Developing Guidelines on Henna: A Geographical Approach

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In Chapter One, I demonstrated that there has been no coherent study of henna in the west, particularly its historical geographies, and that is complicating laws, commerce, and use of henna. To solve this problem, one could map the historical geographies of henna if one could collect sufficient artifacts that demonstrate the presence of henna, and place them in time, space, and culture. To do this, one would have to establish criterion for identifying what is, and is not henna. In Chapter Two, I proposed for identifying henna based on the characteristics of human skin and henna. These should be the same at present as they were ten thousand years ago. In this chapter, I will demonstrate how these criteria can be used to examine body markings on artifacts and determine whether these may be interpreted as presence of henna body art. In Chapter Four, I will show how the
artifacts that have positive evidence of henna can be mapped to construct the historical geographies of henna.

Some artifacts will have strong evidence of henna. Some will have weak or inconclusive evidence of henna. Others may be evidence of body markings from other sources such as tattoo, scarification, or body paint. Recent artifacts will have the most easily identifiable evidence of henna, because there will be more corroborating evidence available, and the evidence will not have deteriorated. If a one-year-old artifact has body markings that are completely consistent with henna, and inconsistent with any other sort of marking, we may proceed to discuss the artifact as representing evidence of henna body art. If a ten thousand year old artifact has body markings that are completely consistent with henna, and inconsistent with any other sort of marking, we may proceed to discuss the artifact as representing evidence of henna body art. Unfortunately, ten thousand year old artifacts are unlikely to have an intact representation of body markings, nor are the representations as clear as in a photograph, so conclusions drawn cannot be as firm as those from a photograph. Even with incomplete information to populate the groups of criteria presented in this chapter, the available evidence of body art can be “sieved”, to support or negate evidence of ancient evidence of henna.
Criteria Groups for Evaluating Artifacts with Body Markings

There are four groups of criteria proposed: Criteria groups I through IV are groups of positive, supporting, ambivalent and negating evidence of henna based on what has been established in Chapter Two.

Criteria Group One: Negative Evidence of Henna

First is a “negative” group of criteria to eliminate objects from consideration that cannot possibly be representations of henna. These criteria have a list of characteristics that would eliminate henna as a source of markings, based on the information in Chapter Two. If any object has the following characteristics, it cannot be henna, and should be eliminated from consideration as henna body art

- Location: Western Hemisphere
- Climate: Temperature minimum below 11C
- Climate: moderate to heavy precipitation
- Black body markings on upper arms, legs, torso, or head
• Bright red body markings on upper arms, legs, torso, or head
• Color other than henna range (such as blue or yellow)
• Cultural celebrations do not include henna
• Material culture does not use henna
• Trade routes unavailable for importing henna from cultivation areas
• No words in language for henna plant and/or henna art

If an artifact has body markings which might be henna, or a word in text that might be “henna”, but has these negative criteria, is unlikely to be evidence of henna. For instance, a woman with the name “Henna” in Iran may be named after the henna plant. A woman with the name “Henna” in Finland is probably not named after the plant.

Criteria Group Two: Positive Evidence of Henna

Criteria Group Two identifies strong characteristics of henna body art. Any artifact that has “positive evidence” of henna from Criteria Group Two, and no “negative evidence” from Criteria Group One, it should be considered as “possibly henna.” If an object is determined to be “possibly henna”, additional evaluation through Criteria Groups Three and Four can determine if there is supporting evidence for henna. Criteria Groups Three and Four identify supporting, and ambivalent evidence of henna. Based on the
information in Chapter Two, the following should be considered strong evidence of henna.

- Location: Eastern Hemisphere
- Climate: Temperature minimum over 11 C
- Climate: Temperature maximums over 30C
- Climate: Low to moderate precipitation
- Marking Position on Body: Palms, soles, fingers, toes
- Fingernails or toenails stained red, brown, or near black
- Color within range of henna

According to Criteria Group Two, if a tenth century Spanish illuminated manuscript has a painting of a people with black and red markings on their fingernails, hands and feet, the painting meets all of these criteria, and the markings may “possibly represent henna”. If there are cultural, trade, and linguistic evidence from Criteria Group Three that apply to this artifact, such as the markings being on women of childbearing age, the language including a word for henna, and known commercial trade in henna, then we can say that the markings “probably represent henna”.

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Criteria Group Three: Supporting evidence of Henna

The elements of Criteria Group Three are not in and of themselves positive evidence of henna body art, but they corroborate evidence of henna use and availability based on known characteristics of culture, language and trade. If an object has markings that appear consistent with Criteria Group Two and has supporting evidence from Criteria Group Three, this strengthens the case for henna, and moves the artifact from “possible evidence of henna” to “probable evidence of henna”.

- Markings appear on female of childbearing age
- Cultural celebrations include henna
- Indigenous words in language for henna plant and/or henna art
- Trade routes available for importing henna from cultivation areas
- Material culture includes other uses of henna: such as dye, preservative, or perfume
- Ethnomedical practice includes henna

For instance, if a New Kingdom Egyptian blue faience bowl has a figure of a woman with a pattern on her thigh, this would meet some of Criteria Groups Two and Three. However, the placement of the pattern falls in Criteria Group One, and should be further analyzed for potentially ambivalent evidence of henna.
Criteria Group Four: Ambivalent Evidence of Henna

Criteria Group Four is a set of body art characteristics that may apply to henna, but which also may be characteristics of tattoo, paint, or scarification. One cannot draw a conclusion that objects with these markings are henna without supporting evidence from Criteria Groups Two and Three.

- Marking Position: lower arms and hands, lower legs and feet
- Bright red body markings on hands and feet
- Black body markings on hands and feet
- Brown marks on torso or head
- Brown marks on upper arms and legs
- Markings appear on man
- Markings appear on child
- Foreign words in language for henna plant and/or henna art

In many cultures, tattooing, painting, and other forms of body marking are done in combination with henna, or in the place of henna. These ambiguous markings, such as the one previously proposed of a blue faïence bowl, should be examined in context of as much additional information as possible to make the determination of whether it is henna or another form of marking.
Using the Criteria Groups to Evaluate Evidence of Henna Body Art:

Evaluation of evidence using these criteria groups is not sufficient to prove any particular artifact shows evidence of henna use, but is nonetheless useful in proposing whether a body marking represents henna or not, and supporting that proposal. These criteria groups can be used to support or eliminate henna as a source of body markings in ancient artifacts. The most recent artifacts will have the most corroborating information available to make the strongest cases for the presence or absence of henna, and older, broken artifacts will have less, with information lost over time. As more artifacts can be brought in to populate the group, the more robust the evidence for henna will be.

Following are ten examples of artifacts that have body markings, which will be analyzed through the criteria groups to determine whether or not these may be interpreted as representations of henna.
Example One:

Figure 82 from Qajar Iran shows a young woman with red-stained hands, and black markings on the back of her hand and around her navel. When we apply the criteria groups to this image we find no negatives from Criteria Group One, the criteria for negative evidence of henna. From Criteria Groups Two and Three we find strong confirming evidence that the red color of the woman’s hands represents henna.
Criteria Group Two: Positive Evidence of Henna

- Location: Iran
- Climate: Temperature minimum over 11°C: Yes, in Persian Gulf region
- Climate: Temperature maximums over 30°C: Yes, in Persian Gulf region
- Climate: Low to moderate precipitation: Yes, in Persian Gulf region
- Marking Position on Body: Yes, the red orange color is on the palms and fingers
- Fingernails or toenails stained red: Yes, the fingernails are stained red
- Color within range of henna: Yes, the color is in the red-orange range

Criteria Group Three: Supporting evidence of Henna

- Markings appear on female of childbearing age: Yes, the woman is a young post-pubescent female.
- Cultural celebrations include henna: Yes, Iranian culture has a long and well documented tradition of celebrating holidays and weddings with henna.
- Indigenous words in language for henna plant and/or henna art: Yes, the word for henna in Farsi is pronounced *Hina*
- Trade routes available for importing henna from cultivation areas: Yes, henna can be grown near the southern coast of Iran.

A close examination of this painting in Figure 83, an enlargement of her hand and navel, shows that the young woman had more than one kind of body adornment. Her hands are stained a color consistent with henna, but she also has a small black pattern on the back of her hands. She also has black markings consistent with tattooing around her navel.
These are consistent with records of women’s tattooing traditions in Iran during the Qajar period. (Field, 1958)

Figure 83: detail, Two Harem girls, attributed to Mirza Baba, Iran 1811-14, Collection of the Royal Asiatic Society London, 01.002

In this enlargement, you can see that the solid orange color on her hand is covering another pattern going along the base of the hand and thumb and up the index finger. I have examined similar Qajar paintings in the Victoria and Albert Museum that show
patterns underneath an orange over painting. A previous darker henna pattern was painted over with a simple “dip” pattern, possibly to bring the image “up to date” with changing court styles. The above information supports an interpretation that this image represents henna body art worn by fashionable women at the Qajar court, but may also show a change in henna fashion!
Example Two:

Figure 84: Example Two.

A Lady Playing the Tanpura, Rajasthan, Kishangarh, ca. 1735

Metropolitan Museum of Art, New York, Fletcher Fund, 1996 (1996,100.1) Indian Court Painting, 16th – 19th C
In Figure 84, a female musician has red fingertips, indication of a red palm, and a red mark on her forehead. When we apply the criteria group to this image we find no negatives from Criteria Group One for the red stains on her hands, so we may proceed to investigate those body markings as possibly representing henna.

Criteria Group Two: Positive Evidence of Henna

- **Location:** Eastern Hemisphere: Yes, this image is from India
- **Climate:** Temperature minimum over 11 C: Yes, this is from Rajasthan, where the temperature minimum was over 11C during the 18th century
- **Climate:** Temperature maximums over 30C: Yes, this is from Rajasthan, where the temperature maxima were above 30C during the 18th century, based on flora in local landscapes paintings during that time and period. The flora included mangos, bananas, and other tropical plants (Kossak, 1997, Figs. 70, 41, 34).
- **Climate:** Low to moderate precipitation: Yes, this is from Rajasthan, a semi-arid zone where there were prolonged droughts during the 18th century, based on landscape paintings from 18th century Rajasthan showing semi-arid conditions similar to those at present, as well as depictions of violent monsoon storms (Kossak, 1997, Figs. 52, 56, 58, 71).
- **Marking Position on Body:** Palms, soles, fingers, toes: Yes, there are markings are on palms and fingertips.
- **Fingernails or toenails stained red, brown, or near black:** Yes, her fingernails are stained red.
• Color within range of henna: Yes, the stain color on fingertips, palms, and nails is red-orange, consistent with henna.

The above constitute strong evidence of henna body art on the palms, fingertips and fingernails in Figure 84.

Criteria Group Three: Supporting Evidence of Henna

• Markings appear on female of childbearing age: Yes, these markings appear on a sexually mature female.
• Cultural celebrations include henna: Yes, Rajasthan’s cultural celebrations frequently included henna during the 18th century according to eyewitness accounts in British diaries.
• Indigenous words in language for henna plant and/or henna art: Yes, Rajasthani and Gujarati languages use “mehandi” and similar words to refer to the plant and art of henna.

• Trade routes available for importing henna from cultivation areas: Yes, henna may have been indigenous to Rajasthan, and was cultivated there from the 18th century on.
• Material culture includes other uses of henna: such as dye, preservative, or perfume: Yes, henna was a village hedge plant, and flowers were used in perfume in Rajasthan.
• Ethnomedical practice includes henna: Yes, folk medicine in Rajasthan uses henna to cool the body in extremely hot weather.
The above are corroborating evidence that support the conclusion that the red markings on palms, fingertips and fingernails represent henna, except for the consideration that fingertips and nails also are consistent with an Impatiens Balsamica stain, which was available in the area, and has been used for such.

The forehead bindi mark would be negative for henna: though henna can stain the face, it does not leave dark reddish brown marks on the forehead. It is more probable that her bindi was done with kumkum or sandalwood, the cosmetics traditionally used for that purpose.

Therefore, in Figure 84, we can tentatively identify the fingertips and nails as being stained with henna, though they could also have been stained with Impatiens Balsamica.
Example Three

Figure 85: Example Three; King Mahajanaka, Ajanta Caves, Cave I, Sankhapala Jataka, Maharashtra India, 5th – 6th century CE (Behl, 1998, fig. 97)

There is no negative evidence of henna from Criteria Group One for Figure 85. There is much positive and supporting evidence from Criteria Groups Two and Three.
Criteria Group Two: Positive Evidence of Henna

- Location: This image is from Maharastra, India is in the southwestern Indian subcontinent, where henna grows easily.

- Climate: January mean temperature in Maharastra is presently 19 C, suitable for henna, and was probably approximately the same in the year 400 CE as at present. The Ajanta paintings include depictions of tropical flora, consistent with a very warm climate with moderate precipitation.

- Climate: Temperature maxima in Maharasthra, India are over 38C in May at present, so can produce good dye content in henna. The near-nude state of many figures implies that the maxima were warm enough for people to wear little clothing.

- Climate: Low to moderate precipitation: Maharasthra has 2000 mm annual precipitation, not ideal for henna, but suitable for henna to grow easily.

- Marking Position on Body: Palms and soles marked

- Color within range of henna: brownish

Criteria Group Three: Supporting evidence of Henna

- Markings appear on female of childbearing age: This figure is a male, but female figures in the painting have the same hand markings.

- Indigenous words in language for henna plant and/or henna art: Court records for the period mention henna (Auboyer, J.; 1965: 88).

- Material culture includes other uses of henna: such as dye, preservative, or perfume: court records from the Gupta period describe henna use as a hair dye (Auboyer, J.; 1965: 88).
The palm markings are consistent with henna, and not out of place on a male in India during that period. Many female figures on the Ajanta caves have the same palm and sole markings. However, these markings are also consistent with lac, which is recorded as being used to tint palms and soles in India during that period. (Auboyer, J.; 1965: 88) If the original color painted were vivid red that would support the interpretation of the hand markings as being made with lac. If the original color painted were brownish red or brown that would support the interpretation of the hand markings as being made with henna. Without knowing whether the color painted on the palms of these figures has remained stable or has changed in 1500 years, it’s impossible to determine whether these markings represent henna or lac.
There is no negative evidence from Criteria Group One for the hands in Figure 86, though there are markings on the woman’s face that cannot be henna.
Criteria Group Two: Positive Evidence of Henna

- Location: This is from Morocco, where henna grows easily, and is presently commercially cultivated.
- Climate: Temperature minima in Morocco are over 11 C except in the mountainous regions, and so is suitable for henna.
- Climate: Temperature maxima on Morocco are over 30C except in the mountainous regions, and so is suitable for henna.
- Climate: Precipitation is low to moderate in Morocco, and so is suitable for henna.
- Marking Position on Body: The fingers appear to have dark patterned stains.
- Color within range of henna: This is unknown, due to photographic and reproductions limitations, but indicates a dark stain.

Criteria Groups One and Two support the dark finger markings in Figure 86 as being “possibly” henna. Corroborating evidence from Criteria Groups Three and Four may be used to further identify this woman’s markings.

Criteria Group Three: Supporting evidence of Henna

- Markings appear on female of childbearing age: This woman is a post-pubescent female.
- Cultural celebrations include henna: Yes, henna was used for adornment in many Moroccan celebrations at the time of this photograph (Westermarck: 1914).
- Indigenous words in language for henna plant and/or henna art: Morocco used the Arabic word, “henna” for the plant and the body art.
• Local cultivation of henna: henna grows easily in Morocco.

Figure 87 is an enlargement of this image shows staining consistent with henna on the woman’s thumbnail, a streak across her palm, and staining on her index and middle fingers. Her forehead, tip of nose and chin have marks not consistent with henna, but which are consistent with tattooing as described in Seawright (1984), and other texts on Moroccan women’s traditional body markings.

Figure 87: Detail: Postcard 185: Scenes Et Type, Fez, Beuté Morocaine

H. D. Séréro, Fez, Mailed 1909

The scarring on her face does not appear to be consistent with deliberate scarification markings; the markings are random and are more consistent with an accidental scalding or burning, both common household accidents. Skin mapping, geographic mapping, and
corroborating cultural information strongly support this image as evidence of henna body art, combined with tattooing in Morocco, in the first decade of the twentieth century.
Example Five

Figure 88: Example Five: Post card, purchased from an Ebay auction, labeled “Arab woman” (purchased February, 2006, author’s collection)

Red markings on the hands may be considered evidence of henna. However, “Самоедка за выделкой оленьей шкуры. Самоедка за выделкой оленьей шкуры. Ненцы (самоеды). Из фотоархива РЭМ” is on the reverse of the post card, identifying the figure as a “Samoyed Woman”. This can be corroborated with an image of a Samoyed woman from the Russian Museum of Ethnology, Самоедка за выделкой оленьей...
шкуры, seen in the Figure 88. The Samoyed are a sub arctic group of nomadic reindeer herders living in Siberia.


Based on identification of this image as of a Samoyed woman, corroborated with Figure 89, many characteristics fall into negative evidence of henna:
Criteria Group I: Negative Evidence of Henna

- Climate: Siberian temperature minimum below 11C:
  - Climate: Temperature maximum below 30C: Siberia
  - Climate: moderate to heavy precipitation: Heavy snows

Based on the negative evidence that the climate in Siberia is inhospitable to henna, and there are no known cultural or trade connections linking the Samoyeds to henna-using groups, the red on the woman’s hands cannot be considered henna, and is more likely to represent red gloves, or blood from processing reindeer hides.
Figure 90 has an “eye in hand” pattern frequently seen in Middle Eastern and North African henna patterns meant to deter the Evil eye. However, this is a line drawing is of “The Rattlesnake Disk”, an engraved circular sandstone palette from Alabama, Tuscaloosa and Hale Counties, Moundville, A.D. 1300–1450. It is a pre-Columbian artifact, presently in the Alabama Museum of Natural History. This places this object into Criteria Group One, an object from the Americas prior to 1850, and therefore cannot represent henna body art.
Example Seven

Figure 91: Example Seven: Detail from Life in The Country: The Nomad Encampment of Layla’s Tribe, Tabriz, 1539 – 43, Cambridge, Harvard University Art Museum, 1958.75

The illuminated manuscript from which Figure 91 is taken was painted in Tabriz, Iran, which is about 600 km north of the climate zone for henna. Tabriz has snowy winters and mild summers, which are Criteria Group I negative evidence for henna. However,
Tabriz is on trade routes that could transport henna easily from the southern gulf shore region of Iran, where henna is cultivated, and has strong cultural traditions for henna use. Therefore, the cold climate of Tabriz does not eliminate the possibility that the girls and woman’s hands and feet show henna patterning. Both have markings on their foreheads that should not be judged to be henna, and probably represent tattoos.

Criteria Group Two: Positive Evidence of Henna

- Marking Position on Body: Palms, soles, fingers, toes: Both the woman and the girl have markings on their hands and feet.
- Fingernails or toenails stained red, brown, or near black: The girl’s fingernails and toenails are represented as being stained reddish orange and the woman’s fingernails and toenails are represented as being stained black.
- Color within range of henna: The girl’s hands and feet are within color range for a brief application of medium quality henna. The woman’s hands and feet have patterns that are in a color range for henna of very high quality, which has been mixed with perfume, and has been darkened with heat or alkalini after paste removal. This would be consistent with the girl being of servant class, and the woman of higher rank.

Criteria Group Three: Supporting evidence of Henna

- Markings appear on females of childbearing age: The woman is certainly of childbearing age, and the girl may also be pubescent.
- Cultural celebrations include henna: Iran has a strong henna tradition, henna was praised in poetry of the period, and noted by travelers.
• Indigenous words in language for henna plant and/or henna art: In Iran, henna is referred to as “hina”.

• Trade routes available for importing henna from cultivation areas: Henna grows well along the Persian Gulf coast of southern Iran. There were well-established trade routes between the Persian Gulf and Tabriz.

Criteria Group Three: Ambivalent Evidence of Henna

• Black markings on hands and feet: The woman has black patterning on her hands and feet. High quality henna, mixed with alcohol-bearing perfume, then heated after application can leave a nearly black stain on skin. Since the soles and palms are patterned as well as the tops of feet and backs of hands, it is unlikely that these marks represent tattoos. It is also unlikely that this represents a black cosmetic paint. On the sole of the foot, black paint would soil shoes and smear with walking. On the fingertips and palm, black paint would soil her food and the child she is nursing. The black markings also only occur on the areas of the hands and feet that can easily be oxidized to a black or near-black color. Many images from Safavid art show similar black markings on hands and feet, and since they always include black markings on fingertips and fingernails, and rarely extend beyond the wrist or ankle, this would favor the interpretation of darkened henna rather than black body paint.

• Brown marks on torso or head: Both females also have markings on their foreheads, which would not be henna markings. Iranian women have facial tattooing traditions, so it is probably that these marks represent forehead tattoos.
This evidence from the criteria groups indicates the hand and foot markings on the females in Figure 91 are probably representations of henna, and the forehead markings are not.
Example Eight

Figure 92: Example Eight: Figure from the Little Palace

Knossos Post-Palace Period, 1400 – 1100 BCE Gallery X, Case 140, Figure 46,
Herakleion Museum, Greece

Figure 92, a ceramic female figure has markings on palms, knuckles and fingertips. There are additional markings on wrists, throat and chest. The throat markings are very unlikely to represent henna, and are more probably representations of a necklace, and Figure 93, a similar piece, clearly has a necklace in the same place. The wrist markings
may represent bracelets, and the lines on the torso seem likely to be clothing. The hand markings may be examined in Criteria Groups Two and Three for evidence of henna.

Criteria Group Two: Positive Evidence of Henna

- Location: Eastern Hemisphere: The figure is from the Aegean Islands.
- Climate: Temperature minimum over 11 C: In warm climate periods, the Aegean islands temperatures do not fall below 11C
- Climate: Temperature maximums over 30C: The Aegean islands can be warm in the summer, but they don’t get much above 30F.
- Climate: The Greek Islands have low to moderate precipitation with long, dry summers.
- Marking Position on Body: Palms and fingers: The markings on this figure are palms, fingertips and knuckles.
- Fingernails, fingertips, palm markings are brown: Though this figure is ceramic and the colors are limited to iron pigments, the color is consistent with that of henna.

Criteria Group Three: Supporting evidence of Henna

- Markings appear on female of childbearing age: The woman is post-pubescent.
- Indigenous words in language for henna plant: the words for henna in the Aegean islands at that period are Cyperus or Phoinikion (Chadwick, 1976, p 120-21)
- Records of henna grown on Crete (Chadwick, 1976, p 120-21): there was henna locally available, and there was not a need for import from another area.
The above evidence supports an interpretation of the hand markings on Figure 92 as representing henna, and indicates a probability of henna use in the Aegean Islands in 1400 – 1100 BCE.

Given the proximity in time and place of this figure and the mention of henna in the 15th century BCE Ras Shamra texts, the Ugaritic Myth of Baal and Anath, according to the Version of Ilimilku (De Moor 1971: 85), one could propose a connection. This is a figure of a young woman with hennaed hands, and she may be an illustration of the myth, a woman hennaed to go seek her husband. The Aegean Islands were commercial and cultural partners with Ugarit, where the Ras Shamra texts were written. They were also connected with Myceneae, Crete, and Cyprus, where other similar statues have been found.
Example Nine

Figure 93: Example Nine: Figure from Paphos, Cyprus, 700 BCE;

The British Museum

Figure 93 is similar to Figure 92. A single arm remains on the figure, and there are red markings in the place of the palm. The wristbands and upper armbands probably represent clothing and bracelets. The location is Cyprus, a suitable zone for henna during warm climate periods as are the Aegean Islands.
Criteria Group Two: Positive Evidence of Henna

- Location: Cyprus, which is in the eastern Mediterranean
- Climate: In Cyprus, the temperature minima are over 11°C during warm climate periods.
- Climate: In Cyprus, the temperature maxima are over 30°C during warm climate periods.
- Climate: There is low to moderate precipitation, and very dry summers in Crete.
- Marking Position on Body: The palms are marked.
- Color within range of henna: the marking color is consistent with henna, and differs from black markings denoting eyes, jewelry and clothing elements.

The Criteria Group Two above indicate there is a good support for the palm markings on Figure 93 as representing henna markings.

Criteria Group Three: Supporting Evidence of Henna

- Markings appear on female of childbearing age: this is an image of a post-pubescent woman.
- Cultural celebrations include henna: if this image is connected to the myth of Baal and Anath, or the fertility event described in the Book of Adam and Eve, women adorned themselves with henna for celebrations. In another section of the myth of Baal and Anath, she applied henna for a springtime fertility festival sacrifice and hennaed again before she avenged Baal’s murder by killing his enemy, Mot, the god of summer sun, heat and drought, (Hooke, 1963, 83).
• Indigenous words in language for henna plant and/or henna art: in nearby Ugarit, the word for henna was KPR.

Given the supporting evidence from the Myth of Baal and Anath, it is very likely that Figure 93 is representation of a young woman hennaed for celebration, and I believe these two figures support evidence of an early bridal tradition of henna in the eastern Mediterranean.
Case Study Ten

Figure 94: Example Ten: Xeste 3, “Lustral Basin” North Wall: Adorants, (photograph by J Liepe, Coumas, 1992)

Figure 94 is a wall painting from Akrotiri, excavated after being covered in the eruption of Thera in 1680 BCE. ON the north wall painting of Xeste III, there are young women.
with body markings that potentially represent henna. There is nothing in Criteria Group One that would preclude the interpretation of these markings as henna.

Criteria Group Two: Positive Evidence of Henna

- Location: Akrotiri is in the eastern Mediterranean
- Climate: The Akrotiri temperature minimum was over 11 C in the warm climate of the Bronze Age. Tropical plants are represented in other wall paintings.
- Climate: The temperature maximums in Akrotiri may have been over 30C, but were probably mild.
- Climate: Low to moderate precipitation is typical in the eastern Mediterranean.
- Marking Position on Body: There are reddish orange markings on the palms, and soles of some women in Xeste III, though these are not easily visible, and are indicated by a red line at the edge of the hand, foot and finger.
- Fingernails or toenails stained: on several of the women, the fingernails are colored red-orange.
- Color within range of henna: the reddish orange color is appropriate for henna grown in a climate without extreme heat.

Criteria Group Three: Supporting evidence of Henna

- Markings appear on females of childbearing age in Xeste III
- Cultural celebrations include henna: the women appear to be engaged in a cultural celebration
• Trade routes available for importing henna from cultivation areas: the Minoan world was a trading partner with Egypt, but they may have grown henna locally.

In Figure 94, from the north wall of the Lustral Basin room of Xeste 3, a woman’s fingernails again are stained a color consistent with henna, and the red line at the palmar edge of the thumb may indicate that the woman’s palms were also stained.

Figure 95: “The House of the Ladies”, Room 1, East Section, North Wall, Bare Breasted Female Figure: Detail of Feet (J Liepe photograph, Coumas 1992)

The woman’s companion, shown in Figures 96 and 96 has red stains on the soles of her feet, red fingernails and red lines on the palm pressed to her forehead. A third companion in this group, wearing a spotted veil, has red stained fingernails and toenails. Taken together, these indicate that women stained their fingernails, toenails, soles and palms. These marking are consistent with henna stains in the body’s geography.
“The House of the Ladies”, one of the northernmost buildings uncovered in Akrotiri, also has paintings of young women with body stains consistent with henna. In Room 1, East Section, North Wall, in the paintings of women with Pancratium Lilies, both women have rusty-copper colored markings on the soles of their bare feet and hennaed fingernails. These colors are consistent with henna stains from plants grown in cooler limits of the henna-growing zone.

If Figures 92 through 96 are taken together with the legend of Baal and Anath, this would support the possibility that henna bridal traditions originated in the early Bronze age, in the Minoan, Mycenaean and Phoenician civilizations, and may have spread across North
Africa with their trade networks, also southward and eastward into the Arabian Peninsula and the Levant, where it was later embraced, reinforced and expanded with the expansion of Arabian culture in the eighth through fifteenth centuries.

The Results of the Evaluations

The examples in Chapter Three demonstrate that the presence or absence of henna body art on an ancient artifact can be systematically determined by evaluating them with the proposed criteria groups. Since these criteria are derived from what is known about henna, as discussed in Chapter Two, we should be fairly confident of these determinations. When many artifacts are examined and found to show evidence of henna, they can be mapped through time and space. These maps should reveal the geographies of henna. Chapter Four will propose maps of henna through periods of history based on available artifacts.