

Left- and Right-Handedness in Classic Maya Writing-Painting Contexts

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August 15, 2003

In a recent essay, Joel Palka discussed left/right symbolism in ancient Maya iconography and culture. Based on information from Classic Maya iconography, corroborative information from Maya ethnography, and cross-cultural investigations, he described left/right symbolic differences and the primacy of the right in Classic Maya spatial reference, social order, and worldview. For the Classic Maya, the right hand or side of the body often symbolized “pure, powerful, or superordinate”, while the left hand or side of the body signified “weaker, lame, or subordinate” (cf. Palka 2002; also see Fritsch 1964, Hertz 1909, Needham 1973).

There is one particular Classic Maya iconographic domain in which the left and right hand can be most effectively studied and described: the domain of writing and painting. In this essay I describe various contexts in which the left and right hand, and as such left- and right-handedness, of writers and painters can be identified. “Handedness” within the iconographic contexts discussed in this essay is defined as the hand that is used for writing and/or painting.

Visualizing the Hand

Writing and painting in general takes place while manipulating a writing or painting implement with either the left or right hand or, in a small percentage of instances, with both hands (ambidexterity). In the Western world there are now painters who use their feet or mouth to produce works of art (the majority of them being handicapped and no longer able to use their hands). At present there is no evidence that this kind of writer or painter existed in antiquity. In Classic Maya iconography the hand is a powerful medium to express different states of being, and it conveys intricate and complex messages to the observer(s). The many gestures of the hand and the positioning of the fingers are still not fully understood, but are under investigation and were recently described in detail (cf. Ancona-Ha, Pérez de Lara, and Van Stone 2000).

The hand is also used in a wide variety of Classic Maya hieroglyphic signs. The most important hieroglyphic signs that represent a certain gesture of the hand or include the hand, following the catalog numbers as allocated by Thompson in 1962 (note amendments by Grube 1990: Anhang B), are T220ab **ye**, T670 **CH’AM~K’AM/YAL** (depending on the super- and subfixed signs), T671 **chi**, T673ab **yo**, T710 **CHOK** (“hand-with-drops”), T711 **ke**, T713a **K’AL** (“flat-hand”), T713b **TZUTZ** (“flat-hand-with-dangler”), and T714 **TZAK** (“fish-in-hand”). In Maya hieroglyphic writing the human hand is the most represented body part (not counting the so-called “head-variants”).

The Hand That Holds the Brush or Quill Pen: Glyphs

There are not many examples of Classic Maya hieroglyphic texts in which one can identify a human hand holding a brush or quill pen. At present I am familiar with only two examples, both to be found in the hieroglyphic text painted on Kerr No. 0772. This hieroglyphic text, discussed in detail by Closs (1992), contains two collocations that depict a human hand holding a brush or quill pen:



Left hand holding
brush or quill pen



Right hand holding
brush or quill pen

The first glyphic collocation provides the title of a lady (*ixik*). The hieroglyphic sign superfixed to the T561(var) SKY sign is clearly an open hand holding a brush or quill pen. The specific position of the hand, with the thumb pointing upwards and the brush or quill pen resting on the open palm of the hand, indicates that here the left hand has been depicted.

The second glyphic collocation is a title referring to *a[j]tz'i[h]b'* “writer, painter” (in the context of the text on Kerr No. 0772, it is a title of the woman). The hieroglyph for *tz'ihb'* is a unique logographic sign. It depicts a hand holding a brush or quill pen in the writing or painting position. The thumb is below, the brush or quill pen passes through the space between the index and middle finger, while the two remaining fingers are seemingly free to move (this collocation can be transcribed **'a-TZ'IB'-b'a** for *a[j]tz'i[h]b'*). It is the right hand that is depicted here (the brush or quill pen passing through the space between the index and middle finger is quite a comfortable position if one wants to write or paint either at an angle or in a vertical position). This Classic Maya hieroglyphic text, possibly written by a master scribe from the court of the Tikal king K'i[h]nich Waaw (this king or *k'uhul ajaw* is mentioned in the text), thus depicts the writing or painting implement in both the left and the right hand.

Scribes at the Classic Maya Court, or: The Occasional “Lefties”

There is a wide variety of Classic Maya ceramics that depicts Maya scribes and painters at work (see Appendix). In a majority of the available examples the tools to write or paint with are held in the right hand, as illustrated by scribes from Kerr No. 1185 and 1565:



Kerr No. 1185 and 1565: Detail of a Right-Handed Scribe

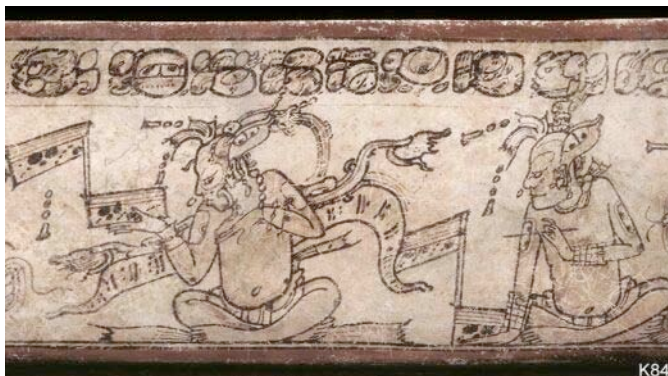
There are, however, rare examples in which the writing or painting implement is held in the left hand. A left-handed painter of an anthropomorphic mask can be found illustrated on Kerr No. 0717:



Kerr No. 0717: Rollout Photograph and Detail

The detail shows two artists at work. On the floor an anthropomorphic being with a vulture's head or mask can be found seated in front of a jaguar skin-covered screenfold book on which a shell ink container has been placed. In his right hand he holds a brush or quill pen; his lower left arm is crossed over his chest. The brush or quill pen is held between the thumb and the index finger, a common position for Maya scribes and painters. In the background on a bench a fully anthropomorphic figure can be found. He holds a mask in his right hand, while in his left hand he holds a brush or quill pen. The pen is held between the thumb and the index finger.

There is a large selection of Classic Maya ceramics that depicts pairs of (supernatural) scribes or painters. In most cases these scribes or painters are clearly right-handed. There is however one example in which one of the scribes is left-handed:



Kerr No. 8425: Part of Rollout Photograph and Detail of Scribe

This Classic Maya codex-style ceramic shows two supernatural male scribes; note that both are marked by T24(var) MIRROR-BRIGHTNESS and T504(var) DARKNESS markings, indicative of a supernatural or godly status. The scribe on the left lifts an opened screenfold book with his right hand (but painted as a left hand); the scribe on the right has an opened screenfold book to his side while in his left hand he holds a brush or quill pen. The painter of this vessel had a problem representing the left-handed scribe; the details of the hand and positioning of the thumb and fingers show that the painter of the vessel actually painted a right hand holding the brush or quill pen and attached that to the left arm of the scribe.

The Left Hand - Right Hand and the Supernatural

There is one particularly important example of a left-handed supernatural painter. This painter can be found in the iconographic narrative on Kerr No. 4022:



Kerr No. 4022: Rollout Photograph

The individual on the right is seated on the ground with the legs crossed. In the right hand this individual holds what seems to be a ceramic or wooden plate or bowl. A male figure is seated in front, also on the ground and also with the legs crossed. His left arm is extended towards the figure on the right and in his left hand he holds a thick quill pen. With this quill pen, held between thumb and index finger, he seems to be painting the face of the figure on the right.

The spots on the body of the left figure, indicated by circles on the cheek and upper arms, suggest that this is Hun Ajaw (as “Hunahpu”, cf. Coe and Kerr 1998: 148), one of supernatural twin brothers (he forms a twin with Yax B’ahlam, e.g. Kerr No. 1892; cf. Coe 1989) or possibly a human impersonator. The figure he is painting may be his father, the resurrected Maize God, as suggested by Coe (in Coe and Kerr 1998: 148), although certain features may point to the fact that a female figure is intended (cf. Boot 1997: 64). The diagonally placed hieroglyphic text records the fact that this is the quill pen (the third glyph reads **che-b’u** for *che’eb’* “quill pen”) container (possibly *chub’al* or *chumal*) of a lady named Ixik Wi’ B’ahlam (Boot 1997: 63-64, Fig. 3). If the figure on the right is indeed a female, it is noteworthy that she is holding a wooden or ceramic bowl that is used to provide fresh paint for the quill pen in the narrative scene. This may be the bowl as referred to in the hieroglyphic text. The left-handed painting Hun Ajaw (or impersonator) is unique in Classic Maya iconography. But there are other supernaturals that seem to write with the left hand:



Kerr No. 3413: Rollout Photograph and Detail of the Monkey Scribes

The complex iconographic narrative of Kerr No. 3413 contains the image of two supernatural howler monkey scribes on either side of an opened screenfold book. The monkey scribes have been identified as the supernatural patrons of writing, painting, and the arts in general (cf. Coe 1977). The howler monkey scribe on the left has his left hand raised, and it is in this hand that he holds a brush or quill pen. Although not actually writing or painting, the howler monkey scribe holds, i.e. manipulates, the writing or painting implement with his left hand and as such indicates hand preference. The howler monkey scribe on the right has his right arm crossed over his chest, while his left arm is raised and its hand touches the back of the screenfold book. At least one of the two howler monkey scribes is clearly left-handed.

There are other left-handed supernaturals:



Kerr No. 1196: Rollout Photograph and Detail of Hand

Kerr No. 1196 is a well-known Classic Maya codex-style ceramic vessel. It shows two scenes; in both an aged supernatural being (of which the large eyes are indicative) is seated in front of a pair of male youths. In both scenes the aged supernatural being has a netted headdress to which is attached a brush or quill pen-like object. This kind of netted headdress (as hieroglyphic sign T63/T64 possibly to be read *itzam*, as recently suggested by David Stuart) is often found being worn by scribes, painters, and artists in general (cf. Coe and Kerr 1998). In the scene on the right the aged supernatural has a screenfold book in front of him; he reads or recites from the book, as indicated by his opened mouth, speech scrolls, and emanating numerals. More importantly, it is in his left hand that he holds or manipulates a long thin instrument that points to the opened codex. It is the left hand to which preference is given. This long thin instrument has all the marks of a brush pen, an instrument frequently depicted in Classic iconographic narratives that illustrate either writing or painting.

Probably the best known supernatural that is in the process of writing or painting is shown with the implement in its right hand:



Kerr No. 0511: Rollout and Detail of Right-Handed Supernatural “Rabbit” Scribe

This narrative scene takes place at the court of God L, the god who wears the celestial owl headdress (cf. Boot 2003). God L and his female consorts are seated upon an extensive throne or bench structure. On the floor one can find a small rabbit seated in front of an opened codex. In his right hand (actually it is his paw) he holds a brush or quill pen.

Predominance of the Right Hand?

In most contexts in which the Classic Maya depicted artists, scribes, or painters the tools with which they worked were held in the right hand (see Appendix). Only in a small sample of

unique iconographic narratives one can find left-handed scribes and painters. These rare references could be found, for instance, on Kerr No. 0717, 1196, 3213, 4022, and 8425 and have been illustrated in this essay.

Already in the Early Classic there seems to have been a preference for the right hand in the context of Maya writing-painting. A pair of Early Classic ceramic statuettes (probably the top part of cache vessels) shows this preference for the right hand:



Two Ceramic Statuettes
(Cleveland Museum of Art Inv. No. 1994.12.1 & 1994.12.2), images adapted from www.clevelandart.org

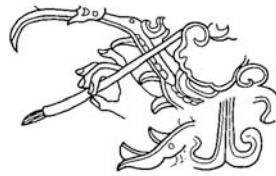
The figure on the left depicts a young male seated in a cross-legged position. In his left hand he holds a strip of bark paper to which are attached three branches each with a single leaf. This strip of bark paper was probably taken from the *Ficus cotinifolia*, H.B. & K., or *Ficus pertusa*, Linn.f., fig trees native to the Maya area, the bark of which served as the material from which paper was made. In his right hand he probably held a writing or painting implement, originally made of some kind of perishable material, to indicate that he was either writing or painting (note 1). The heads of serpents emerge below his arms; these heads may represent the serpent associated with writing, which possibly was a manifestation of Itzamnaah (see below), the creator god and inventor of writing.

The figure on the right shows a supernatural entity. It has the characteristics of the creator god Itzamnaah (note the headband and artificial beard) and the howler monkey (the elongated monkey face as well as the tail). The howler monkey can be found in many writing- and painting-related contexts, the most important one found on Kerr No. 0954. The tail of this supernatural is transformed into some kind of a serpent (see below). The supernatural entity is in the process of carving or painting an anthropomorphic mask, which he holds in his left hand. In his right hand he once held a painting or carving implement, which also in this case was made of perishable material and unfortunately has not survived.

Both these figures seem to illustrate the predominance of the right hand in writing, painting, and carving contexts already in the Early Classic period.

Writing and Serpents: The Final Right Hand

As could be seen in the few examples illustrated here, there is a close association between the act of writing, painting, and carving, the creator god Itzamnaah, howler monkeys, and serpents. Possibly the most impressive serpent associated with writing can be found on an incised bone from the tomb of Jasaw Chan K'awiil in Temple I, Tikal:



Detail of Tikal Incised Bone: Hand Holding Brush Pen Emerging From Serpent Jaws
(after Reents-Budet 1994: Figure 2.7a)

It is the right hand of an anthropomorphic being that holds the brush pen. The serpent from which emerges the hand holding the brush pen has been identified as “Itzamná in the guise of a serpent/dragon” (Coe and Kerr 1998: caption to Fig. 65). That basic identification is correct, as some kind of serpent is indeed associated with writing, as can be seen in the following two examples:



Details of Scribes from Kerr No. 1523 and 8425

These two examples illustrate a supernatural scribe to whose back is attached the head of a raptorial bird. From the bird's mouth emerges a serpent with opened jaws that serves as a tail

of the supernatural scribes. This serpent tail is actually the same ophidian version of the howler monkey tail as seen on the Early Classic ceramic statuette, illustrated above, possibly depicting Itzamnaah in the guise of a howler monkey.

There is a carved and incised ceramic vessel that illustrates a howler monkey who has an opened screenfold book in his lap. Writing implements seem to be contained in his headdress, while in front of the monkey a curling branch or vine with a large flower can be found; this is the flower of the *Ficus cotinifolia*. In Yucatec Maya this tree was and is known as Huun (also the word for bark, paper and book) and Kopo'. To the back of the howler monkey one can find attached the head of a raptorial bird from whose mouth emerges a single branch or vine with again a large flower. It is this vine or branch that serves as the tail of the howler monkey (this flower contains the glyphic signs for ink container, T174var possibly *k'och*, as well as ink, T709, or *sab'aak*, *ab'aak*; cf. Boot 2002):



Kerr No. 0954: Detail of the Howler Monkey Scribe

The howler monkey tail was envisioned as a blossoming vine or branch, which itself became represented as a serpent. The fact that these vines or branches and serpents indeed refer to the same symbolic object can be established through the fact that they all emerge from the opened mouth of a raptorial bird, in all probability a Great Horned Owl (cf. Boot 2003). The close association between the howler monkey as patron of writing and painting and the blossoming vines or branches of the *Ficus cotinifolia* (or a related native fig tree) or bark paper tree can be found illustrated on Kerr No. 5637:



Kerr No. 5637: Detail of Howler Monkey and Sprouting Paper Bark Tree

Final Remarks

Within the context of the iconographic narratives that illustrate the act of writing or painting it is generally the right hand that holds the writing or painting implement. In rare examples one can find a left-handed writer or painter, as in the case of Kerr No. 0717, 1196, 3413, 4022, and 8425. Additional examples as well as a discussion of the percentages of left- and right-handedness can be found in the Appendix. It is however too early to conclude that those artists or scribes who were left-handed were considered to be “weaker, lame, or subordinate”. The scribes, if part of the human world, clearly belonged to the upper class of their society (note the royal parents of the scribe Aj Maxam at Naranjo, cf. Kerr No. 0635). The supernaturals that used the left hand are all of great importance. The howler monkey scribe is considered to be one of the patrons of writing and the arts, Hun Ajaw is one half of an important pair of twin brothers, while the old god may be a manifestation of the creator god Itzamnaah (as possibly indicated by the netted or *itzam* headdress), the inventor of writing.

The examples presented in this essay provided moments frozen in time in which the preference for one hand in a skilled manipulative task (in this case writing, painting, or carving) could be established and studied. Although the left hand is used much less frequently than the right hand, there does not seem to be any direct negative connotation with left-handedness in writing, painting, and carving narrative contexts in the Classic period.

Note

1) These two ceramic statuettes were once part of a private collection in Europe and were illustrated in two catalogs published in 1985 and 1992. The published images of the figure on the left indicated that this young man or noble was writing or painting with his left hand (Berjonneau and Sonnery 1985: Figure 364; *Treasures of the New World* 1992: Figure 178). In 1994 these statuettes were acquired by the Cleveland Museum of Art. Images of these on the web site of the museum showed both with the writing, painting, or carving implements in their right hand. In August of 2003 I asked the museum which of the hands was actually used to hold the writing or painting implement. Dr. Susan Bergh, curator of the Department of the Art of the Americas, informed me that both figures originally held their implements in their right hand (e-mail to the author, August 5, 2003). As such the photographs in the 1985 and 1992 catalogs must have been inverted (probably for aesthetic reasons, as in both cases the young lord faces the supernatural being).

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Appendix

The following table provides examples of scribes or painters illustrated on Classic Maya ceramics as contained in Justin Kerr's archive of rollout photographs of circa 1700 vessels.

Separate columns indicate the allocated Kerr number in the rollout archive, the amount of scribes or painters, the use of the left or right hand when a writing or painting implement is held in the hand, or when no writing or painting implement is present.

<i>Kerr No.</i>	<i>Amount of Scribes/Painters</i>	<i>Writing/Painting Implement</i>		
		<i>Left Hand</i>	<i>Right Hand</i>	<i>None</i>
0344	7		x	
0501	2			x
0511	1		x	
0717	3	x	x	x
0760	2			x
0761	2			x
0954	1			x
1185	2		x	x
1196	2	x		x
1220	2			x
1221	2		x	
1225	2			x
1252	2		x	
1257	2		x	
1303	2			x
1522	3			x
1523	2		x	
1565	2		x	
1787 (=1783)	2			x

2095	2			X
2717	2			X
2744	2			X
2756	2			X
2994	2			X
3324	1			X
3413	2	X		X
3460	1	X		
4010	2		X	X
4022	1	X		
4143	1	X		
4339	2			X
4550	1		X	
4686	2			X
4800	2			X
4962	4		X	
4969	2			X
4992	2			X
5004	2			X
5012	2			X
5348	2			X
5352	3			X
5354	2			X
5373	2			X
5495	2			X
5597	2		X	
5721	2		X	X
5824	1		X	
6020	2		X	X
6061	2		X	
6500	1		X	
6599	2			X
6738	1			X
7008	2			X
7009	2			X
7447	2			X
7715	2			X
8393	4			X
8425	2	X		X
8457	2			X
8479	1	X		

Out of an archive of circa 1700 Classic Maya ceramics a total of 60 ceramics illustrates writers or painters. These 60 ceramics provide the images of 121 writers or painters. Of these 121 scribes or painters, 42 hold a writing or painting implement in either one of their hands. Of these 42 scribes or painters, 8 are left-handed (19%), while 34 are right-handed (81%).

In the present the percentages of left and right handedness are calculated at 5 to 20% for left-handedness and 80 to 95% for right-handedness (percentages differ according to the criteria used to define left- and right-handedness as “handedness” lacks a precise descriptive standard, cf. Holder 1992). Although the sample as contained in this table can not be considered exhaustive (this sample only concerns writing-painting contexts on painted, carved, or incised ceramics), it is of interest to note that the percentages of the left- and right-handed Maya scribes or painters in the Classic period fall within the spectrum of percentages as calculated for the present. This specific distribution of left- and right-handedness may indicate that Classic Maya human (and supernatural) hand use was unconstrained by, or resistant to, cultural (and supernatural or divine) pressures for conformity (compare to Steele and Mays 1995).

Future osteological research in the Maya area may include the detailed measurement of the humerus and radius in adult skeletons to obtain an indication of arm length. The presence of individual left-right arm length differences would then be a good proportional indicator for left- or right-handedness (cf. Steele and Mays 1995).

Table Summary

- census: 60 ceramic vessels out of an archive of circa 1700
- depict 121 scribes or painters of which
- 78 scribes or painters do not hold writing or painting implements
- 42 scribes or painters hold writing or painting implements
- 8 are left-handed (19%)
- 34 are right-handed (81%)

The author of this essay is right-handed.