

Sky Bands on Hems of Clothing of Women and of Men

Sky Bands on Hems of Men's Clothing in the Murals of Bonampak Sky Bands on Hems of Clothing on Lintels of Yaxchilan



Sky Bands on Hems of Women and of Men's Clothing at Tikal Sky Bands on Hems of Woman on Sculpture from El Peru-Waka'

Iconography of Sky Bands, Part VI

FLAAR Reports FLAAR (USA) and FLAAR Mesoamerica (Guatemala)

> Nicholas Hellmuth October 2024

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Acknowledgements

I sincerely thank Matthew Looper for sending me his entire book, *Gifts of the Moon: Huipil Designs of the ancient Maya*. I learned a lot from seeing his text and the illustrations by Thomas Tolles.

For every author and illustrator where I can find a valid email, I write and ask permission. But most of the material is already available all over the Internet. And it is not realistic to find emails of each author and every illustrator. And I fully understand when some authors are not able to respond or send higher resolution images of their drawings. Many are busy teaching their courses or doing research. That is why FLAAR Reports with our photos and our drawings are available for students and scholars to use without needing to write, because I would be inundated with e-mails to answer. The important aspect is to cite the author and when known cite the illustrator.

It was very courteous for Isabelle Sophia Pincemin Deliberos to respond to my request to both answer my email and also to send two helpful drawings of individuals with decorated clothing hems in the murals of Bonampak.

Introduction to Research on Sky Bands

The present report on Sky Bands on hems of clothing of Late Classic Maya women and of men is one of a FLAAR Reports series on Sky Bands in Maya art:

- Sky Bands on plates, especially a dozen plates photographed by the FLAAR Photo Archive.
- Sky Bands on vases and bowls from photos in the FLAAR Photo Archive.
- Sky Bands on vases and bowls from Kerr rollouts and from Hellmuth rollouts
- Sky Bands on stelae and lintels and architecture (Uxmal and Chichen Itza).
- Sky Bands in stucco and on sculptures at Palenque

We hope to issue these reports by November.

Sky Bands on Hems of Men's Clothing in the Murals of Bonampak





Fig. 1a and b. Bonampak murals, Room 1, Chiapas, Mexico, Uriarte 1998: Figura 4, FH1/71, drawing by Jose Francisco Villasenor.

There are two Sky Bands on the upper part of the Bonampak murals; these are well known. But I am curious whether the Sky Bands on such outfits of Maya in the scenes have previously been noticed or commented on in any study of Sky Bands. Most studies of Maya weaving are on clothing of women, not as often clothing of men. The photo is by Maria Elena Ruiz Gallut (Uriarte 1998: Lamina 7).



Fig. 1,c. Upper Sky Band on a person in Room 1, Bonampak murals. Drawing by Jose Francisco Villasenor.



Fig. 1,d. Lower Sky Band on a person in Room 1, Bonampak murals. Drawing by Jose Francisco Villasenor.

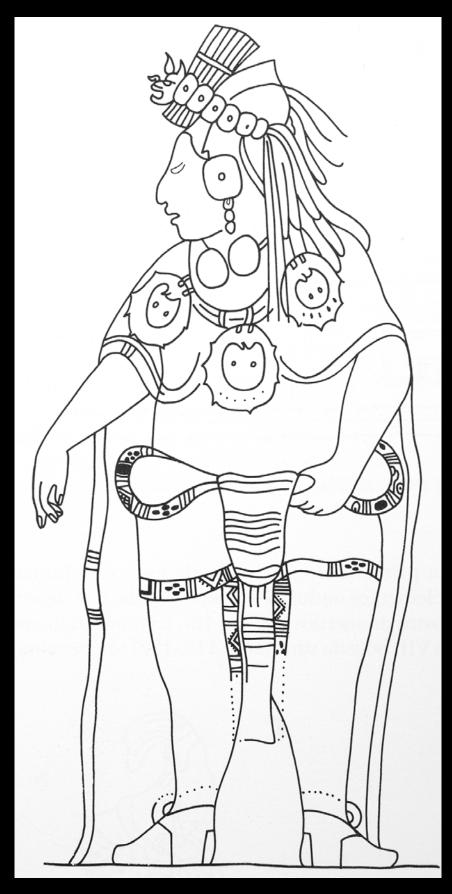


Fig. 2,a. Sky Bands horizontally and vertically on Personaje 13, Bonampak murals, south vault, Registro 2, Room 1. Drawing by Alfonso Arellano Hernández 1998: Figura 30. What would help would be comparable black-and-white drawings of Personajes 1, 3, 4, 7, 8, 9, 12 (so not just nice color photos).

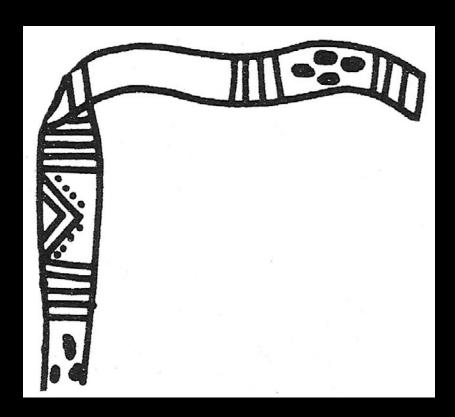


Fig. 2,b. Closeup of one of the segments of the Sky Band on Person #13, Room 1, south vault, Bonampak murals.

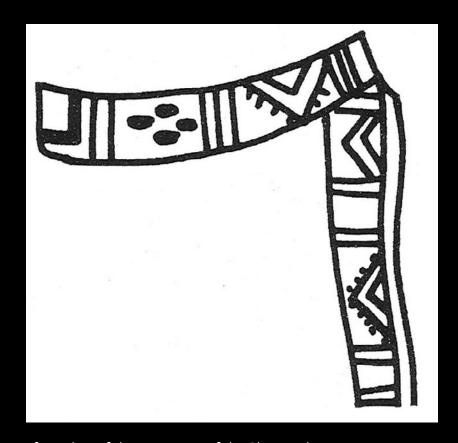


Fig. 2,c. Closeup of another of the segments of the Sky Band on Person #13, Room 1, south vault, Bonampak murals. The four spots motif is not common on stone sculptures or ceramics.

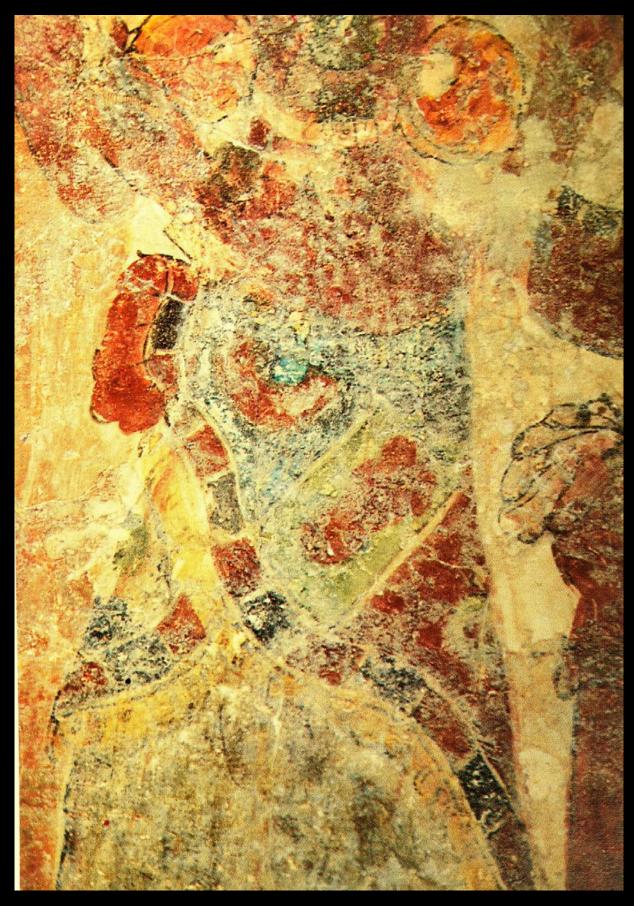


Fig. 3. Uriarte 1998: Lamina 12, Room 1, Registro 2, south vault, Figure 8. Photographer Maria Elena Ruiz Gallut, 1996. Possible Sky Bands on hems of personage 8.

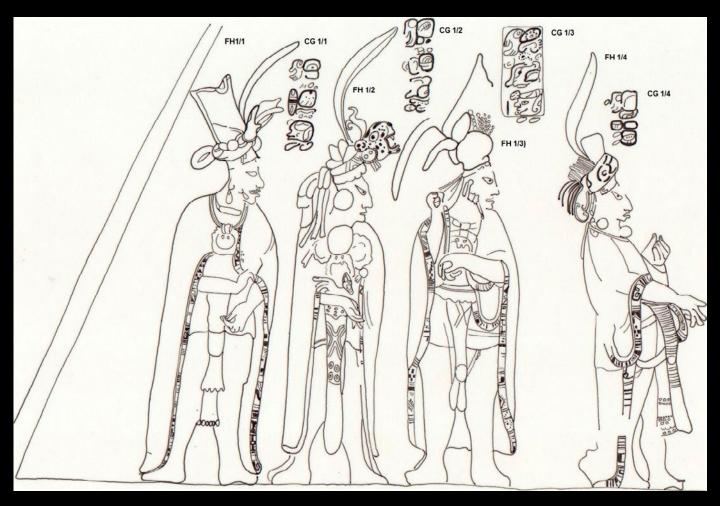


Fig. 4,a. Persons #1, 2, 3, and 4 (Pincemin and Rosas 2014: Fig. 4). This drawing kindly sent to us by Sophia Pincemin. All four of these individuals seem to have Sky Bands on their hems, especially #1, #3, and #4. Sophia Pincemin told me that she did indeed consider that these bands were Sky Bands but she correctly noticed that the ones on hems often have geometric motifs and not the motifs of Sky Bands on stelae, lintels and ceramics. Once we have comparable good-resolution drawings of Figuras 7, 8, 9, 12, 13 and 14 of Cuarto 1, then I would propose a concept of "woven textile variant Sky Band."



Fig. 4,b. To have comparable drawings of personages 7, 8, 9, 12, 13 and 14 would allow rewriting the iconography of textile variant Sky Bands on hems of both men and women in Classic Maya art.

Drawing by Sophia Pincemin kindly sent by her to FLAAR.

Figura 5. FH 1/5 a 1/8, cuarto 1, Bonampak



Fuente: Sophia Pincemin.

Fig. 5. Person 7 has probable Sky Bands. Person 8 has bands but celestial motifs are not yet visible (Pincemin and Rosas 2014: Figura 5). A fresh drawing of Persons 7 and 8 would help.

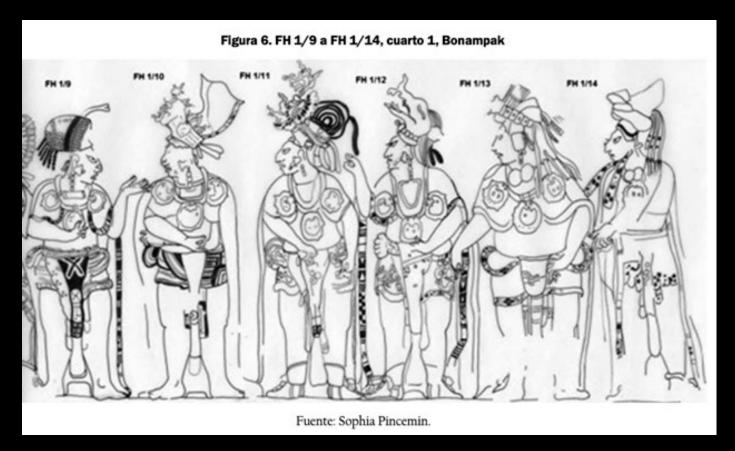


Fig. 6. (Pincemin and Rosas 2014: Figura 6). There are more potential Sky Bands on these hems of Room 1 of the Bonampak murals than at most other Maya sites of Mesoamerica. Have these Sky Bands been pictured and mentioned specifically? Individuals #9, 12, and 13 have long Sky Band-like bands. But of all these individuals (and the ones on the previous two illustrations), so far I have found only Personage 13 shown in good resolution at a helpful size (Hernández 1998: Figura 30). Keep in mind that woven motifs on textiles are often different than carved motifs on stelae and lintels or painted motifs on Sky Bands around Maya plates of Peten.

The large shells on the necklaces and the Sky Band hems are also visible on a throne scene from Tikal Burial 116. Mary Miller has also recognized the Bonampak aspect of this Tikal vase (we show the vase later in the present report).

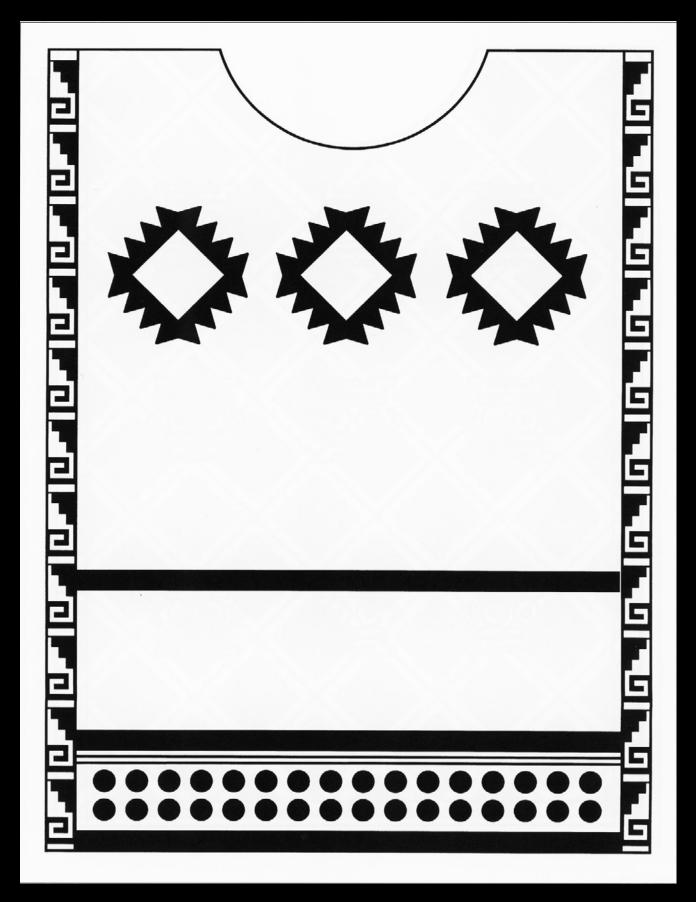


Fig. 7. Since there are so many hems on the Bonampak murals, until I know what room, what wall, I can't comment further. But the stepped fret is a motif found on a few Sky Bands and on other decorations.

Bonampak "Fig. 1-21",

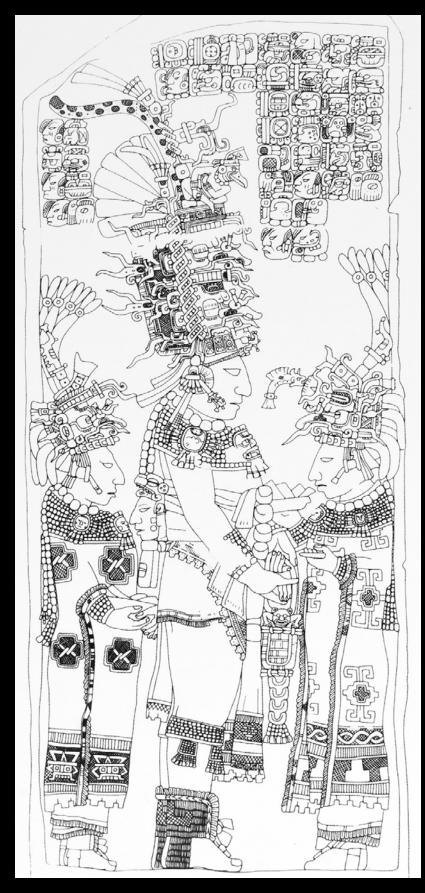


Fig. 8,a. The Sky Bands are on the vertical edges of both women's clothing. Excellent drawing by Peter Mathews. Would help greatly to have higher resolution drawing so the Sky Band motifs can be shown in better detail.



Fig. 8,b. The lower horizontal hems have no visible Sky Band motifs on either the wife (left) or mother (right). But on the vertical hems of the women there are vertical divider spaces for Sky Band motifs.

The actual Sky Bands are vertical. Excellent drawing by Peter Mathews.

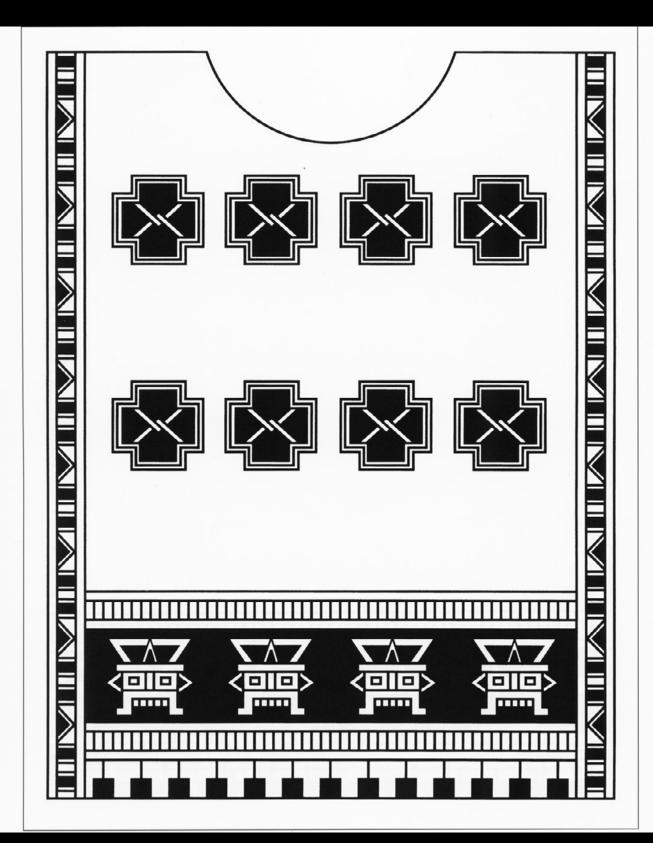


Fig. 8,c. The triangle is potentially a simplified variant of the snake skin pattern. Woman on the left. Bonampak Stela 2, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 28).

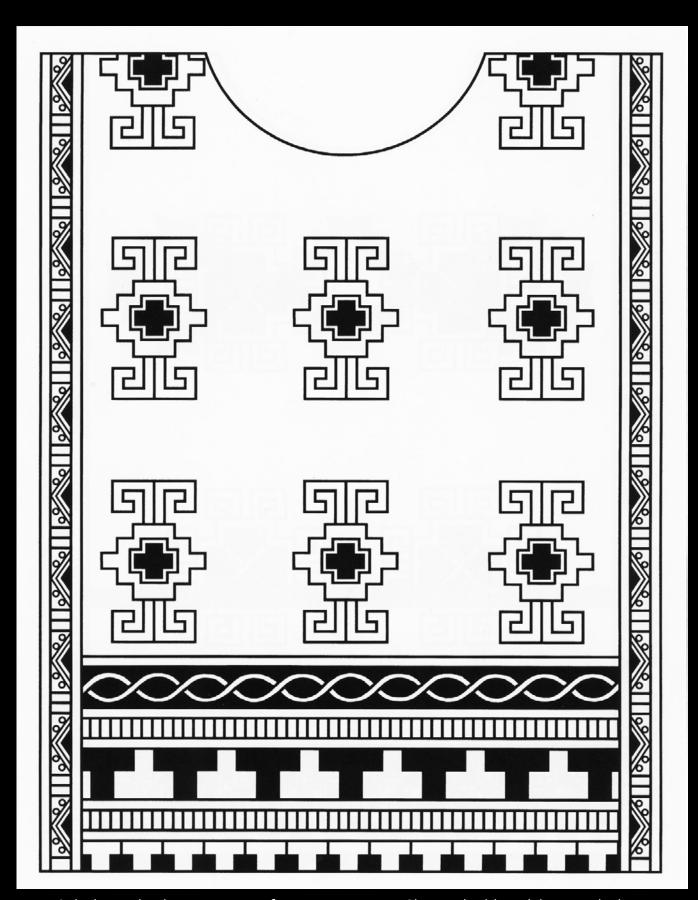


Fig. 8,d. This snake skin pattern motif is very common on Sky Bands although here on the hem it is repeated. Woman on the right, Bonampak Stela 2, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 29).

Sky Bands on Hems of Clothing on Lintels of Yaxchilan

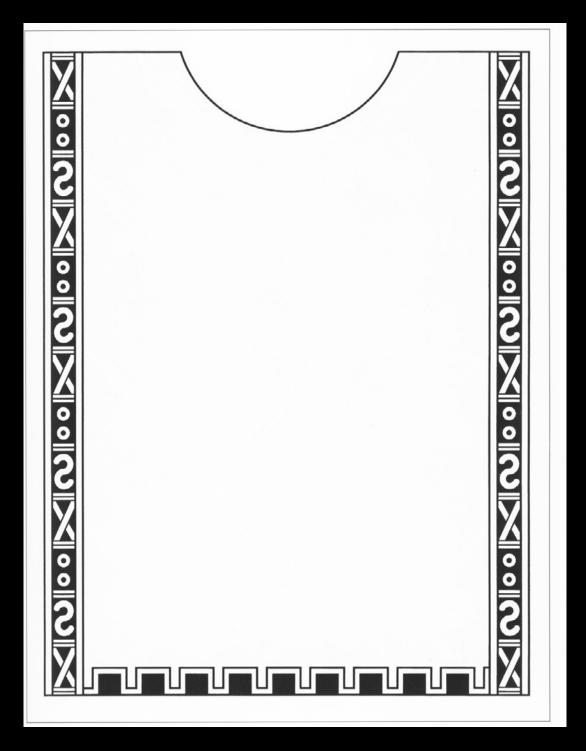


Fig. 9,a. Crossed-Bands are very common in Sky Bands as are the two circles. The backwards-S motif is often a curved simplified form of Zip Monster but it could also have other significance. Yaxchilan Lintel 1, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 13). In the future it would help to show more of the actual motifs on the hem that you can see in the drawing by Ian Graham.



Fig. 9,b. This sculptor of Yaxchilan Lintel 1 arranged the hems so that the Sky Band hem was most visible. To show each individual motif, a 1:1 digital image at high resolution is needed. This image was obtained by enlarging the Peabody Museum page and then cropping to the woman. Drawing by Ian Graham,

Peabody Museum of Archaeology & Ethnology, Harvard University.



Fig. 9,c. Yaxchilan Lintel 1, drawing by Ian Graham, Peabody Museum of Archaeology & Ethnology, Harvard University.



Fig. 10,a. Nicely cross-illuminated photograph of Yaxchilan Lintel 14 by Nicholas Hellmuth in the 1990's. The FLAAR style of photography is illuminating sculptures from two sides, not just from one side. To allow the details to be better visible with this cross-lighting, we do not use lights on the front of the sculpture.



Fig. 10,b. Closeup of the Sky Bands on the woman on Yaxchilan Lintel 14.

The Sky Bands are at the bottom of her outfit.

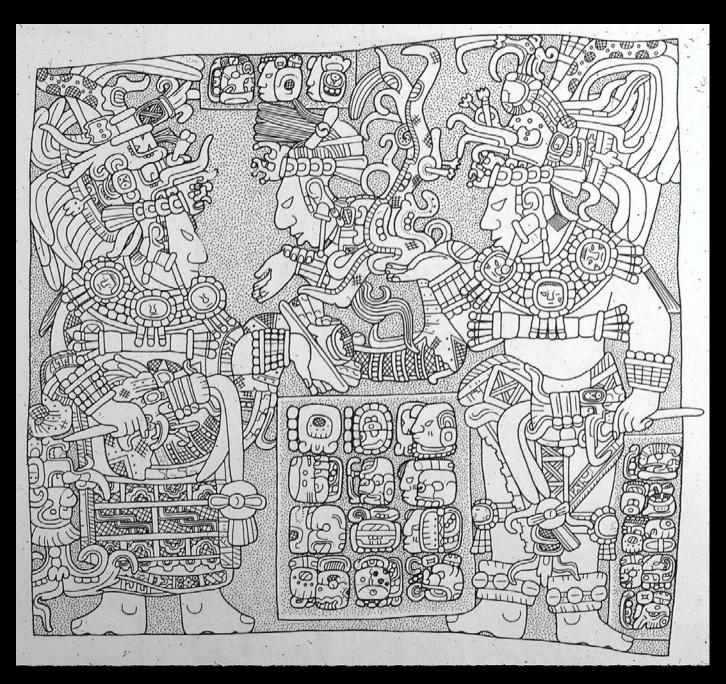


Fig. 10,c. The diagonal hem of the man also has Sky Band-like spaces and motifs. Yaxchilan Lintel 14, Structure 20. Drawing by Ian Graham based on plaster cast by Eric von Euw, Peabody Museum of Archaeology & Ethnology, Harvard University.

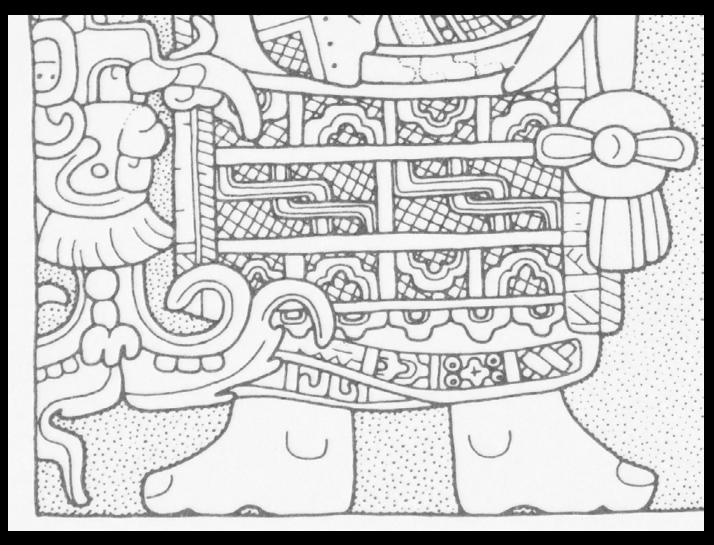


Fig. 10,d. There are three large bands with vertical divider spaces on the clothing. But the most obvious Sky Band is on the lower area. The motif with "snake rattles" is not often seen elsewhere.

There are also divider lines on the two vertical "hems".

Cropped by Hellmuth from drawing by Ian Graham, Peabody Museum of Archaeology & Ethnology, Harvard University.

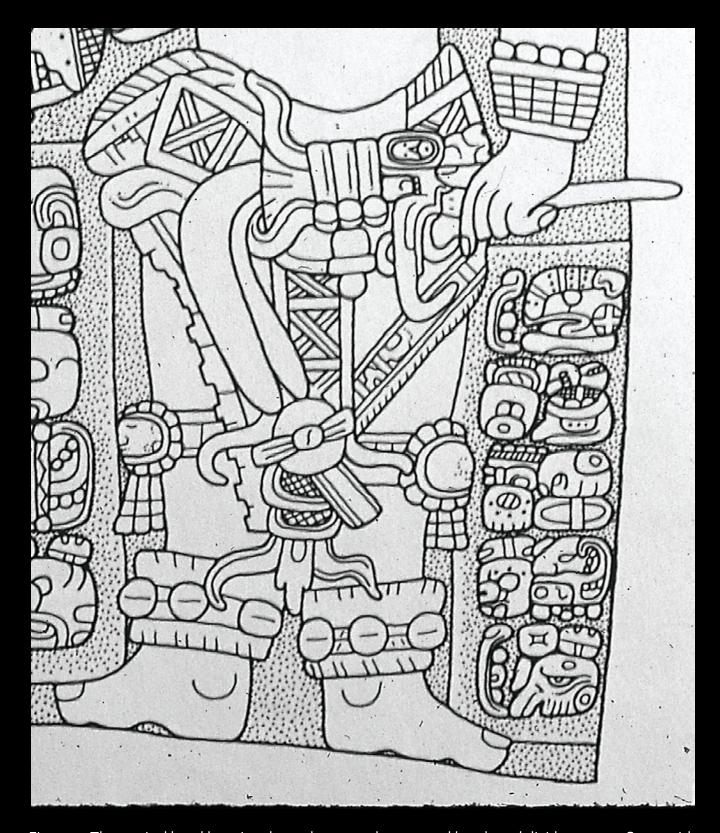


Fig. 10,e. The vertical band hanging down the center has crossed bands and divider spaces. Same with the clothing accessory across the belt area. But the more traditional Sky Band is diagonal on the hem of his clothing. Yaxchilan Lintel 14, cropped by Hellmuth from drawing by Ian Graham, Peabody Museum of Archaeology and Ethnology, Harvard University.

Normally it is females who have Sky Band hems but I have found them on males in the Bonampak murals and on a vase from Tikal Burial 116.

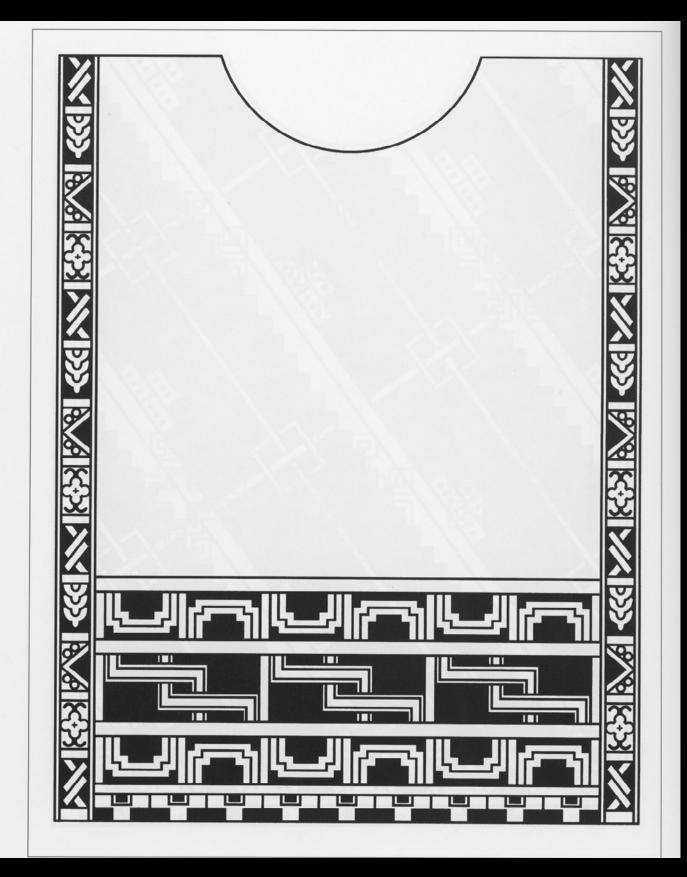


Fig. 10,f. The snake-V and the entwined crossed-bands are both common on traditional Sky Bands. The 4-sided motif and the "snake rattles" are not common on actual Sky Bands. Yaxchilan Lintel 14, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 22). Would help to have a drawing by Tolles of the outfit of the man.

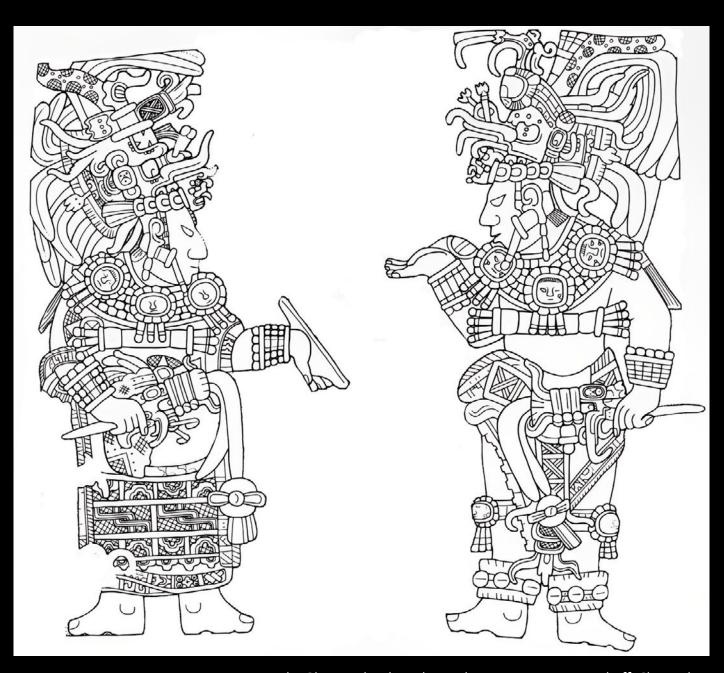


Fig. 10,g. It is easier to concentrate on the Sky Bands when the snake monster is cropped off. Cleaned by Norma Cho, FLAAR, from drawing by Ian Graham, Peabody Museum of Archaeology & Ethnology, Harvard University.



Fig. 11,a. Yaxchilan Lintel 24, drawing by Ian Graham, Peabody Museum of Archaeology & Ethnology, Harvard University. The man has an area of three horizontal bands with vertical dividers but I do not yet see any Sky Band motifs there. The woman has two gorgeous very iconographically important series of motifs in a Sky Band format. They are vertical.



Fig. 11,b. The digital image is not good enough resolution to allow enlarging the Sky Bands. These Sky Bands have the most different motifs on a woman's hem. Yaxchilan Lintel 24, drawings are available from John Montgomery and separately by Ian Graham, Peabody Museum of Archaeology & Ethnology, Harvard University.

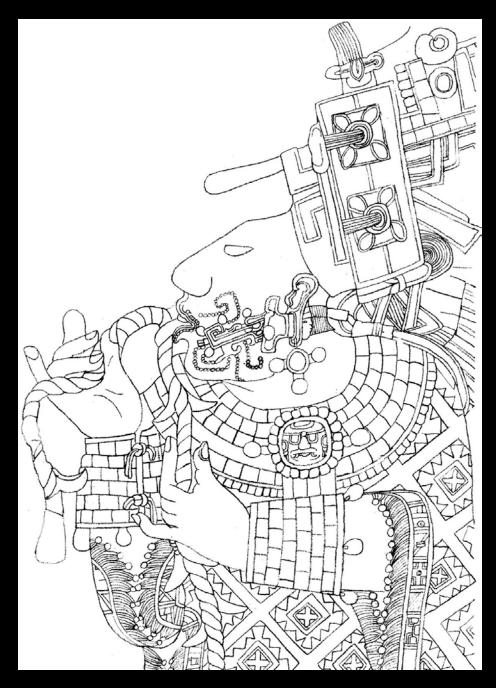


Fig. 11,c. Curiously the drawing by John Montgomery from FAMSI can be enlarged better than the drawing from Harvard. But the Ian Graham drawing shows more details on the Sky Band.

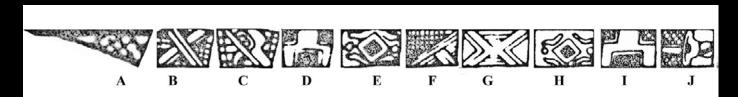


Fig. 11,d. E and H are potentially the 4-legged creatures seen on other hem area Sky Bands. Victoria Bricker (1986: Fig. 51) has the nice Ian Graham drawing of Lintel 24 at full-page size, but since her book is on hieroglyphs she does not show or name individual motifs of the Sky Band.

Carlson and Landis do the best job of this so far, but today into year 2025 we need more complete catalogs of motifs and more illustrations.

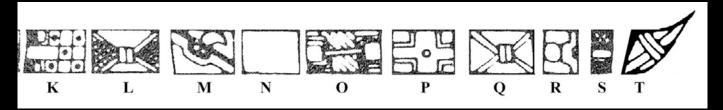


Fig. 11,e. D, J, K, O, R, and S are not common in other Sky Bands. R and S should be together as one motif. N is eroded; there should be another eroded area after o (see the drawing below).

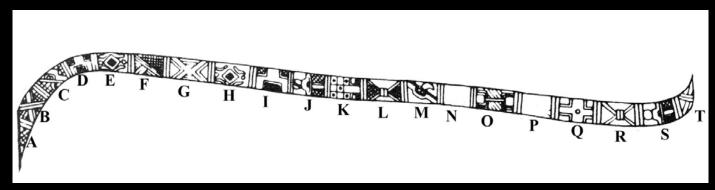


Fig. 11,f. Here the two empty spaces are both shown and "S" is one motif, same motif as J.



Fig. 11,g. The second motif from the left (and the motif further to the right) should be redrawn to see whether they are a Kan Cross or Lamat or something else. A nice Zip Monster (recurved snout reptilian head) is visible. Yaxchilan Lintel 24, cropped from drawing.

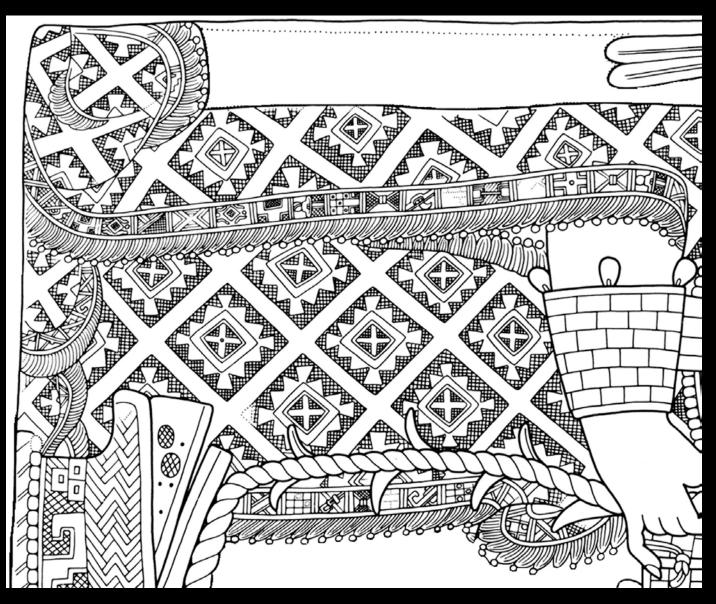


Fig. 11,h. This image is flipped so the Zip Monster at the bottom is pointing in the correct direction. I estimate this drawing is by Montgomery since there is no background stippling on either side of the woman. Yaxchilan Lintel 24.

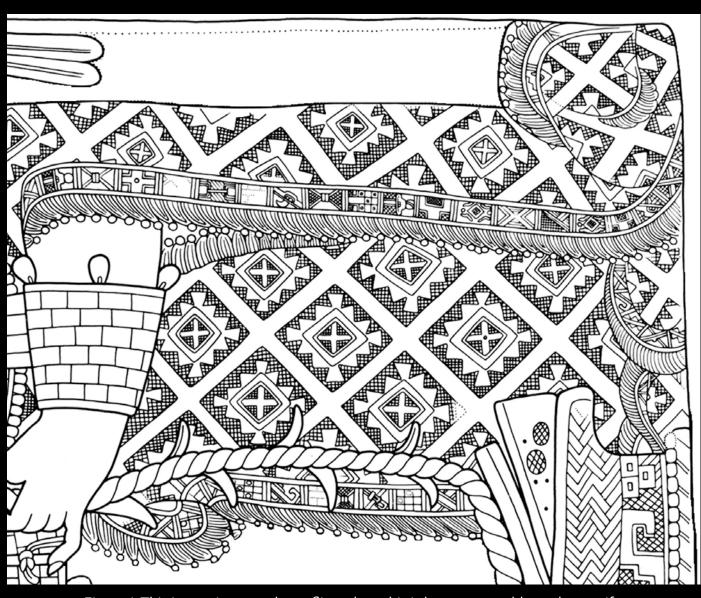


Fig. 11,i. This image is rotated, not flipped; so this is how you would see the motifs.

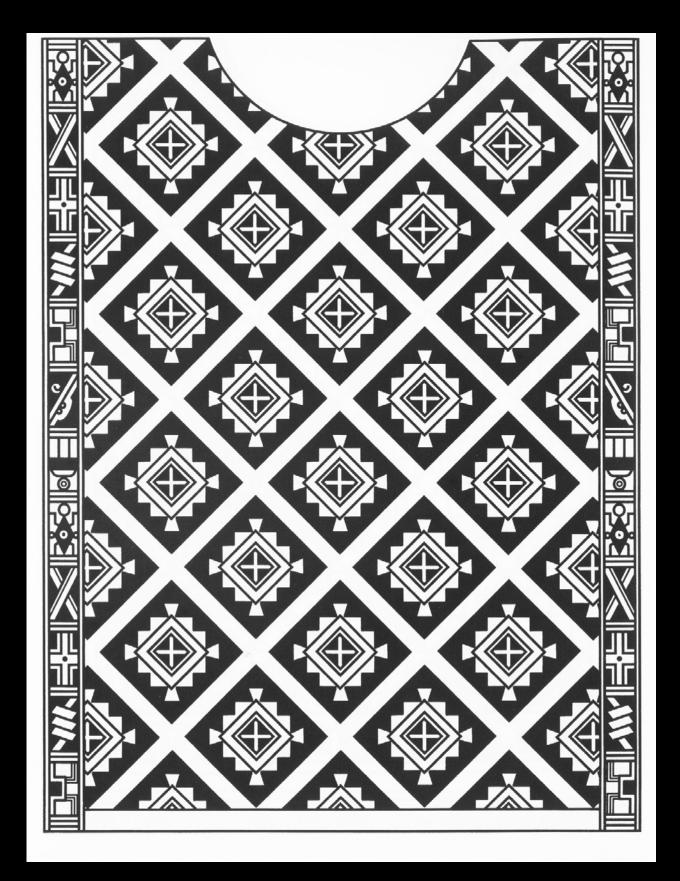


Fig. 11,j. Several motifs on this hem are not often found elsewhere: lowest motif, and 6th motif up from bottom. Kan Cross, crossed-bands, entwined bands, and the diagonal band are all common on Sky Bands. The "insect" is found primarily on woven textile hems. Yaxchilan Lintel 24, drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 8).



Fig. 12,a. Sky Bands on both sides of the arm. Yaxchilan Lintel 26. Drawing by Ian Graham, from download option on Peabody Museum website, Harvard University.

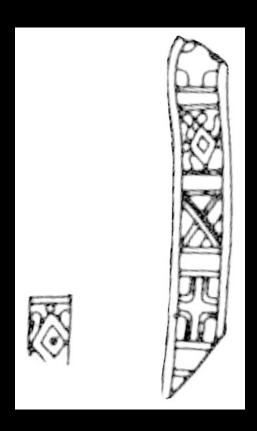


Fig. 12,b. As is painfully obvious here, a higher resolution drawing is needed for Yaxchilan Lintel 26. This is a 500% enlargement, but the original image on-line is not high enough resolution.



Fig. 12,c. Yaxchilan Lintel 26, drawing by Ian Graham, from download option on Peabody Museum website, Harvard University.

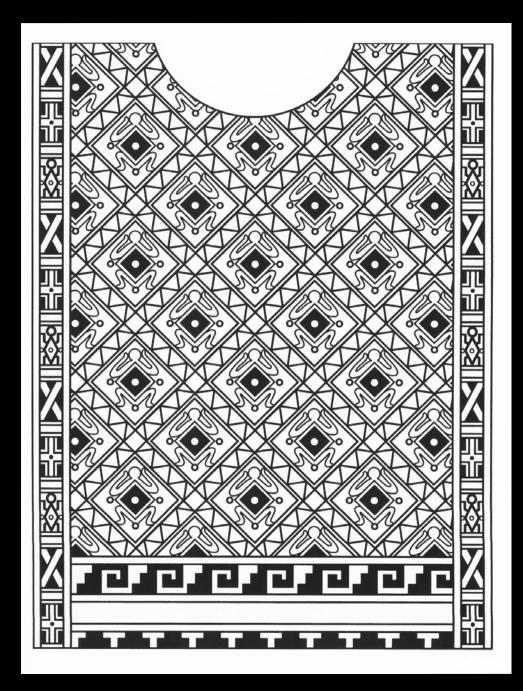


Fig. 12,d. All motifs on the two vertical hems are common; the "insect" is found primarily on woven textile hems. A wider version of this creature decorates the entire surface of this huipil. Yaxchilan Lintel 26, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 7).

So far all the Sky Bands on hems at Yaxchilan are on lintels. The Yaxchilan stelae are not yet on the Peabody Museum website, but thirty-six stelae are in the new Peabody publication (Fash, Tokovinine and Graham 2022). Yaxchilan Stela 32 has nice hems but none in traditional Sky Band format. Both Stela 32 and Stela 36 have a snake with a gorgeous Tlaloc issuing from the open jaws of the snake. My 1969 Master's thesis was on Teotihuacan motifs specifically in the Late Classic (after Teotihuacan itself had collapsed). I did not have illustrations of either of these reptile-related Tlalocs a half century ago. These Tlalocs at Yaxchilan remind me of the Tlalocs in the full-figure personified hieroglyphic inscription of Copan Temple 26 façade (shown in PDF on the home page of www.Maya-archaeology.org).

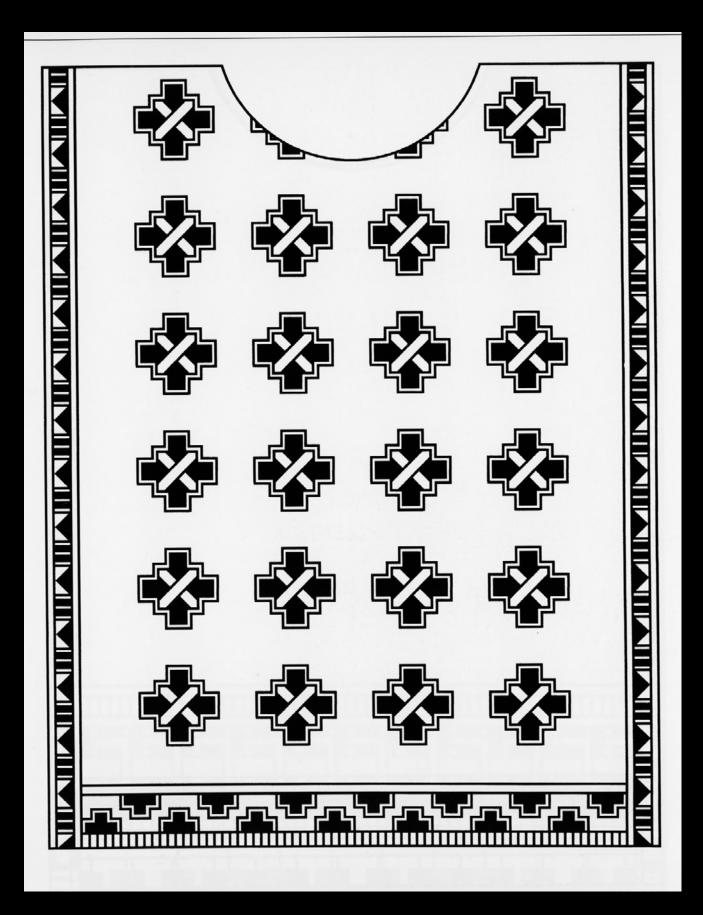


Fig. 13. Simplified V-shaped motif with no cross-hachure (solid black instead) and no circles on two top sides of the triangle. Yaxchilan, Stela 4, drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 25).

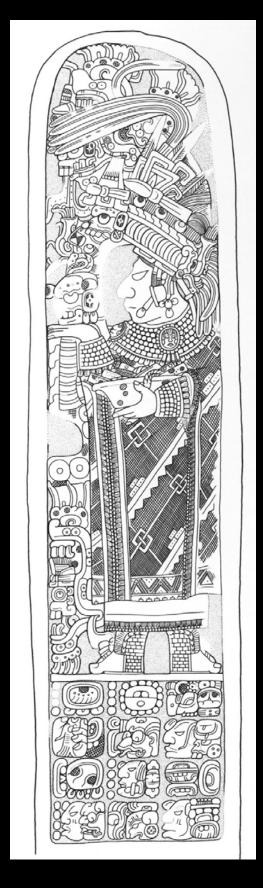


Fig. 14, a. Yaxchilan Stela 35

Drawing by Barbara Fash in Fash, Tokovinine and Graham 2022, copyright 2022, Peabody Museum of Archaeology and Ethnology, Harvard University.



Fig. 14,b. Yaxchilan Stela 35, cropped.

These hems are a good example of NOT Sky Bands.

Drawing by Barbara Fash in Fash, Tokovinine and Graham 2022, copyright 2022, Peabody Museum of Archaeology and Ethnology, Harvard University.

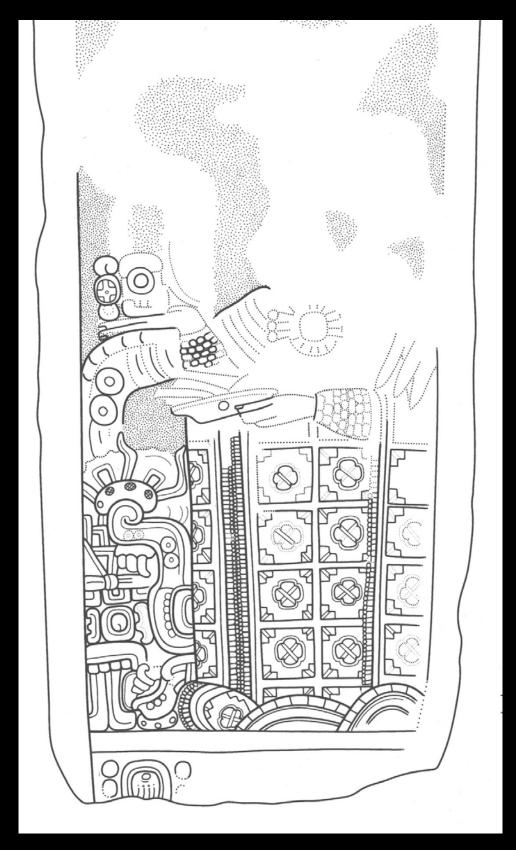


Fig. 15. Yaxchilan Stela 36 is amazing in that the woman's entire outfit is associated with motifs of that look like those on Sky Bands. But the motifs are on not on the hems.

Cropped by Hellmuth from drawing by Barbara Fash in Fash, Tokovinine and Graham 2022, copyright 2022, Peabody Museum of Archaeology and Ethnology, Harvard University.

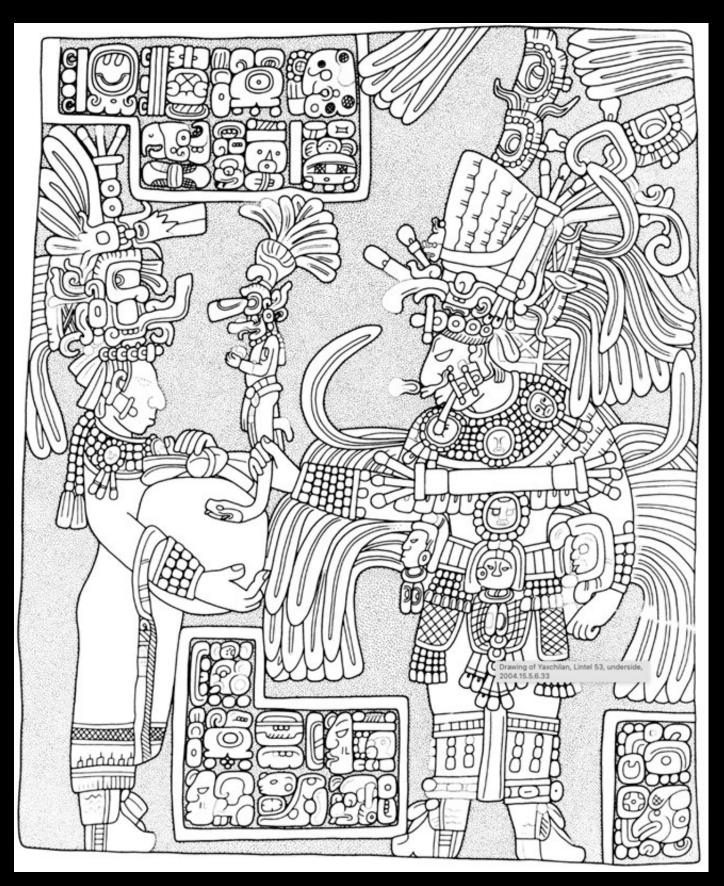


Fig. 16. The vertical hem on the woman's textile clothing has remains of Sky Band frames and motifs.

Yaxchilan Lintel 53, drawing by Ian Graham,

Peabody Museum of Archaeology and Ethnology, Harvard University.

Sky Bands on Hems of Women and of Men's Clothing at Tikal



Fig. 17,a. These outfits, especially featuring seashells on the necklace, need to be compared with the outfits in Room 1 of the Bonampak murals. Mary Miller, expert on Bonampak murals, recognizes this connection (Miller and Brittenbam 2013: caption of Fig. 291). She also mentioned the connection earlier, in 1998 in multi-volume Mexican publication on the murals of Bonampak.

My focus is on the hems, since most of the standing men and at least one of the knelling men have divider spaces between motifs.

Several other vases at Tikal should be checked to see if the hems have bands with divider lines, such as Figure 70 in Culbert's monograph.

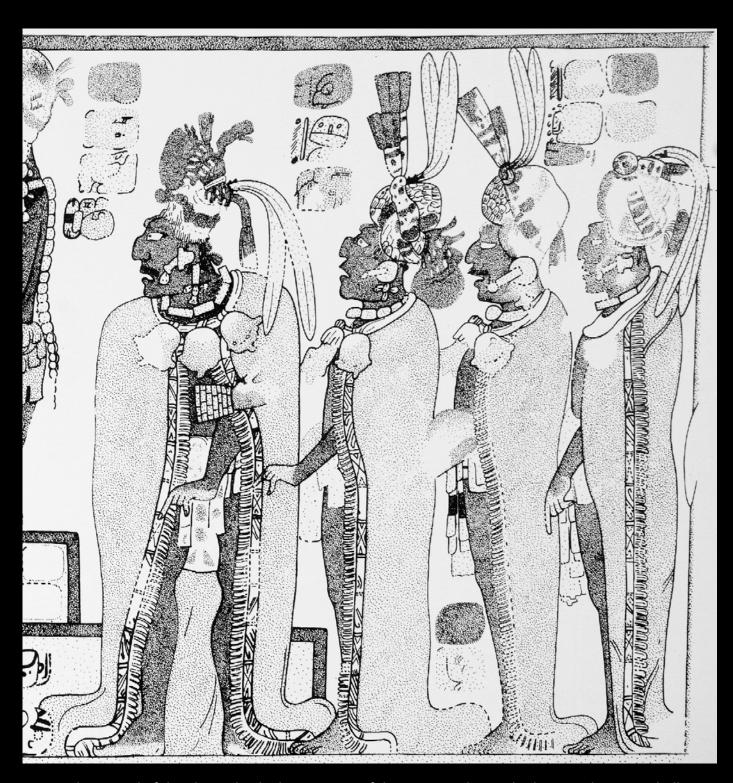


Fig. 17,b. Several of the elite individuals in Room 1 of the Bonampak murals also wear large seashells on their necklaces, and also wear shawls with Sky Band hems. The cloaks here at Tikal have an additional decoration sticking out from the area of the Sky Bands (this extra decoration is not worn in the Bonampak murals).

Three of the elite men in this scene have Sky Bands on the edge of their cloaks.

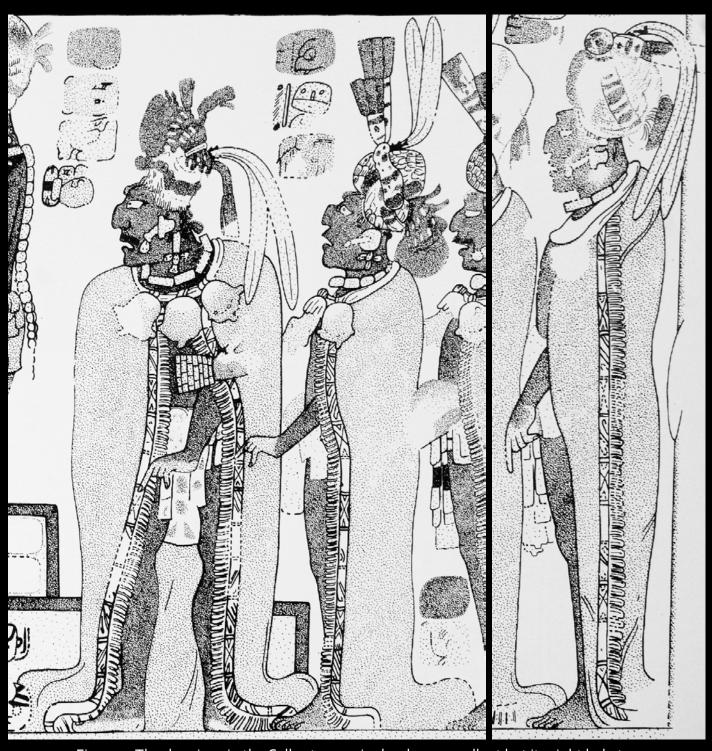


Fig. 17,c. The drawings in the Culbert ceramics book are excellent but it might help to redraw the Sky Bands so the individual motifs can be cataloged.

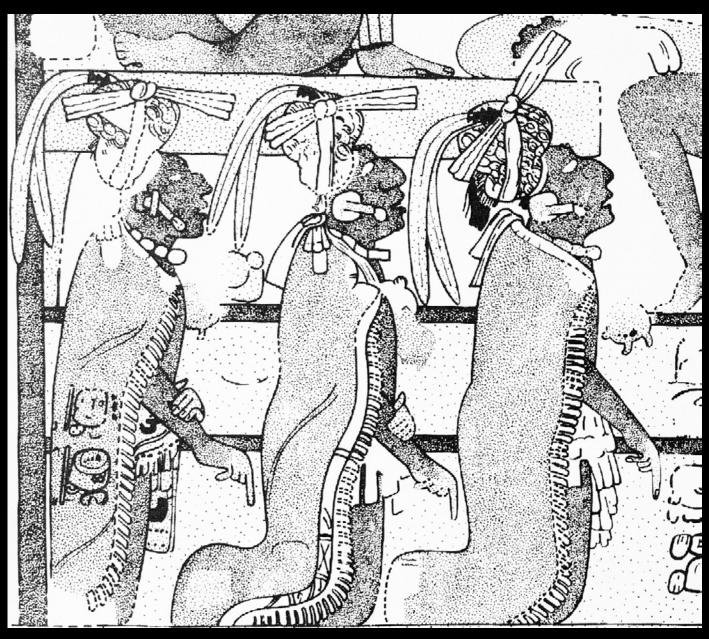


Fig. 17,d. The man in the middle has divider areas on his hem. The wide X motif is a potential simplified Etznab motif. Cropped from Culbert 1993: Fig. 68,A.

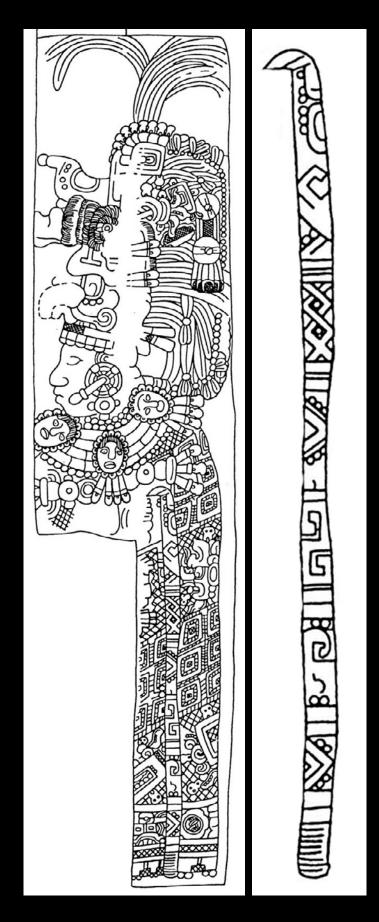


Fig. 18, a and b. Sky Band on woman, Tikal Temple 2, Lintel 2, drawing by John Montgomery, JM000729, FAMSI. V-snake motif is common on traditional Sky Bands. Entwined crossed-bands (woven pattern) are very common. But other motifs here are atypical.

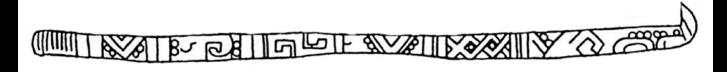


Fig. 18,c. Sky Band on woman, Tikal Temple 2, Lintel 2, drawing by John Montgomery, JM000729, FAMSI.



Fig. 18,d. The V-motif is the common snake skin pattern. The zig-zag crossed bands can be found in various places. The backwards-S is atypical for Sky Bands. Tikal Temple II, Lintel 2, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 24).

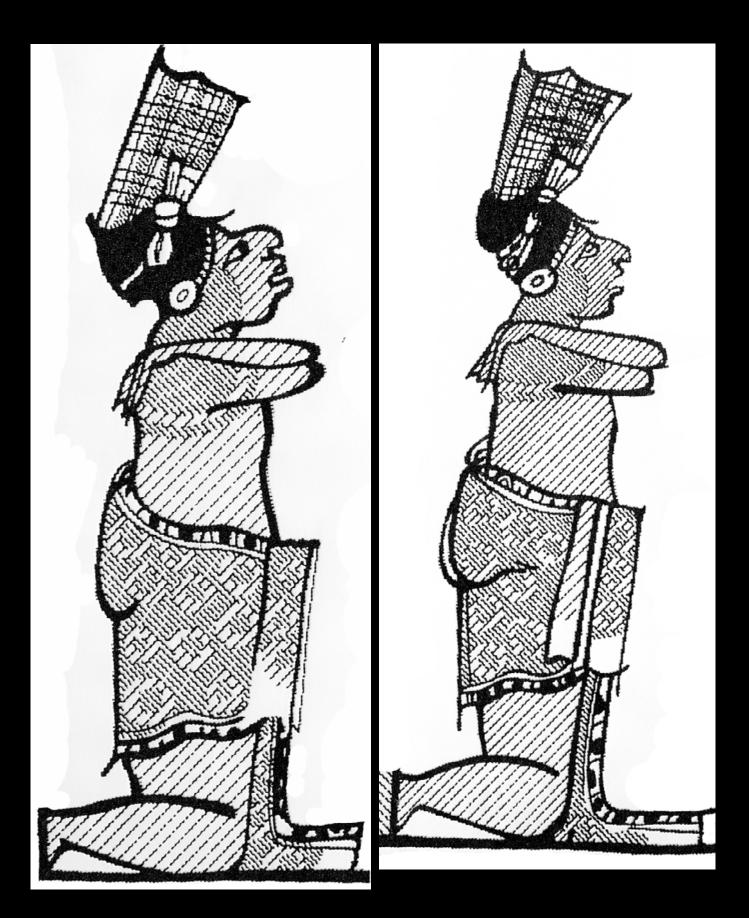


Fig. 19, a and b. Bands but most of the motifs are not yet recognizable (Culbert 1993: Fig. 69). The kneeling individuals of Culbert's Fig. 70 have similar hems.

Sky Bands on Hems of Woman on Sculptures from El Perú-Waka'



Fig. 20,a. Below is a horizontal hem; above is a larger band with diagonal dividers. The main Sky Bands are vertical, on both sides of the woman's outfit. ClevelandartOrg:art:1962.32, Cleveland Museum of Art.



Fig. 20,b. Closer view of the woman with Sky Bands on both sides and also across the bottom. Cropped from photo from Cleveland Museum of Art.



Fig. 20,c. Photos of this sculpture at the Cleveland Museum of Art on the Internet are higher quality than photos of other Maya sculptures at other museums.

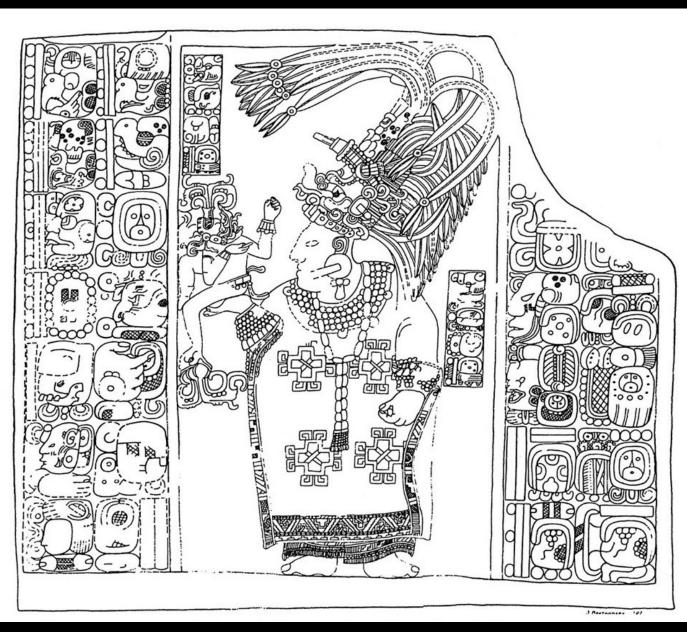


Fig. 20,d. Late Classic Maya sculpture at the Cleveland Art Museum.
Drawing by John Montgomery, JM00903.

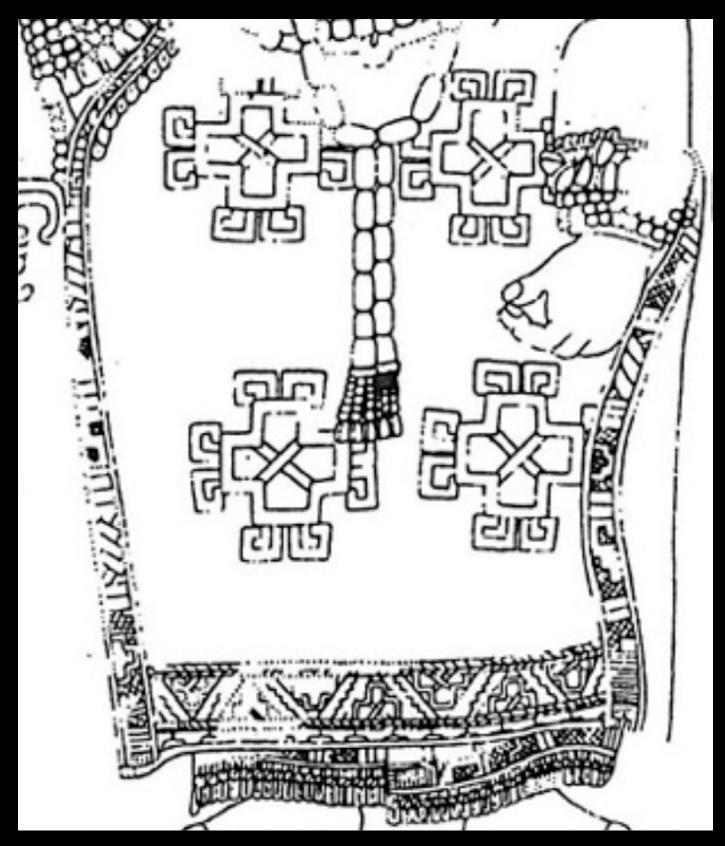


Fig. 20,e. Bands with diagonal areas are not traditional Sky Bands. The more traditional Sky Bands are to the left, to the right, and horizontally near the bottom. But this drawing of John Montgomery is not as high a resolution as his drawing of Stela 34. I enjoy seeing a step-fret in the Sky Band at the right. Step-frets do occur in other Sky Bands but they are rare.

Tikal Temple IV, Lintel 3, Drawing by John Montgomery, JM0074.

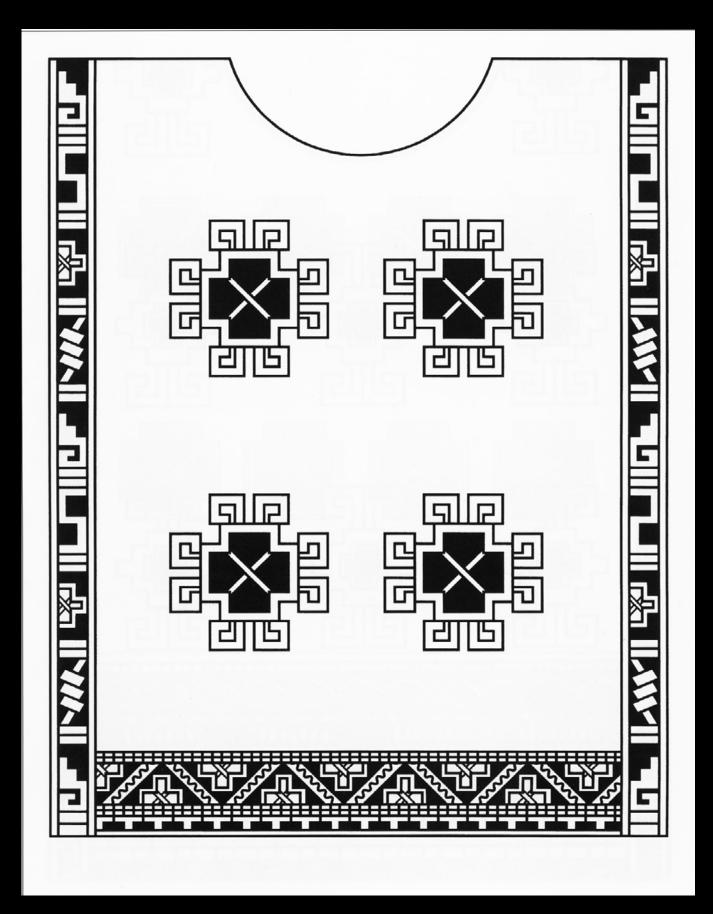


Fig. 20,f. The woven entwined motif is found on Sky Bands, ceremonial bars, waist area and elsewhere. The stepped fret is found on occasional Sky Bands and elsewhere. The other motif is more a woven motif of textiles. El Cayo lintel, drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 30).



Fig. 21,a. El Perú-Waka' Stela 34, downloaded at high resolution from Cleveland Art Museum web site. This photo is 493MB which surpasses downloads on any other museum or university web site.



Fig. 21,b. Closer view. Because lighting also comes from the front, the motifs of the Sky Bands are not standing out.



Fig. 21,c and d. Once you move closer, then you can begin to see the individual motifs.

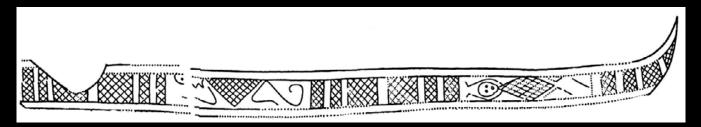
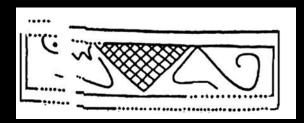


Fig. 21,e. Drawing of the Sky Band on the left side of the Stela 34, cropped from drawing of Montgomery (JM00652).



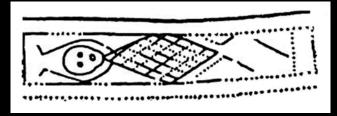


Fig. 21,f and g. The head suggests a monkey head, but monkey bodies are not this geometric shape, and a tail is needed on the full-figure (the half-creature has a monkey-like tail curling at the end). Matthew Looper has a discussion and a really good quantity and quality of illustrations of these creatures in Maya art (Looper and Tolles 2000: Fig. 37 and Fig. 38). Looper calls these motifs a hocker. I suggested these were potentially insects before I received his excellent book and noticed he lists several as insects also. I made my potential conclusion based solely on the ones from Maya textile hems and based on my study of insects out in the train forests. Clearly more research would help to document whether the geometric body is a result of textile weaving patterns or a special meaning for this creature.

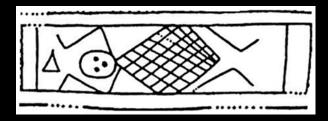


Fig. 21,h. No tail. Keep in mind that when Maya show the giant cave cockroach and other insects, the Maya artists traditionally show only four limbs, not six.

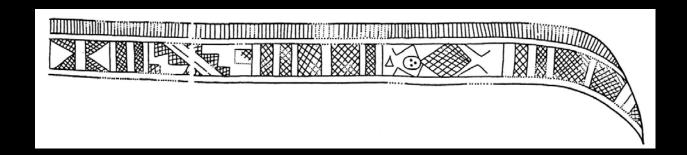
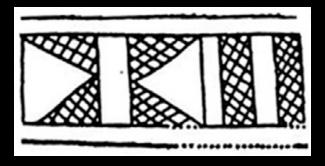


Fig. 21,i. Drawing of the Sky Band on the right side of the Stela 34, cropped from drawing of Montgomery (JM00652).



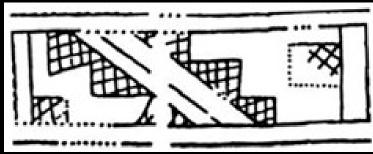


Fig. 21,j and k. Since these hems are woven by women, it is easier to weave certain geometric shapes than others. Sky Bands not on clothing can be any shape since sculptors are creating them with tools.

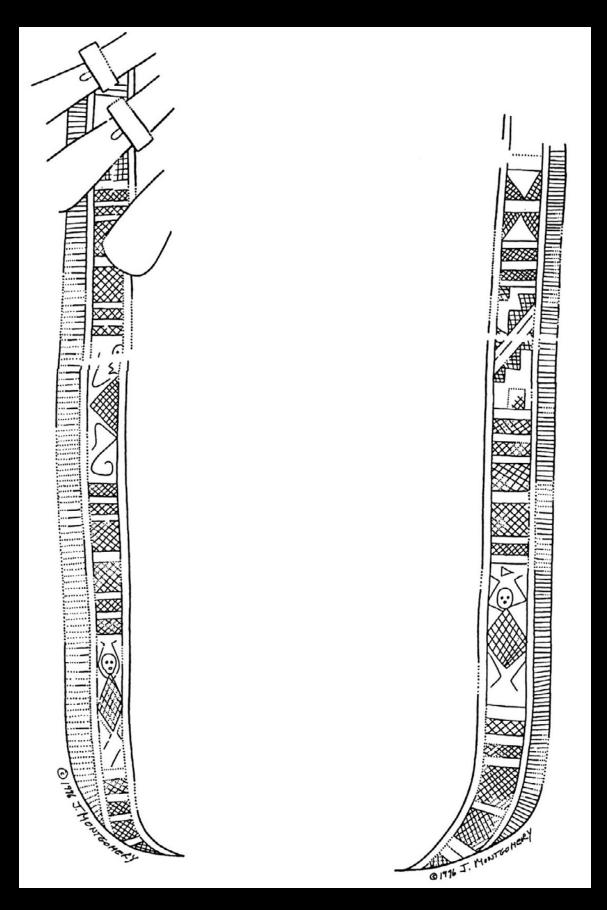


Fig. 21, I. The motifs have much more detail in this drawing by John Montgomery than in drawings by other illustrators.

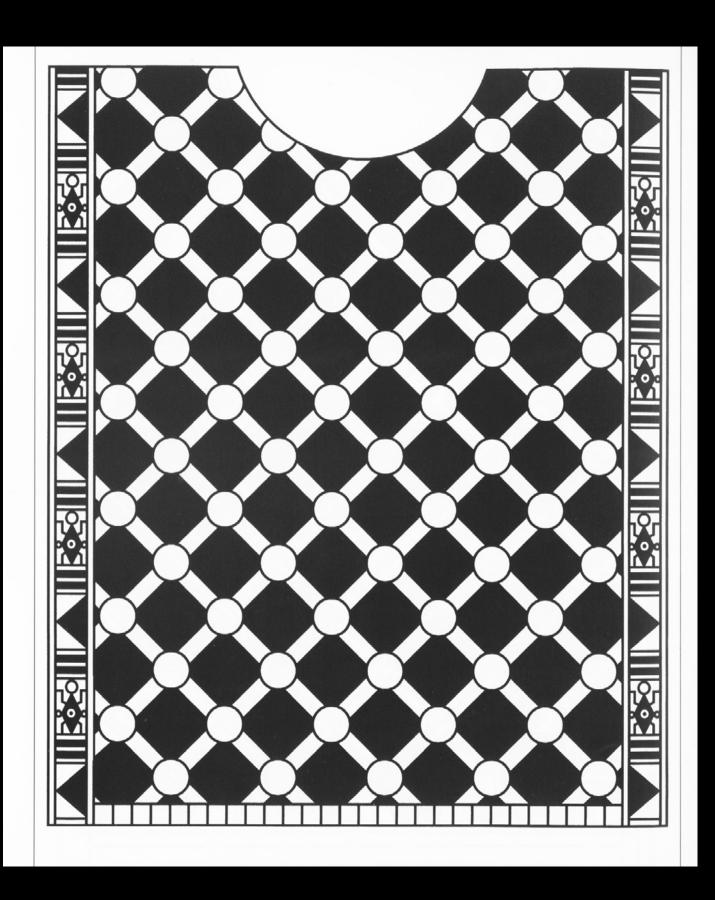


Fig. 21,m. The "insects" are more common on textile hems. The black triangle is potentially a woven variant of the snake skin pattern. El Peru Stela 34, reconstructed drawing by Thomas Tolles (Matthew and Tolles 2000: Plate 4).

Sky Band Hems on Sculptures Elsewhere

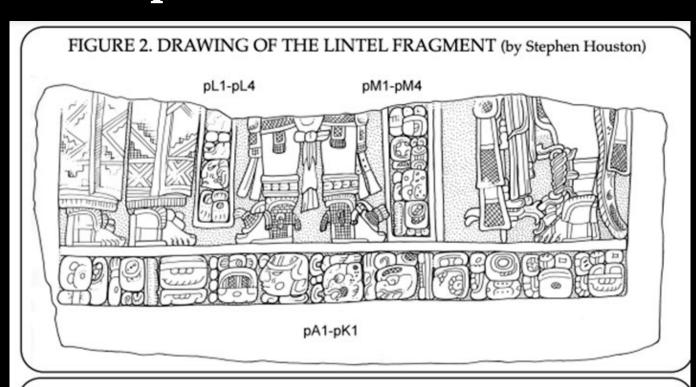


FIGURE 3. DIGITAL IMAGE OF THE SCULPTED FACE OF THE LINTEL FRAGMENT



Fig. 22,a and b. Tixan, Peten. Photograph by Charles Golden, drawing by Stephen Houston. The vertical bands on the woman's outfit include motifs found on traditional Sky Bands.

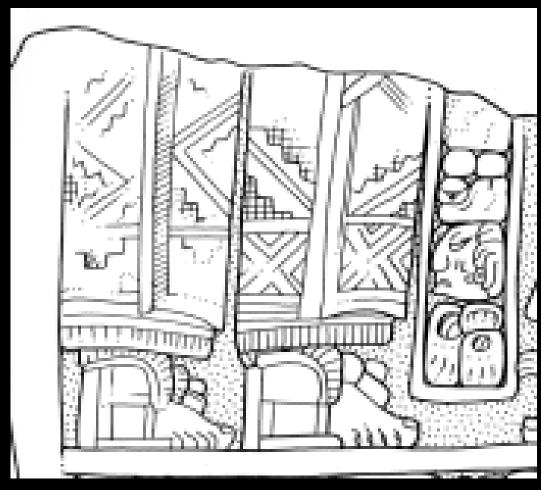


Fig. 22,c. Potential Sky Bands on women's clothing of sculpture from Tixan Centro Campesino; drawing by Stephen Houston. Instead of being on the hem, these motifs are ten-times larger on the main item of clothing (potentially a huipil). There are divider lines, which is why I suggest a possible Sky Band.



Fig. 23,a. Stela potentially from El Chorro, drawing by Grube in Zender 2004: page 614, Fig. 144.

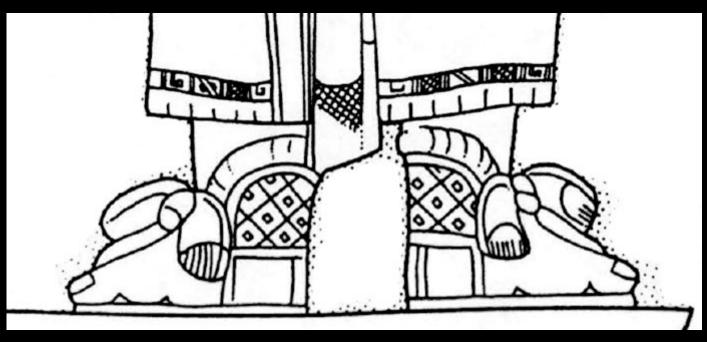


Fig. 23,b. The Sky Bands are across the bottom. A higher resolution of the drawing would help to see the details of the motifs that get smudged with black when you enlarge a low-resolution image.

Would help to have a drawing by Thomas Tolles.

Initial Conclusions

The Sky Bands on Yaxchilan lintels have been recognized and mentioned by several scholars, including Josserand, Montoya, Looper and Tolles. The Sky Bands on the Bonampak murals--the one across the upper area and the peccary and turtle—have all been published many times. But so far I have not noticed the Sky Bands on hems of men's clothing in the Bonampak murals and the men on the Tikal Burial 116 vase being mentioned in publications as Sky Bands. Surely someone has commented on these Sky Bands in an article, but I have not yet found one. Sophia Pincemin said she

noticed the similarity of the bands on textiles of Bonampak men (personal communication 2024). Pincemin also recognized that many of the motifs were quite different from actual Sky Band motifs (personal communication 2024).

Now that Matthew Looper has kindly sent a copy of his Looper and Tolles book on huipil designs, I can learn what Sky Bands they show, and perhaps what hems I have missed. A very helpful illustration in their book is list of motifs that they noticed in hembands (2000: Fig. 41).

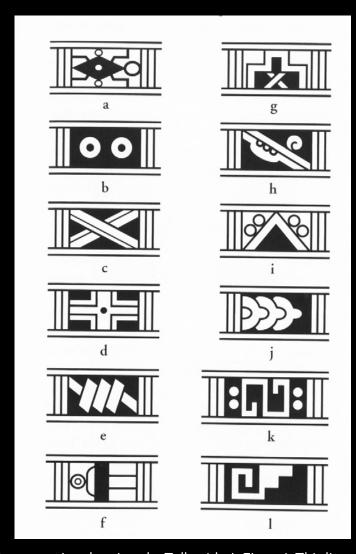


Fig. 24. Illustrated list by Looper using drawings by Tolles (their Fig. 41). This list would be even more helpful if it included all the motifs from all the hems at Bonampak and hems from Tikal vase of Burial 116, plus Yaxchilan Lintel 14, man at the right; more details from Lintel 24 hem on female; more motifs from Tikal lintel; Late Classic Maya sculpture at the Cleveland Art Museum and Stela potentially from El Chorro. Would also help to show which parts are cross-hachure rather than putting that symbol for black as solid black.

The purpose of the present FLAAR Reports on Sky Bands on hems is to show the complete sculptures and complete vases so that students and iconographers can find better quality drawings so a catalog/inventory can be made of individual motifs, to add to the helpful initial catalog of Carlson and Landis in 1985.

What would help hugely would be a book with drawings by Tolles, drawings by Pincemin of all the men with rectangular motifs on hems of Bonampak, and co-authored by Looper and Pincemin and Hellmuth to discuss the iconography. A catalog of all the motifs on hems is needed and to show which few are also found on "traditional Sky Bands" and which are primarily on woven hems. I would add all the hems on the vase from Tikal Burial 116 (that also need drawings by Tolles). Also should be added drawings by Tolles from the few hems that Hellmuth found (such as El Chorro stela) that were not in other books on hems. Since many of the motifs on hems are different from motifs on Sky Bands in codices, ceramics, ceremonial bars, waist area clothing, I will suggest a term, "textile hem Sky Bands" when they include at least one feature of a traditional Sky Band.

Insects? Frogs? Or something else?

The crawling creatures on many woven textile hems need further in-depth research, for a MA thesis or PhD dissertation. I add this final series of illustrations that I found in the FLAAR Photo Archive, after the report on hems was finished but not yet put on-line.

These views from above of 4-legged crawling creatures can be seen on many sculptures. I name a sample, surely more can be found:

- El Perú-Waka' Stela 34
- Yaxchilan Lintel 24
- Yaxchilan Lintel 26

Since I have found several Tepeu 1 bowls and other Maya ceramics with rows of obvious insects, even though the ones on woven hems are different, I estimate they are more likely insects than frogs. The Maya show insects with four legs, not six.

I now show several images that I was very surprised to find while looking for images of early Maya ceramics with mammiform tetrapod supports. All the images previously known are on Late Classic stelae and on hems. To find these images, centuries earlier, and painted on ceramics, shows that they were deeply imbedded in Maya belief systems.



Fig. 25, a. It would be very helpful for archaeologists or iconographers to find other examples of these early images of these crawling creatures. All are photos by Nicholas Hellmuth in the previous century, FLAAR Photo Archive.



Fig. 25, b. Notice the dots around the head and the two rows of dots at the tail end. Similar dots are on the inside of another early container that we show two images later.



Fig. 25, c. Mammiform ceramics have some of the earliest paintings of Maya ceramic history. This is the non-crawling creature side of the same ceramic of the previous two photos.



Fig. 26. This early Maya painting shows the crawling creatures with diamond-shaped bodies. The dots around the head and two rows of dots at the tail end are similar to crawly creatures on the side of the mammiform ceramic pictured previously. Photo by Nicholas Hellmuth, FLAAR Photo Archive.



Fig. 27. These crawling creatures are different, yet similar. But they seem to have a tail.

Basal flange bowl, FLAAR Photo Archive.

Note: the entire thirty years of photography of Maya architecture and photography of vases, bowls, plates, cache vessels, incense burners, etc. of the FLAAR Photo Archive of color slides and black-and-white negatives has been donated by Nicholas Hellmuth and FLAAR to a university museum research center. Thus in the future it should be possible to find several more examples of these crawling creatures.

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1998 Bonampak cedulas. In *La pintura mural prehispánica en México, II, Área Maya, Bonampak, Tomo I, Catálogo*. UNAM, Mexico.

BAKEWELL, Elizabeth and Byron HAMANN

Painting History, Reading Painted Histories: Ethnoliteracy in Prehispanic Oaxaca and Colonial Central Mexico. Chapter Eight in *A Companion to Mexican History and Culture*, First Edition. Edited by William H. Beezley. Blackwell Publishing Ltd.

Shows Sky Bands in the Post Classic Codex Nuttall, but images are too small to allow seeing the individual motifs. Most are associated with architecture.

BRICKER, Victoria Reifler

1986 A Grammar of Mayan Hieroglyphs. Middle American Research Institute (MARI), Tulane University.

CARLSON, John R. and Linda C. LANDIS

1985 Bands, Bicephalic Dragons, and other Beasts: The Skyband in Maya Art and Iconography. In *Fourth Palenque Round Table*, 1980, Merle Greene Robertson and Elizabeth P. Benson, editors, pages 115-140. The Palenque Round Table Series, Volume VI.

CULBERT, T. Patrick

1993 The Ceramics of Tikal--Vessels from the Burials, Caches and Problematical Deposits. Tikal Report 25A. University Museum Monograph 81.

FASH, Barbara, TOKOVININE, Alexandre and Ian Graham

2022 Corpus of Maya Hieroglyphic Inscriptions, Volume 3, Part 4, Yaxchilan. Peabody Museum of Archaeology and Ethnology, Harvard University.

Shows thirty-six stelae of Yaxchilan, several of which I have never seen before (such as Stela 36).

JOSSERAND, J. Kathryn,

2002 Women in Classic Maya Hieroglyphic Texts. In: Traci Ardren (editor) *Ancient Maya Women*. Walnut Creek: 114-151. AltaMira Press.

Cited by Moreno as source of Sky Bands on women's clothing (n.d.: 3).

Unfortunately Josserand's chapter is not on the Internet as a PDF but we have the book in our research l ibrary. In caption for her Figure 8.10, for Yaxchilan Lintel 24, she mentions the "sky band fringe". But in her illustration of the Cleveland Stela (which in those early years was thought to come from Calakmul), there is no mention of Sky Band, nor mention in captions of Yaxchilan lintels other than Lintel 24.

LE FORT, Genevieve

2002 Costume et royauté sacrée chez les mayas de la période classique: le costume « en treillis ». Itinéraires belges aux Amériques 50 : 115-127.

Shows a drawing by N. Grube of El Chorro stela showing a royal individual whose lower hem has a horizontal Sky Band.

Available on line: https://journals.openedition.org/civilisations/3395?lang=en

LOOPER, Matthew G., drawings by Thomas TOLLES

2000 Gifts of the Moon: Huipil Designs of the ancient Maya. San Diego Museum of Man.

If you are studying Maya weaving designs or Sky Band iconography, this book is essential.

MILLER, Mary and Claudia BRITTENBAM

The Spectacle of the Late Maya Court, Reflections on the Murals of Bonampak. University of Texas Press.

MONTOYA, Julia

2008 Los motivos de los tejidos mayas, espejos de una cosmovision. Pages 97-131 in *Los tejidos mayas:* espejos de una cosmovisión. Cholsamaj, Guatemala.

Sky Band is pictured in her Figure. 4.38, from Seibal Stela 11 in Fig. 4.39, and Palenque in Pakal's tomb, Fig. 4.31. Sky Band on a hem of Yaxchilan Lintel 24 is pictured in her Fig. 4.30. Montoya shows ten individual Sky Band motifs in her Fig. 4.32, but does not indicate from what sculpture this was drawn; she cites Looper and Tolles 2000: Fig. 41, but her PDF on Academia.edu has no bibliography.

MORENO, Gloria

n.d. What information is available that would allow us to infer the sorts of clothing worn by elite Maya women during the Classic period? How would elite Maya women have expressed their identity through what they wore?

No date and no publisher listed in the Academia.edu posting of this helpful pdf. For the Sky Bands on the clothing of Lady Xoc of Yaxchilan, Moreno credits Josserand (2002: 129).

PINCEMIN-Deliberos, Sophia and Mauricio ROSAS-Y-KIFURI

Propuesta de estudio semiótico para los murales de Bonampak, Chiapas, México. Revista LiminaR. Estudios Sociales y Humanísticos, vol. XII, núm. 1, enero-junio de 2014, México, pp. 17-35.

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1998 El juego de las realidades: analisis de los atravios en Bonampak. Pages 193-240 in *La Pintura Mural Prehispanica en Mexico, II, Area Maya, Bonampak, Tomo II*, Estudios, UNAM, Mexico.