the head.
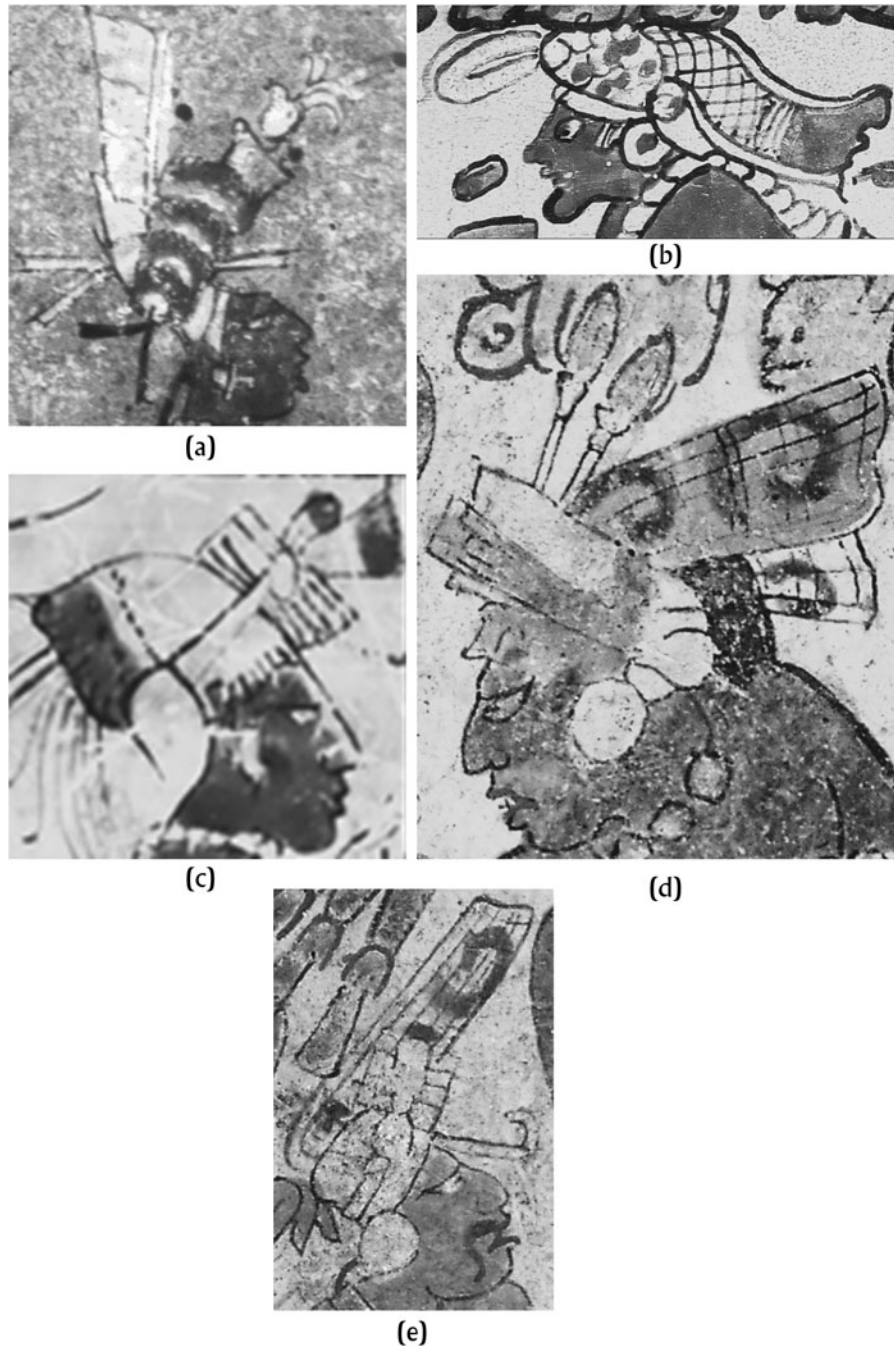
Figure 6. Additions and Attachments : (a) Flower Circlet K8469; (b) Spangled Turban K956; (c) stick bundle K6494; (d) brushes K3009; (e) hook K3009. Photo by Justin Kerr. Justin Kerr Maya archive, Dumbarton Oaks, Trustees for Harvard University, Washington, DC.

Hats and titles

Using data from both sculpture and vases, I associated four of the six Standard hats with glyphic titles (Table 4). Although it is unlikely that all the polities organized themselves in the same ways, the relative ubiquity of the Standard headgear implies that the headgear stands for common social roles. These roles can be interpreted as administrative positions within the Maya royal court. The roles have a hierarchy, as measured by which individuals are primes and which are in inferior positions. Like most models, this model of the connection between hats and titles approximates reality, especially given the scarcity of the data. I expected and found exceptions to my association of titles with specific kinds of headgear.

Only two seated titles appear on ceramic vases in short columns of glyphs tagging individuals. When they appear, titles often cannot be assigned to specific individuals, or they are assigned to individuals who are in dance costumes, as on Ik-style vessels. The *ajk'uhuun* title is the only one found on multiple vessels, but often the person is in a

Table 3. Distribution of hat types by location.

Site	Object	Hat Types	Reference
Champoton	Polychrome vessel	WB	Foncerrada De Molina and Lombardo de Ruiz 1979:109:10
Jaina	K4340	TU	https://research.mayavase.com/kerrmaya_hires.php?vase=4340; Graña-Behrens 2006: Figure 4b
Xcalumkin	Panel 7	WF (possibly WB or WU; unclear because of frontal view)	Corpus of Maya Hieroglyphic Inscriptions
Oxkintok	Stela 9	WF, WU	Graña-Behrens 2006:Figure 14
Tunkuyi	Column in Centro INAH Campeche	WF	Looper 2009:Figure 5.41
Rio Bec	Bench colonettes, Group B, Structure 6N2	WF	Arnauld and Lacadena 2004:Figures 6, 7
Totuguero	Wooden Box	WU	Zender and Bassie 2007
Palenque	Platform of Temple XIX	WU: Portraits A, B, C, H, I, J	Stuart 2005b: WU: Figures 80, 82, 85, 100, 102, 104
Palenque	Platform of Temple XIX	WB: Portraits E, F, G	Stuart 2005b: WB: Figures 92, 96, 98
Palenque	*Bulto* Tablet, Group XVI	WU, WF	Stuart 2005b:Figure 95
Palenque	Pacal's Sarcophagus	TU, W	Greene Robertson 1983
Tonina	Polychrome vessels	SP/N[1]	Becquelin and Baudez 1979:Figures 181–183, 185
Tonina	Figurine	WU	Becquelin and Baudez 1982:Figure 259
Santa Elena	Yaxchilan Lintel 16	WF	Tate 1992:Figure 93
Piedras Negras	Lintel 1	TU	http://research.famsi.org/uploads/montgomery/577/image/JM05700.jpg
Piedras Negras	Stela 9, Front	WF	http://research.famsi.org/uploads/montgomery/hires/jm05290pnst09fr.jpg
Piedras Negras	Stela 40	N	http://research.famsi.org/uploads/montgomery/557/image/JM05530.jpg
La Pasadita	Panel	TU	https://www.metmuseum.org/toah/works-of-art/1979.206.1047/
Laxtunich	Kimbell Panel	TU	<objidref>http://research.famsi.org/uploads/montgomery/638/image/JM01220.jpg</objidref>
Bonampak	Sculptured Stone 1	WB	Schele Drawing Number 6006, http://www.ancientamericas.org/collection/aa010572
Bonampak	Mural	WU, WB, WF, TU	Miller and Brittenham 2013. East wall, white robes
Aguateca	Figurine	WU	Inomata et al. 2002:Figure 9
Dos Pilas	Stela 16	WF	Just 2012:177
Dos Pilas	K1599	SP/WB, WF	MacLeod and Reents-Budet 1994:131
Dos Pilas	61000/DPD103	WB/WU, WF	Foias and Bishop 2007:Figure 8.3b.
Dos Pilas	Panel 2, Museo Principe Panel	TU	Houston 2009:Figure 1
Seibal	Stela 3	WB, TU	http://research.famsi.org/uploads/montgomery/587/image/JM01101.jpg
Seibal	Stela 5	WB	Corpus of Maya Hieroglyphic Inscriptions

(*Continued*)

Table 3. (*Continued.*)

Site	Object	Hat Types	Reference
Cancuen	Panel 3	TU, WF	Demarest et al. 2014:Figure 19
Calakmul	Chiik Nahb Murals	N, NF, SP/N, SP/WF, SP/WB	Carrasco Vargas and Cordeiro Baqueiro 2012; Martin 2012
Nakbé and Mirador Basin	Codex-style Vessels	TU, N, NF, WF, WB, WU	Reents-Budet et al. 2010
El Palmar	K9144	N, TU	Cortés de Brasdefer 1996
Rio Azul	K2914	TU, WF, WB, WU	MacLeod and Reents-Budet 1994:131; Looper and Polyukhovych 2019
La Florida	Stela 1	WB	Graham 1970:Figure 4b
Zapote Bobal (Hix Witz)	K1186	SP/N	Looper and Polyukhovych 2016:18
Motul de San José	K1463	TU	Just 2012:187; Tremain 2017:Figure 3.11
Motul de San José	K3046	WU, WF, N	Reents-Budet et al. 2012:Figure 3.7
Motul de San	Sherds	WB	Halperin and Foias 2010:Figures 2c, 9b
José	Vase sherd	WB, WF	Halperin and Foias 2010:Figure 13
Ixlu	Altar 2	WB	Carter 2014:Figure 4.12
Xultun	Stela 10	WF	Stuart 1993:341, Figure 8
Xultun	Murals of Structure 10K-2	WB, WF	Saturno et al. 2017:Figure 4
Uaxactun	Polychrome sherds	WF, WB, N	Smith 1955:Figure 2n, g, j; 38b1, b3
Tikal	K2698, K7996 to 8003	TU, N, NF, WF	Culbert 1993:Burial 116, 196
Tikal	K3009	WU, SP/N, FC/WU, FC/N	Mundo Perdido
La Sufricaya	Mural 6N, ca. A.D. 379	WF	Tokovinine and Beliaev 2013:180, Figure 7.7
Naranjo	Stela 19 Captive	WB	Corpus of Maya Hieroglyphic Inscriptions
Xmuqlebal Xheton Cave, Cayo District, Belize	Wooden figurine	WB or N	Prufer et al. 2003:Figure 1
Caracol	Altar 10	WF	Beetz and Satterthwaite 1981:Figure 22
Caracol	Altar 12	WF	Grube 1994:Figure 9.7
Caracol	Altar 13	SP/OH(?)	Grube 1994:Figure 9.7
Caracol	Altar 23	WF	Chase et al. 1991:Figure 4
Caracol	Stela 11	WF	Chase and Chase 1987:Figure 71
Caracol	Stela 17	WF	Beetz and Satterthwaite 1981:Figure 16a
Caracol	Graffiti, Str. B20-2nd	WU	Chase and Chase 2001:Figure 4.12
Pusilha	K8089	SP/WF, WF, WB, TU	Wanyerka 2004:34–35; Figure 81; 2009:374
Nim Li Punit	Stela 15 Bench of Str. 1B14	WF, WU	http://research.famsi.org/uploads/montgomery/251/image/nimst15.jpg JM00450
Quirgua	Bench of Str. 1B14	WB or N	Crasborn et al. 2012
Copan	Sherds and tomb vessels	SP/N, WU	Maca 2015:Figure 6.9
Copan	Sherds and tomb vessels	TU	Longyear 1952:Figures 22a, 118 h, h', e''
Copan	Sherds and tomb vessels	N	Longyear 1952:Figures 20b, 118e, 74b
Copan	Sherds and tomb vessels	WB	Longyear 1952:Figures 118g
Copan	Sherds and tomb vessels	SP/WU or SP/WF	Longyear 1952:Figure 74b; Willey et al. 1994: Figures 82, 92

[1]Hats with SP or FC followed by a slash and the base hat type indicate that the base hat has either the Spangled Turban (SP) or Flower Circlet (FC) added to it.

Table 4. Association of hat types with titles.

Standard Hat	Title
Wrapped Upright	Banded Bird
Wrapped Backward	*yajaw k'ahk'*
Wrapped Forward	*sajal*
Tube	*aj k'uhuun*
Net	Unknown
Net Forward	Unknown

dance costume. *Sajal* appears on ceramics only twice: on a sherd from Tonina (Jackson 2013:154), and on a mythohistorical vase from Uaxactun (Carter 2015) with no Standard hats.

Titles found in the Primary Standard Sequence are seldom linked to depicted individuals. Titles are more common on stone sculpture, and some are assigned to individuals with Standard hats.

Two complicating exceptions exist in associating titles with hats. The first is a person wearing a Standard hat who has only a nonseated title attached to them. In this case, it is likely that people with seated titles had specific duties assigned, and the nonseated title is the more appropriate title for that context. For example, people with both WF and N hats have the "*baahtz'am*" title.

The second is an individual with a different seated title than I assigned to that hat. These, whether on ceramics or other media, may be because people had two or more titles. We do not know under what conditions a person would wear which hat, so there could be situations in which the hat would not match the title. And we do not know why a maker would depict one over the other. This problem does not have a solution yet and limits our ability to apply the proposed model without care. However, I do not think that isolated contradictions are enough to say that no pattern exists in how dress relates to social categories.

One good example of the same person wearing multiple headgear types in different contexts is Yok Ch'ich' Tal of Palenque. He appears in three types of headgear with different titles on Temple XIX and on the *bulto* stone from Temple XIV. On the latter, an eroded glyph block may have his name and profile (Spencer 2007:209; Stuart 2005b:125); his Wrapped Forward hat would point to a *sajal* title. On the Temple XIX bench and the stone slab, he was wearing an unusual headgear addition covered with short feathers associated with Tlaloc. On the bench, it was an addition to a WB Standard hat, and he was labeled as a *yajaw k'ahk'*. On the stone slab, he added two goggle eyes, characteristic of Tlaloc, and his hair projected from the top of the hat, a characteristic of an *ajk'uhuun*, as detailed below. A *yajaw k'ahk'* on an incensario from Group IV at Palenque has a similar headgear, also with two goggle eyes (Stuart 2005b:124). The portrait faces front, so we cannot see if this headgear was worn over a hat. Another example of this same combination of a WB with the short-feather headgear occurs on a *sajal* performing a ceremony on Altar 4 at El Cayo (see

Jackson 2013:41–44). A partially destroyed title glyph could suggest the El Cayo *sajal* held the *yajaw k'ahk'* position as well (Zender 2004:321). The hair projecting from the back of the WB is tied, which is not typical of an *ajk'uhuun*. Given that the short-feather type appears on individuals with three different titles, it is likely a sign of an activity or event.

This seeming contradiction shows how the Maya used material culture to signal different aspects of a person's social identity. They did this by adding embellishments to the person's base Standard hat in the form of additions and attachments. It also shows the complexity of signaling multiple roles and the need for a model to start exploring them.

Wrapped Upright hat

People wearing the upright wrapped hats (WU) (Figure 5f) were not labeled on vases, but such hats were labeled on the platform of Temple XIX at Palenque (Stuart 2005b) (Table 5). Three people (Portraits A–C) were on the right of the ruler K'inich Ahkal Mo' Nahb, who was receiving the *sak huun* of rulership from the first of these (Stuart 2005b:131–136). They had the banded bird title. Three other individuals on the west side of this platform also had WU hats (Portraits H, I, and J) but without attendant titles. That there are six people with banded bird hats implies multiple individuals in the banded bird role. This suggests that the people with this title were members of a priesthood at Palenque or were banded birds from nearby communities, such as on the Tabasco Plain (Straight 2007:187–188; Stuart 2005b:131). It also suggests ranking within the title, or that every community had their own banded bird.

This idea that the banded bird position exist in other communities is supported by a carved box from Tortuguero, from the same region as Palenque. The box shows an individual with both the banded bird title and the WU hat. The box was made for an individual who was seated as a banded bird after the accession of the local ruler (Zender and Bassie 2007).

A conflicting example exists for identifying the WU hat with the banded bird title. Two examples of figures with WU hats are labeled as *ti'sakhuun*. The Palenque *bulto* stone is one instance with the title associated with a wearer of a Wrapped Upright hat (Stuart 2005b:124). The other is the figure on the left side of Piedras Negras Stela 11, the ruler's right side (Zender 2004:324). He wore what could be a Spangled Turban on a Wrapped Upright hat, although the shape is not clear. I did not include it in my data as an example of a WU hat because it is smaller and of different shape.

Wrapped Backward hat

The Wrapped Backward hat (WB) (Figure 5e) was not labeled on a vase and rarely labeled on sculpture, but it was on the same Palenque platform in Temple XIX (Table 5). The three figures to the left of the ruler had WB hats. The person closest to the ruler was Yok Ch'ich' Tal (Portrait E), labeled *yajaw*

Table 5. Standard hats on people labeled with titles on other media.

Title	Hat	Site	Location	Source
Banded Bird	WU	Palenque	Platform, Temple XIX Portraits A–C	Stuart 2005b
Banded Bird	WU	Tortuguero	Wooden Box	Zender and Bassie 2007
Yajaw k'ahk'	WB	Palenque	Platform Temple XIX Portraits E–G	Stuart 2005b
Yajaw k'ahk'	WB	Palenque	Sculpted Pier, Temple XIX	Stuart 2005b
Sajal	WF	Yaxchilan	Lintel 16, *sajal* of Santa Elena	Tate 1992:Figure 92
Sajal	WF	Cancuen	Panel 3	Demarest et al. 2014:Figure 19
Sajal	WF	Palenque	Pacal's sarcophagus, Yuk Mak'abajte. Lid: north border, west portrait; south border, west portrait. Support: northeast.	Zender 2004:Figure 109
Ajk'uhuun	TU	Palenque	Pacal's sarcophagus, Chak Chan. Lid: north border, central; south border, central. Support: northwest and southwest.	Zender 2004:Figure 110
Ajk'uhuun	TU	Palenque	Pacal's sarcophagus, Jewel Bird. Lid: north border, east; south border, east. Support: southeast.	Zender 2004:Figure 111
Ajk'uhuun	TU	Palenque	Sculpted Pier, Temple XIX	Stuart 2005b:9
Ajk'uhuun	TU	Piedras Negras	Lintel 1	research.famsi.org/montgomery, Drawing JM05700
Ajk'uhuun	TU	Yaxchilan	Stela 10, river side, Lady Ix Skull (Lady Uh Jolom Chanil)	Tate 1992:232, Figure 13
Ajk'uhuun	TU	Cancuen	Panel 3	Demarest et al. 2014:Figure 19

k'ahk'. The two behind him with the same hat certainly bore the same title, although they lacked the short-feather addition over the WB hat, suggesting a ranking among those with the title. Stuart suggests that the title, translated as "Fire Lord," was used for elite individuals from the royal lineage at Palenque (Stuart 2005b:119). Analysis of this title has suggested that it could be a military title or one associated with priestly duties, such as taking care of the drum major headdress (Stuart 2005b:20), which sat between the *yajaw k'ahk'* and the ruler. As mentioned above, it might be associated with Tlaloc. The case of Yok Ch'ich' Tal and the *sajal* from El Cayo were discussed earlier.

Wrapped Forward hat

The Wrapped Forward hat (WF) was the most common type in my vase sample (Figure 5d), and I associate it with the *sajal* title (Table 5). The title appears on sculpture but only twice on ceramics, as mentioned earlier. A few people on sculpture were labeled *sajals* when not dressed for rituals at Palenque, Yaxchilan, Cancuen, and Xcalumkin. One from La Mar Stela 1 is provisional because the photo (Maler 1901:Plate 36:2) is not clear, but a section of the headgear is bent forward. Mayanists in general believe *sajals* to be rulers of smaller subsidiary sites and subordinate to the rulers of major sites. But they also had roles at major sites (Jackson 2013).

People wearing this most frequent hat (17 percent of all hats) had many duties on vase scenes. They were the main musicians; they held mirrors for the ruler, helped him dress, and painted his body. They held spears and banners and presented tribute. A common motif was a figure behind

the throne looking to the right, away from the ruler, as if in a guard position. Three of the six times this motif appeared, the person wore the WF hat (K1790, K5450, K6341). On the Xultun mural, the person behind the throne wearing the WF hat had the *baah tz'am* ("head throne") title. These duties could all represent honorific positions for trusted nonroyals or distant relatives.

Some minor sites had records of the same family holding the *sajal* title for five centuries (Bíró 2011; Jackson 2013), and Stuart (1993:330) has suggested there was little real difference between *ajaw* and *sajal*. For example, the *baah ajaw* wearing a WF hat was not labeled as a *sajal* on K2914. Altogether, observations suggest "a *sajal* may inherit his status but acquired its essence, its *sajal*-ship (*sajal-il*), only through rituals of enthronement" (Houston and Stuart 2001:61). The elite who were not seated but played administrative or religious roles may have comprised a group of nobles who accepted minor honorific duties in the court. They also may have earned other nonseated titles, such as *anahb* and *baah tz'am*. In summary, it might be that unseated *sajals* were a broad class of nobles eligible to take part in court activities, from whom rulers could select office holders. Whether that would have been by kinship or achievement is unknown.

Tube hat

The Tube hat (TU), often called a head wrap, has hair, often matted or braided, that is visible from the top (Figure 5c). I associated this hat with the *ajk'uhuun* title. The hair is an important element because this is the only hat that consistently showed exposed hair. Coe first connected the hat

with the title on Lintel 1 from Piedras Negras and the stone vase K4340 (Coe and Kerr 1998:92–94). Other sculpture examples with the title and the hat exist on six items (Table 5). Some had the hat and the hair, whereas others only had the hair. Long hair is shown sometimes for an *ajk'uhuun*, even when the individual is wearing ritual headgear. This is the case with Ahkmo', a leader of Site R (La Pasadita), who performed in ritual clothing with his ruler, Bird Jaguar IV, on Lintel 4 at Yaxchilan (Jackson 2013:Figure 16). His appearances on two other monuments (Site R Lintels 1 and 3) do not show him with hair while wearing ritual headgear.

Wearers of these hats were a common presence in court, making up 16.1 percent of the those with Standard hats and 9 percent of all hats. Twelve people (including two women) not in ritual or warrior dress had been tagged on vessels as *ajk'uhuun* (Table 6). Of these, six figures had the TU hat and the hair, and two had the Spangled Turban over projecting hair. Three other vessels did not have all or any TU standard elements: K8469, La Fundación La Ruta de Maya vase, and El Tamarindito vase. On K8469, it is not clear to which person the title belongs. For this vase, it does not matter, given that neither person fits. On the La Ruta vase, it also is not clear to whom the title belongs, but a WB and WF hat are candidates. On the El Señor vase, one title is located closest to a person with a WU hat; but people with an N and TU are nearby. The El Tamarindito vase applies the title to two figures: one who has a WB hat, and another whose hat is too

eroded to identify. It is possible that glyphic tags were assigned to the wrong person by me or by the vase analyst.

The functions assigned to the *aj k'uhuun* have been varied, depending on how the word is translated. One of more frequent suggestions is that they functioned as scribes, although the ones most used now are "he who guards" or "he who venerates" (Jackson 2013:13; Jackson and Stuart 2001). The scribe function was based on the attachment called the "stick bundle" under the tie on their hat and the occasional presence of a hook (Coe and Kerr 1998: 91–96). However, all the Standard hat types sometimes bore the hat attachments suggested as scribal. Another suggestion beside scribe is that the individual was the chief tribute collector (Jackson and Stuart 2001:225; Reents-Budet 2006:112). This idea may become more likely if the stick bundles often found on *ajk'uhuun* hats are tally sticks for recording tribute (see Freidel et al. 2017; Tokovinine 2020).

This hat type has all three of the common attachments: the stick bundle, the hook, and brushes often associated with scribes. Some attachments were more frequent on one hat type or another. In the Standard hats, 32 percent of the stick bundles occurred on TU hats, but the other 68 percent were divided among the five other hat types with from 2 to 7 percent each. Consequently, it is not likely that this is the only hat that signals the wearer is a scribe, if that is what it signals.

Table 6. Standard hats on people labeled as *ajk'uhuun* on vessels.

Vase Designation	Position from Left Edge	Hat Type	Reference
K0764	#1 woman	TU hat and hair	Coe and Kerr 1998:99
K3054	#4 woman	TU hat and hair	Tokovinine and Zender 2012:58
K1463	#4	TU hat and hair	Tokovinine and Zender 2012:58
K1728	#3	TU hat and hair	Jackson 2013:Appendix; Jackson and Stuart 2001:Figure 12; Lacadena 1996:Figures 1 and 2; Tokovinine and Zender 2012:58–59
K4340	#2, onyx bowl	TU hat and hair	Jackson 2013:Appendix; Lacadena 1996:Figures 1 and 2
K9144	#3 on bench	TU hat and hair	Similar to El Señor del Petén
El Señor del Petén	#4 on floor by throne	TU hat and hair	Jackson 2013:Appendix; Cortés de Brasdefer 1996:Figure 5-3b; Jackson and Stuart 2001:Figure 2
K2695, hair	#4	SP over hair	Jackson 2013:Appendix; Lacadena 1996:Figure 2; Martin and Grube 2008:51
K8469, hair	#3	SP over hair	Just 2012:81–83, Le Fort 2003:91
Ajk'uhuun titles with questionable or different hats			
K8469	#2	WF	Le Fort 2003:91
La Fundación La Ruta de Maya	#2 or #3	WB or WF; latter with hair visible	Luin et al. 2015
El Tamarindito	#1	WB, no hair visible	Tokovinine and Zender 2012:56–57
El Tamarindito	#4	Uncertain, eroded not observable	Tokovinine and Zender 2012:56–57

Net hats: Net Backward and Net Forward

Human figures wearing the Net (N) hat (Figures 4 a–b) have not been labeled on vases with any recognizable title. The only example on sculpture I have found is Piedras Negras Stela 40. On this monument, the ruler was performing a ritual for an ancestor. It also did not appear on the various scenes on panels and lintels with nonroyal nobles.

The nonquotidian social and political contexts in the Bonampak murals had all the hat types but no identifiable Net. In contrast, Net hats were plentiful on the Chiik Nahb market-scene mural, with their wearers taking a meal or participating in the market (Carrasco Vargas and Corderiro Baqueiro 2012; Carrasco Vargas et al. 2009; García-Barrios and Carrasco Vargas 2008; Martin 2012). Perhaps this difference in scene type means that wearers of this hat were not required participants in sculptured scenes of a ritual or political nature. Rulers did not wear them with their ritual garb on stelae either (except Piedras Negras Stela 40). Two vases showed groups of people with either Spangled Turbans (K5611) or Flower Circlets (K3009) on N hats. On the latter vase (K3009), a group of men, playing music, preparing for dancing, and dancing, suggested that the N hats were part of certain group ritual activities.

Unlike the other hats, N hats had two variants. An artistic variant showed a red or white crosshatched pattern for this hat rather than the mesh of the other vases (K625, K680, K764). The other variant, scroll decorations (Figure 6d–e) was seen on vases K3009, K2800, K5609, K7021; the Lord of the Jaguar Pelt Throne vase; and Piedras Negras Stela 40. The scrolls appear painted on stiffened nets. A third possible variant, or even a different hat, is the bag hat of Itzamnaah on K1196, which does not have the dark strip the net hats do.

Mayanists have linked Net hats to scribal activity, mostly because Itzamnaah is the patron of writing and sometimes wears the similar bag hat. The data from Copan's 9N-82 structure (Fash 1989:69) (the façade sculpture and the *pauahtun*/Itzamnaah sculpture in the fill) links Itzamnaah to scribal activity. But no *ajk'uhuun*, like the one who lived in the structure with this evidence, wore a Net hat.

We have no evidence that people wearing Net hats were the only scribes, although scribal duties were important in their occupations. I know of only one example of a human-interaction scene that showed a person with a brush and codex, and that person wore a WB hat, not an N one (Halperin and Foias 2010:Figure 2c). Even in mythological scenes, only one vase (K4010) had a figure with an N hat holding a brush over a paint pot. However, "The Court of God D" vessel shows the link of literacy and numeracy to Net hats. There, Itzamnaah's animal assistants wore Net hats and held a codex and a "printout" with Maya numbers on it.

Finally, we have no evidence that the wearers of Net hats are seated, as some other titles are. Their frequency on vases, their wide distribution, and their association with supernaturals means their activities were important but, in some way, distinct from the kind of positions represented by the other Standard hats. But although their role was important, they never appear in sculpture in public ceremonial contexts, and only once did a narrative scene show an active scribe on pottery (Halperin and Foias 2010:Figure 2c).

Hierarchy

A hierarchical system places people or things in ranks and controls, to some degree, their actions in different contexts (Chase and Chase 2011). It generally assumes a greater expression of power with an increase in rank. A heterarchical system has "elements either unranked relative to other elements or possesses the potential for being ranked in a number of ways" (Crumley 1987:158). This results in counterpoised power that can create a dialectic between hierarchical and heterarchical elements (Chase and Chase 2011:5; Crumley 1987:164).

Existing Maya communities have overlapping hierarchies based on age, civil-religious organizations, rituals, and wealth (for example, Mayén de Castellanos 1988 and Rosaldo 1968, among many others). We do not know the structure of the Classic Maya ranking system. A court could have heterarchical elements as well as hierarchical ones, with the expressed relationship between two people changing based on the interaction context.

The depictions on vases materialize ranking at a particular instance. Within visual space, artistic conventions are used to show who has the most importance. In the Maya vase painting, the main figure—here called the prime—is elevated over others, is larger, and faces his right, but his body is seen in a frontal view (Loughmiller-Newman 2008; Palka 2002). This positioning indicates a hierarchical relation with a prime figure facing his right and an opposing one, who is usually seen in profile, with various attendees also in profile behind the two confronting individuals.

In three cases, where the interactors wear Standard hats, the hierarchical relationship of prime and opposing person is reversed, suggesting that some other factor besides power is at work. A ritual hierarchy could require a reversal of roles. An event could be overseen by groups that are not formally ranked. A person may move to a higher position, even if temporarily, by taking up a specific role and be required to be a prime in that context.

The vases show two separate sets of hierarchical relationships: those found on vases with primes wearing Special headgear, and those where they wear Standard hats. Those wearing Special headgear were opposed by Standard hats about 1.5 times more than Special ones. Those primes with Standard hats were almost three times more likely to be opposed by those in Standard hats than in Special headgear.

Special hats were probably worn for specific ceremonies, and their variety made it difficult to say much more about them. The people who wore the Headdresses, Tied Hair, Other Hair, and Miscellaneous appear in a primary position over all the wearers of Standard types, with few exceptions. Tied Hair was not over WB, and Miscellaneous was not over N.

Wearers of Tied Hair were never in the second position. Tied Hair was most often over wearers of Standard hats (N, TU, WF, and WU) and hats with Spangled Turbans and Flower Circlets. In the Special group, Tied Hair was over

only Zoomorphic hats. Tied Hair headgear was therefore mainly associated with Standard hats and may have represented a ruler imitating a supernatural attended by members of the court. For example, on vases with mythical scenes, Chahk is known for having a tied hank of hair projecting over his forehead.

The hierarchy of the Standard hats was more straightforward (Figure 7). The basic situation had those wearing the WU hat (banded bird) over those wearing other types of Standard hats. The ranking was WU, TU (*ajk'uhuun*), WB (*yajaw k'ahk'*), WF (*sajal*), and N and NF hats. The last two (N, NF) reversed position: WF was over N once and over NF five times, whereas N was over WF twice. Primes also wore the same hat as those opposing them but infrequently (17 percent). Even fewer (12 percent) of attendees had the same hat as their prime, suggesting that the events depicted were not held for those of the same rank or position. There was only one exception to this basic hierarchy of Standard hats: the Denver vessel (Tremain 2017:Figure 5.39) has a prime with a Flower Circlet added to an N hat. It seems unlikely that an N hat would be worn at an accession scene. This vessel may have been "restored," as others have suggested. However, it has people with WU hats on the left and a WB hat on the right like the Palenque Temple XIX bench.

Those wearing the WU hat are not subsidiary to any other person wearing a Standard hat. It is likely they are subsidiary only to rulers, who wear different Special hats depending on the event. Also interesting was that those
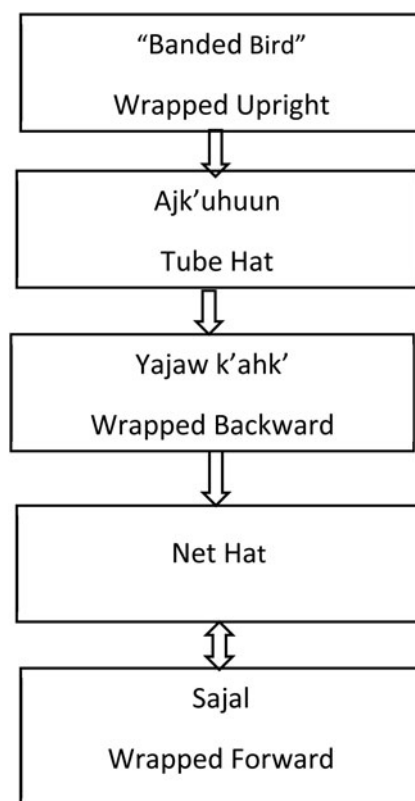

Figure 7. Hierarchical relations among figures wearing standard hats.

with WU hats in the attendees' group were mostly behind the ruler (11 of 14), and six of those were standing. These can be interpreted as people supporting the prime figure.

Two exceptions showed ranking within the banded bird position. In K2732, one banded bird was kneeling to another, and both wore Flower Circlets. The other was the Denver vase, discussed above. Here, two WU were kneeling to a prime with an SP/N hat while he sat on a throne cushion. All are wearing Flower Circlets.

The hierarchical position of the banded bird category is clear from the vases. However, the relative position of the *yajaw k'ahk'* (WB), the *ajk'uhuun* (TU), and the *sajal* (WF) conflicts with the Palenque data, which is the only textual source of ranked relationships among these titles. The information from Palenque both supports and refutes the organization in Figure 7. At Palenque, a *sajal* possessed an *ajk'uhuun*, which placed the *sajal* in the superior position (Jackson 2013:34; Zender 2004:298). The Palenque texts also showed a *ti'sakhuun* (Bíró 2011:109; Zender 2004:307) possessing *sajalob*, who were then made *yajaw k'ahk'*. That suggests the latter were more important than the former, given that the *sajalob* were then raised to a new seated title. It also suggested the *sajal* might be an underlying group of noble but nonroyal elites who were called on for significant duties depending on the circumstances. Houston and Stuart (2001:61) surmised the *sajal* were born into their title but only seated in it when they moved into specific duties. Courtiers often held both *ajk'uhuun* and *yajaw k'ahk'* titles; this suggests they may have been equivalent in some ways. For example, we know they both accompanied rulers into battle (Zender 2004:309) and were occasionally captured and displayed as captives (Zender 2004:405–407). However, I have observed that individuals often received the *ajk'uhuun* title after the *yajaw k'ahk* title, suggesting that it was more important.

In summary, the number of cases where the hierarchical position on vases were reversed is small, suggesting that it was the Maya "normal" ranking system unless contexts changed. The sequence in Figure 7 conflicts in some ways with the equally limited Palenque textual data. A possible explanation of the reversals is that the events overseen had a ritual hierarchy that required a person with one title to take precedence over the other, a possible example of heterarchical groups or events. Most of these reversals occurred in events hosted by bearers of either Flower Circlets or Spangled Turbans, who oversaw specific events. The partially different Palenque data may suggest that different preference or merit systems existed in different polities. Additional data are needed to resolve these issues.

Headgear analysis

The hierarchical distribution of the courtier titles in my analysis is based on who was below another person in the scenes. Some numbers are small, but a look at the percentage of distinct kinds of hats on courtiers in different positions on the vases supports the simple hierarchical analysis (Figure 8). The distribution of the headgear shows
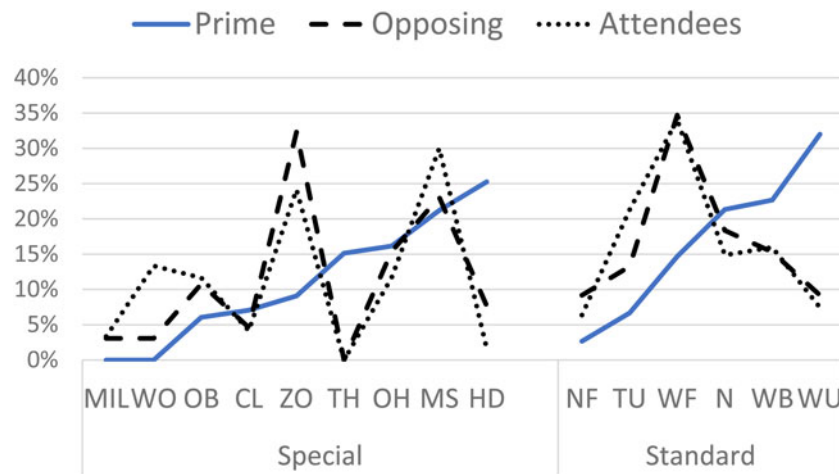
Figure 8. Percent of hat types by headgear group and visual position. They are sorted by the frequency of the prime hats. (Standard hats: chi-Square *p*-values: <0.0001; Special hats: chi-square was not valid since more than half the expected cells were less than 5).

that some were worn more by primes. In general, they were not evenly distributed in the three spatial positions, as shown by a simple chi-square test. This was especially true of the Standard hats.

In the Standard hats, the WU hat (banded bird), at 13 percent of the Standard hats (Table 1), is on the most primes (32 percent). The WF hat (*sajal*) is the most common hat, at 30 percent of Standard hats, but only 15 percent of primes wore this hat. The WB (*yajaw k'ahk'*) and N hats are on about 21 percent of the primes, slightly more than their 17.2 overall percent (Table 1) in Standard hats. The TU (*ajk'uhuun*) hats are on only 7 percent of the primes, in contrast to their 16.1 percent of Standard hats. NF hats were about three times less frequent on primes than their overall pre-sensce in the Standard hat sample. The most direct support of the hierarchy analysis is the position of those wearing banded bird hats. These hats are most frequent on primes,

and those wearing *sajal* hats are mostly in opposing and attendee positions.

The major differences in which titled person wore which addition implies that some titles were more connected to some events than others (Figure 9). The banded-bird role wore the Flower Circlet the most, emphasizing the importance of whatever this event was. It is important to note that the *ajk'uhuun* wore this addition the least. The two lesser positions in the hierarchy, wearing WF and N hats, had larger roles in ceremonies where Spangled Turbans were worn. Neither *ajku'huun* (WF) nor banded bird (WU) wore many Spangled Turbans.

Discussion

This analysis of dress focused on one medium—vases with humans interacting in court scenes—and it evaluated how
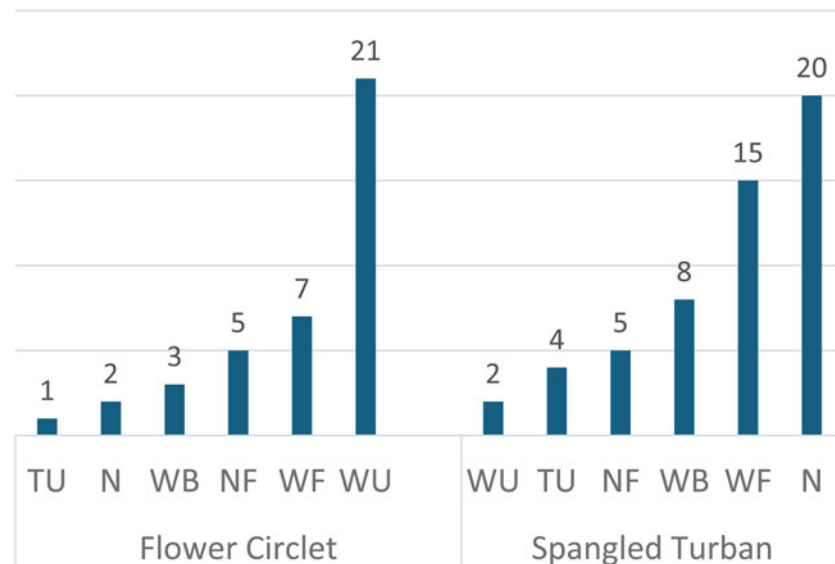
Figure 9. Count of standard hats with different additions, sorted from least to most within each addition.

the producers' view of their audience affected their goals. Although an audience can interpret messages, both verbal and visual, in ways different from producers' expectations, we need to consider what the producers were trying to convey. Given that the scenes show interaction among humans, we can interpret them as commemorations of important human events, but different from those on stelae. Most Mayanists accept that vases were part of displays increasing the political profile of a polity and its ruling elite within the polity. If this is so, they should have enough information for their selected audience to understand the scene with or without text. One way to do this is to have the participants dressed as they normally would be, showing their specific positions in the court. The audience for these scenes would include royals and elite nonroyals in their home polity and in other polities (Jackson 2009:73).

My review of the headgear data has three implications. First, four of the six Standard hats could be connected to titles: the Wrapped Upright hat with banded bird, the Tube hat with *aj k'uhuun*, the Wrapped Backward hat with *yajaw k'ahk'*, and the Wrapped Forward hat with *sajal*. Although a few contradictions exist, the model has enough support to use it to explore relationships and functions of the court. The Net hats have not been tied to titles yet, but they are related in some way to things scribes did. They could belong to individuals with nonseated titles such as "wise one" (*itz'at*). This work supplements that of Jackson (2013) and Tokovinine and Zender (2012), who examined individual names in texts to understand who was doing what in Maya courts. We can now look at people without associated texts and see how they act in court settings.

Second, Standard headgear and the associated titles were widespread, but Standard hats were missing in some eastern areas. This artistic, and possibly political, trend did not spread there until late, if at all. Perhaps that area had no tradition of narrative sculpture or pottery. Caracol, for example, did not have narrative sculpture until after A.D. 800.

Third is that the Standard headgear tradition dates to at least the Early Classic period. Earlier visual data, such as the San Bartolo murals, show only headdresses and the royal headband. These do not provide early examples of position-signifying hats; but it seems that by the Early Classic period, at least some of these positions were in existence. Earlier evidence, such as the glyph from Tak'alik Ab'aj in the Late Preclassic period, is suggestive but preliminary.

It is still not clear, despite Zender's (2004) extensive investigation and arguments, what dress or accouterments identified priests, and I cannot address that issue in detail here. However, current evidence suggests that different religious specialists have different headgear. It is likely that at least the Wrapped Upright hat, as Zender (2004) concluded, was worn by a priest. At Palenque, the highest-level priest who comes from a specific lineage wears this hat. The Wrapped Backward hat is also probably a religious specialist's hat based on its association with military and religious activity at Palenque. The evidence does not connect the Net and Net Forward hats to a title, seated or unseated, and it is unclear if they were a kind of religious specialist. I doubt

that either the Wrapped Forward (*sajal*) or the Tube (*ajk'u-huun*) hats mark a religious specialist. The *sajalob*'s role in ritual dances, as documented by Parmington (2003), does not mean they are priests. Dances were part of rituals that many kinds of people took part in, as shown by the Bonampak mural and various Ik and other vases. The *ajk'u-huunob* also danced, often in supporting roles as musicians, but again, this does not make them priests.

Four common Standard hats signaled four titled persons. Their wearers functioned as the political-religious administration for the ruler, as others have suggested. Various scholars have commented that this group had flexible duties, partially because of a lack of data. However, this study supplies a distinct perspective, especially on how courtiers were chosen. I suggest that the courtiers were drawn from an ajaw or sajal class that had an inherited basis. Within this base group, some positions were inherited through lineages, such as the banded bird and the *yajaw k'ahk'*, if Palenque is representative of other polities. Some *sajalob* in charge of communities also were in inherited positions. A ruler chose an *ajk'uhuun* on personal relationship, or skills, or political expediency, as inferred from Copan's example. The choice could come from people in inherited or achieved positions, given that the *ajk'uhuun* title was usually the last of the series of titles individuals received. This suggests that courtiers could move through a series of positions and that not all seated positions were inherited (Jackson 2013). We know the least about those wearing Net hats because texts never mentioned them.

The distribution of brushes to hats suggests that almost any courtier could be literate. Numeracy also seems widespread if stick bundles are tally sticks. Most of those with seated titles can host or oversee activities represented by the Flower Circlet and Spangled Turban. With this view of the relation of dress to titles, we can develop new understandings of courtier behavior. The murals at Chiik Nahb, for example, have a *sajal* marketing cloth (Garcia Barrios and Carrasco Vargas 2008:Figure 7), expanding our view of who engaged in market behavior.

Conclusions

I had two purposes in the article. The first was to restart a discussion on using dress as artifacts to understand the social structure of the Maya court. We need to look at dress as a material culture complex with the body as a complex artifact that we can study with standard archaeological methods. European scholars have been applying *chaîne opératoire* methods (Lemonnier 1986), like behavioral chains (Schiffer 2016), to dress for some years (Andersson Strand 2012; Harlow and Nosch 2014). Various Mesoamericanists have looked at the material culture of weaving, specifically spindle whorls, but few have looked at how cloth was used to create clothes.

The second purpose was to use dress to examine the structure of the Maya court. My underlying assumption is that patrons and artists wanted vase scenes to be commemorative and understandable. Few links exist between glyphic

titles and activities, so most scholars speculated there was flexibility and variation in which title did what. Most speculations depend on translating the titles, but there may be no connection between the origin of the word and the activities (personal communication, Marc Zender 2020).

With this model, we now have a place to start the analysis of narrative scenes rather than assuming we understand the contexts depicted. We need to look at the material culture in the scenes to see if different members of the court had specific duties. The material culture may help identify the link between title and activities. Another need is to look at other elements of dress, such as jewelry, in relation to hat types and to expand on the initial study of body painting (Nehammer Knub 2014).

In conclusion, I cannot agree with those who say that statuses or social categories were not signaled by Maya dress. Widespread evidence shows that the Maya signaled social categories and, therefore, social relations by dress. My model identifies overlapping sets of dress elements that referred to social position, events, and skills. Their overlap created a perceived complexity in dress that was seen as not understandable, and dress was ignored as a topic in and of itself. However, there was no lack of cultural rules or dispositions to use dress to structure social relations in the Maya court.

Data availability statement. The author will provide copies of the base data to any interested researcher.

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Notes

List of vessels in the study sample.

Kerr Archive

532, 625, 679, 680, 751, 764, 767, 787, 868, 1092, 1151, 1186, 1205, 1210, 1453, 1454, 1549, 1563, 1599, 1643, 1728, 1775, 1790, 2697, 2698, 2699, 2711, 2732, 2780, 2783, 2784, 2800, 2914, 2923, 3008, 3009, 3026, 3046, 3050, 3203, 3460, 3461, 3983, 4030, 4096, 4120, 4169, 4338, 4355, 4606, 4688, 4825, 4959, 5037, 5062, 5085, 5094, 5176, 5233, 5353, 5370, 5388, 5416, 5421, 5445, 5450, 5453, 5456, 5505, 5513, 5611, 5649, 5738, 5850, 5858, 5940, 6059, 6067, 6315, 6316, 6341, 6418, 6437, 6494, 6552, 6610, 6666, 6688, 6812, 6984, 7020, 7021, 7062, 7182, 7183, 7184, 7288, 7690, 7796, 7797, 7996, 7997, 7998, 7999, 8001, 8002, 8003, 8006, 8089, 8123, 8220, 8385, 8386, 8469, 8652, 8746, 8764, 8774, 8790, 8792, 8793, 8818, 8873, 8889, 8926, 9094, 9109, 9135, 9144, 9190, 9290, 5195/6613, 5609/3389.

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Caracol, Building B5 Vase: Chase and Chase 2001:Figure 4.13.
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