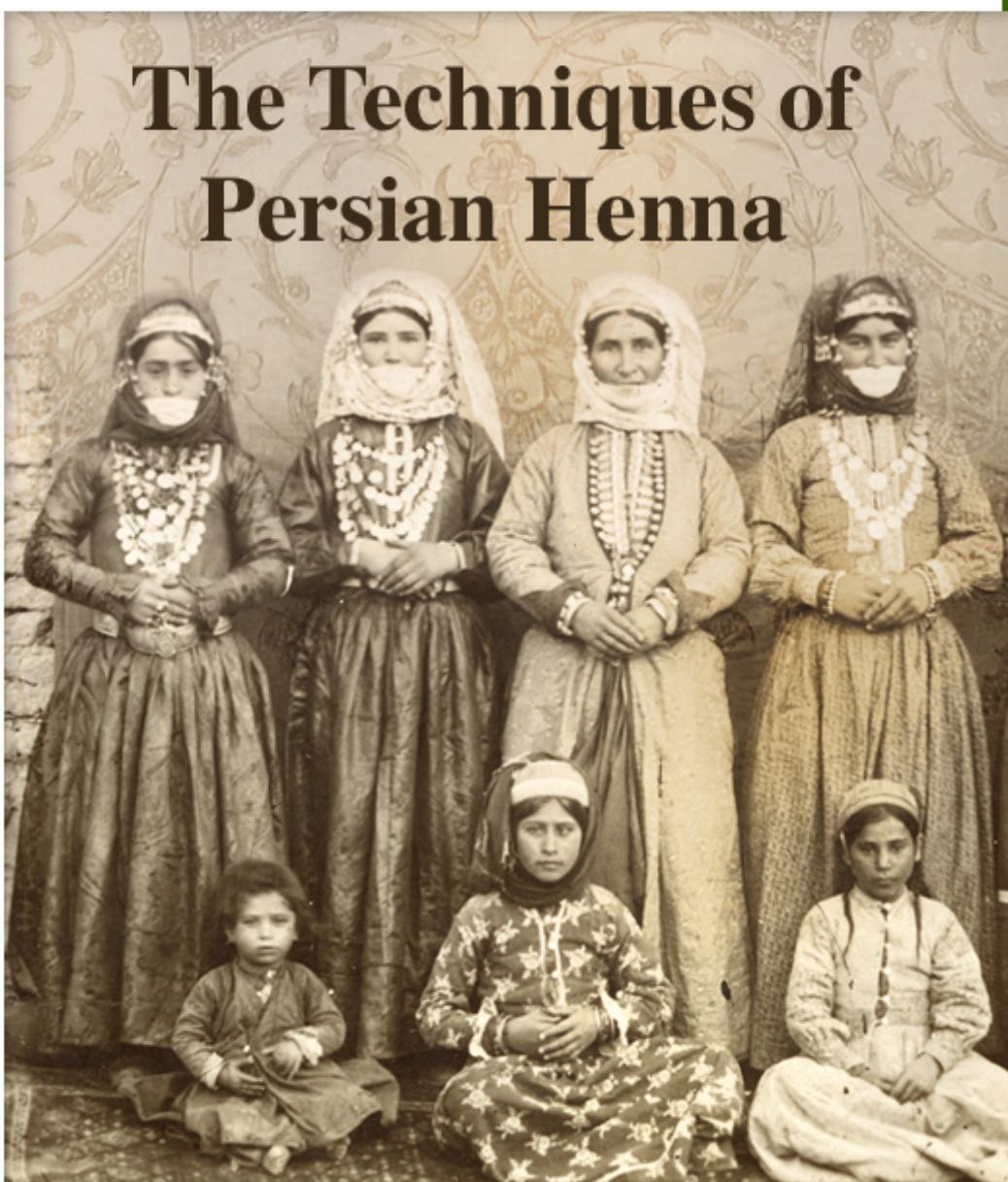




**The Henna Page™**  
ENCYCLOPEDIA OF HENNA

# The Techniques of Persian Henna



Catherine Cartwright-Jones

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*I would like to thank the John Rylands Library in Manchester, the Bodleian Library in Oxford, the British Library in London, and the Victoria and Albert Museum in London for permitting me to view original Persian manuscripts and works of art in person. This is a rare privilege and I am very grateful to have had this opportunity.*

*I would also like to thank the Iranian Heritage Society for providing assistance and funding for this research.*

In this paper, I propose to demonstrate that women's hand and foot markings in pictorial and literary Persian art between the late 15<sup>th</sup> century and the mid 19<sup>th</sup> are representations of henna body art, and that this interpretation of the markings is corroborated by Persian literature and traveler's descriptions. I propose that the representations are idealized but plausible representations of henna, and they demonstrate the technical processes and social uses of henna art in Persia. These depictions can also be read for class, gender, and the evolving Persian concept of ideal women's beauty into the period of increased European influence on style in the Qajar dynasty.

I have supplied images and experience from my own work as a henna artist to support my interpretations of henna technique and stain, and offer them as an approach to reconstructing old techniques.

The works featured in this investigation are:



- “Shirin Examines Khusraws Portrait”, late 15th century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140



- “Bilqis visiting Solomon”, about 1530 CE, Iran, from Assembly of Lovers Bodleian Library Oxford MS Ouseley ADD 24 Folio 1270



- “A Nomadic Encampment”, (1539 – 43, Iran), folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75



- “Nighttime in a Palace”, (1539 – 43 Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.76



- “Two Harem Girls”, attributed to Mirza Baba, Iran 1811-14, Collection of the Royal Asiatic Society London, 01.002



- “Ladies around a Samovar” Tehran, third quarter of the 19<sup>th</sup> century. Victoria and Albert Museum, P. 6-1941

### Note:

In this paper, I use “Persia” or “Persian” and “Iran” or “Iranian”. For the purpose of this paper, I use “Persia” to refer to a region ruled by one of the Persian empires. I use “Persian” to refer to the dominant culture of the Persian empires, as opposed to Kurdish, or Turkic, which also existed in the region of “Persia”. I use “Iran” to refer to the region defined by the political boundaries of the modern Iranian state, and “Iranian” to refer to places and practices within the boundary of that modern state.

The general periods covered are:

- Ghaznavid Empire
- Seljukid Empire 1037 - 1194
- Ilkhanate: 1256–1353
- Timurid Empire: 1370–1506
- Safavid dynasty: 1501–1722
- Qajar dynasty 1781–1925

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**Figure 1: Henna Plants After a Summer Rain<sup>1</sup>**

## An Introduction to Henna

Henna is the Semitic language word for the plant, *Lawsonia Inermis*, the paste made of pulverized henna leaves, and the body art created with that henna paste. Henna contains *lawsone*, or hennotannic acid, 2-hydroxy-1,4-naphthoquinone, that stains skin, nails and hair in a color range of orange to red, to brown in most circumstances, and to near black under some conditions.

## Henna Growth and Use

Henna grows in semi-arid subtropical areas, where night temperatures do not fall beneath 11 C. Henna survives on scant precipitation, endures long droughts, and daytime temperatures of up to 45C. Henna is presently grown and processed in Iran, though production has gradually decreased in favor of more profitable vegetable and fruit farming. The henna milling industry there may date back to the Safavid period or earlier, as Jean-Baptiste Tavernier describes such in his description of Yazd in 1654 (Tavernier, I, p. 171). There are still several very old henna mills in Yazd, Iran, with limestone grinding wheels, rotated by camels and donkeys, exactly as were described centuries ago.

## Henna Paste and Stain

Crushed fresh or dried henna leaves mixed with lemon juice or some other mildly acidic liquid makes the thick green mush known as henna paste. Henna paste will stain skin, fingernails and hair. If the green henna paste is left on for several hours, the keratin

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<sup>1</sup> Henna plant in author's collection: new shoots of henna growth in hot weather, following a rain, show red *lawsone* in the new leaves.

becomes thoroughly saturated with the red-orange molecule lawsone. When the paste is removed, an orange stain remains in the skin that darkens to deep reddish brown over 48 hours. This stain gradually exfoliates in one to four weeks.



**Figure 2: Henna paste partially removed from hand, and stain two days later**



**Figure 3a and 3b: Henna paste just removed from hand, and stain two days later**

A skilled henna artist can manipulate the henna paste and stain to create complex patterns with a range of colors from orange through red and brown to near black. When the paste is left on longer, and under hotter conditions, such as at a women's bath, or hamam, stains are darker, and retain their vivid color longer. The henna in figures 2 and 3 had exceptionally high dye content, being harvested after extreme droughts and high heat. In addition, those hennas were mixed with essential oils with high levels of monoterpenes alcohols and steamed to achieve the darkest possible stain (see Appendix 4).

Fingertips and fingernails are often depicted as black in Safavid miniature painting depictions of women. Henna will easily stain fingernails, and can stain fingertips and nails nearly black under the right conditions. Figures 4 and 4a shows fingernails and fingertips stained with henna. For additional information on the technique used to achieve this color see Appendix 4.



**Figure 4 and 4a:** Henna mixed with lemon juice and essential oils, applied, wrapped and left on overnight to create a henna stain that is virtually black.

If henna has a lower dye content or the color is not deliberately darkened, the results will be a reddish brown tone as seen in figures 5 and 5a.



**Figure 5 and 5a:** Henna with a slightly lower dye content stains skin brown. Henna that is not heated, wrapped, and kept on overnight generally does not achieve the darkest possible color.

Figures 5 and 5a show that the color on the palm is always darker than the stains below the wrist. The break in color occurs at the margin of the palmer skin. There is a similar difference in stains on feet and legs: legs always have a lighter stain than feet, and the sole stain is the darkest. Torso stains are lighter than arms and legs<sup>2</sup>. This difference is because of the differing depths of skin across the body and different levels of keratinization, as detailed in Appendix 2.

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<sup>2</sup> I have only found one Safavid depiction of a marking consistent with a henna stain on a torso: a Khamsa of Nizami in the John Rylands library in Manchester, UK, Robinson 642, RY1 Pers 856, F71a, dated to Shiraz, 1575, has an illustration of Majnun in the wilderness, bare-chested. He has a marking on his chest, which may be “Laila”, the name of his beloved, whom he has been forbidden to marry. There is literary evidence of lovers writing poetry and each other’s names or verses in “dark perfume” on each other’s bodies (Walther, 1993, p.207), but his is the only pictorial piece that I have found corroborating that. The marking on Majnun’s chest is light brown, about the color of the henna beyond the wrist on figure 5a. That mark is consistent with a henna stain on his chest. The subsequent illustration, of Majnun taken to Laila’s camp, shows him bare-chested, but without the mark. This would support the premise that the mark was intended to represent henna, which would vanish from skin in a few weeks, rather than a permanent tattoo.

The range of color that henna produces on skin is expressed in the “Henna Stain Color Chart” figure 6, created by Alex Morgan as a henna stain guide for hennapage.com. The stain resulting from the least saturation of lawsone in skin would be (on pure keratin, or lightly pigmented skin) would be seen as the color F6. The highest saturation of lawsone on keratin, and darkened by oxidation, heat or alkalines would be A1. The mid range of tones are common stain colors for henna, depending on the quality of henna, the mix, the time henna paste was left on the skin, and the gradual exfoliation of stain that appears as fading. These colors are consistent with descriptions of henna stains in historic text, and images of henna in historic Persian visual arts.



**Figure 6: Henna Stain Color chart by Alex Morgan for hennapage.com**

When henna paste has just been removed from skin, the stains typically are the colors in the column F, 1 – 5. High quality henna leaves vivid F1-3 red stains when the paste is removed. This color oxidizes in the first two days after paste removal; the color may peak in the range of columns A 1 - 6 through D 1 – 3.

The length of time that henna is kept on skin makes a difference in color: the longer henna is kept on the skin, the more lawsone will migrate into the skin and stain it. In this chart, 6F would be produced by henna applied for only a few moments, with lawsone barely having time to migrate into the skin. If a woman has the leisure time to have henna wrapped and left in place for many hours, she will have dark stains. This may be interpreted as a sign of prestige: she did not have to constantly labor.

Because lawsone is a hydrophobic molecule, and is not efficiently dissolved with water, adding organic solvents to the henna paste rather than water can facilitate very dark stains, such as A6 through E1. Natural organic solvents may be found in perfumes and essential oils. Plain water typically produces colors paler than B6 through F2. These additives would have been more scarce and expensive than water, so if a woman had dark stains, it displayed the wealth necessary to acquire them.

If a henna stain is represented as vivid red-orange, we have five possibilities for interpreting that color. The henna may have been of high quality and the paste just been removed, and would darken over the next two days. The henna may have been of lower quality and the stain would not be expected to darken. The henna may have been mixed only with water, so the stain would have limited potential for darkening. The henna was left on very briefly, for a slight stain, and would not be expected to darken. Or, the henna stains were applied two weeks earlier, and the process of exfoliation and fading was underway.

Though it is not difficult for a woman to apply henna with her dominant hand onto her non-dominant hand, it is very difficult to henna both of one's own hands. When a person is represented with stains on both hands, we may interpret that this implies that another person applied the henna. Complex patterns on both hands would imply expenditure for a henna artist's on the skill.

A henna pattern would have been a luxury; it had no practical function, and would have disappeared in a few weeks. It was simply a transitory ornament. Though travelers' reports indicate that all classes of women enjoyed henna, it was an activity or purchase that withdrew a woman's labor and resources from other things more necessary to sustenance. From this, we may propose that when very dark or vivid red, complex henna patterns such as are seen in Safavid Persian representations of henna, they may imply privilege and wealth. Unpatterned henna, with brown or less vivid color may imply less costly or utilitarian henna, such as might be used on the soles for comfort rather than beauty.



**Figure 7: Detail: “Nighttime in a Palace”, folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16th century), Arthur M. Sackler Museum, Harvard University Art Museum**

## Part One: Henna Described in Persian Literature and Traveler’s Observations

Persian poets have praised the beauty of hennaed hands for over a thousand years. The Persian fondness for henna, and descriptions of its color and placement are very consistent over the centuries, demonstrating a long-standing and deeply imbedded tradition in the region.

Sometimes the henna was described as black:

*Čun dom-e qāqom karda sar-angošt siāh “She has blackened her finger tips like an ermine’s tail tip”* (Abul Hasan Abu Ishaq Kisa'i Marvazi, 10th century, Derakshān, p. 32)

One millennium ago, Roudaki compared the color, brilliance and delight of a hennaed hand with tulip’s red color:

*“The tulip, from afar, laughs among growing things ... dyed with henna, as is a bride’s hand”* Roudaki, 11<sup>th</sup> C quoted by Said Naficy (Massé...79, S-5)

Sa’di spoke affectionately of Persian women’s dark red hennaed hands in the thirteenth century. Though he traveled widely, and went to India, he refers to women’s hennaed hand as being “Persian”.

*With Sa’di in the Garden, the Book of Love. 23*

... hands  
*Perfect and small; but stained upon the palms  
 With henna's russet-red, the Persian way...*

*With Sa'di in the Garden, the Book of Love: 138*

... new-bathed,  
*Painted and henna-stained, and scented sweet.*

Sa'di (1258, tr. Sir Edwin Arnold)

Sa'di compared the passion inspired by a woman's hennaed hand to a weapon,

“*Negārinā ba šamšir-at če hājat  
 Marā kod mikošad dast-e negārin*”

“*O sweetheart, thou needst not a sword (to kill me), thy negārin hand itself killeth me*”

Jami compared the henna color to a precious coral and implied that it was only proper for women:

“...when hennaed, thy crystalline fingertip(s) . . . make pale a five-digitated coral (*panja-ye marjān*)” (Nur al-Din 'Abd al-Rahman ibn Ahmad al-Jami late 15<sup>th</sup> century, cited by Šaraf-al-Din Rāmi 1946, p.45)

“*O wipe the woman's henna from thy hand, ...*” (Salaman and Absal, XXII, Jami by, tr. Edward Fitzgerald, 1904 p. 38)

The henna patterns in this period were referred to as *negar*. Hennaed hands were *negarin* hands; hennaed feet were *negarin* feet. *Negār-bandī* referred to drawing henna patterns. The bridal ceremony of decorating a bride with henna was *hana-bandī*. ('Alam, 2008)

When feet were similarly adorned, *sang-e bandan*, they merited a special piece of small furniture (*bandan*) to accommodate the lengthy process of patterning feet and allowing them to dry. A woman could not get up and walk while henna paste was on her feet, or the patterns would be spoiled. One such elaborately carved Persian henna footrest, presently in the Pitt River Museum collection, has written on it, “Is this henna stain on thy blessed foot sole, or is it a lover's blood which thou hast trodden?”

*Rang-e hanā'st bar kaf-e pā-ye mobārak-at  
 Yā kun-e āšeq ast ke pāmāl karda'i”*

Fingertips with lighter henna stain, the warm reddish brown typical of henna, were fondly called *fandoqča*, a little hazelnut. This comparison was extended to *fandoq* and *fandoq-*

*band* for hennaed fingertips, and *fandoq bastan* (to attach a hazelnut), and *fandoqi kardan* “to make a fingertip look like a hazelnut,” (Pādšāh, M. 1956, p. 3180).

Europeans traveling in Persia also commented on women’s hennaed hands:

Pietro della Valle, traveling in Persia in 1620, described henna and a henna party, “(she gave them as a gift) a quantity of henna, *alchenna* as it is called by our druggists... for staining the hands; and after supper, in order to celebrate our arrival, she insisted on all present using of it with her; it being the custom in the east on any joyous occasion, such as weddings and the like, to fasten it on the hands while in conversation. This *alcanna* (henna) is nothing more than the powder of the dried leaves of a certain plant, which as (they) never wear gloves, possesses the faculty of embellishing the hand, and preserving it from injury by the weather. The manner of applying it is as follows: after supper, just previous to their retiring to bed, they moisten the *alcanna* with water, and with the paste cover the hands, or as much of the body as they are desirous of staining, binding it on with linen bandages. The evening is therefore chosen for the application, as in the daytime it would be inconvenient for the ladies to have their hands confined. The paste remains thus fastened during the night, and in the morning, on removing the bandage, the paste is reduced again to powder, and the part to which had been applied is stained of a bright orange color; sometimes if a greater quantity be used, it is more inclined to red; and sometimes again, so much is used to make it a very dark color, approaching to the black.<sup>3</sup> This dye is the most esteemed by the Persians, as it serves to set off the whiteness of the skin.” (Pinkerton, 1811, vol 9, pp 48-9)

Della Valle’s description of wrapping the henna overnight shows one of the ways that henna stains can be darkened: the heat and perspiration under the wrappings facilitate maximum dye uptake by the skin. Olearius’s description, following, adds information to the nature of the “water” used to mix henna: if water were rinsed through crushed citron, the oils from the seeds and skin would be an effective solvent to facilitate much darker henna stains. Tavernier, when visiting Yazd, corroborates that there is something special about the “water” used to mix henna in 1689: “They distil vast quantities of rose-water and another sort of water with which they dye their hands and nails red ... ”<sup>4</sup>

Olearius, in 1669, similarly described henna in Iran, “They (the Persians) have also a custom of painting their hands, and above all, their nails, with a red color, inclining to the yellowish or orange, much near the color that our tanners nails are of. There are those who also paint their feet. This is so necessary an ornament in their married woman that this kind of paint is brought up, and distributed among those that are invited to their wedding dinners. They therewith paint also the bodies of such as dye [sic: die] maids, that when they appear before the Angels Examinants, they may be found more neat and handsome. This color is made of the herb, which they call *Chinne*, which hath leaves like those of liquorice, or rather, those of myrtle. It grows in the Province of Erak [sic] (Iraq), and it is dry’d and beaten, small as flower, and there is put thereto a little of the juyce [sic: juice] of sour pomegranate, or citron, or sometimes only fair water, and therewith

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<sup>3</sup> For further notes on achieving a range of colors with henna, see Appendixes 2 – 4

<sup>4</sup> For further notes on solvents used to mix henna see, Appendix 4

they color their hands. And if they would have them to be a darker color, they rub them afterwards with wall-nut [*sic*] leaves<sup>5</sup>. This color will not be got off in fifteen days, though they wash their hands several times a day.”

Sir Austen Henry Layard’s description of henna in Persia as he encountered it on his travels four hundred years later is identical, “The Bakhtiari, both men and women, dye their hair, eyebrows, the palms of their hands, the soles of their feet, and their fingernails and toenails with henna. The henna leaves are dried and then made into a paste with water; lemon juice or some other acid is added. The paste is applied and, in the case of the hands, feet and nails, is left on for an hour.” (Masse, 1954, p. 495)

Persian women clearly loved their henna, and Persian men clearly appreciated the beauty of women’s hennaed hands. Travelers were unfamiliar enough with henna to be curious about it, and make notes on it to take home with them, though some thought it disagreeable; Yonan writes of Persian women “Thus naturally beautiful, they sadly disfigure themselves with paints and dyes … it is required by the all-powerful custom.” (Yonan, 1898, p. 86)

Henna was reported as being grown in the south of Iran, Iraq and the area that is presently Kuwait in 1699 by Olearius (Field, 1958, p. 104). Though henna was used farther north, it would have to have been transported there: only the southern area of Iran is hot enough to grow henna. This is not improbable, there well established and very busy trade routes going from Shiraz northward, west, east and south.

Henna was described as a paste made from dried henna leaves, which were purchased once a year and stored for use (Yonan, 1898. p 66), presumably after the main harvest. Henna was mixed with a liquid, and when there is specific information on the liquid, it is identified a something acidic. There is some implication that the addition of organic solvents was understood, such as the mention of adding citron to the liquid. Many writers do not have clear details on the mixing, but this is not surprising: henna was mixed and applied in the harem or hamam, where men and foreigners would not have entered, and women often guard the secrets of their henna and other beauty preparations. The descriptions of henna stain color vary from orange to red, to shades of brown and near black. When there is an explanation of the henna stain color range, the writer refers to varying the amount of henna used, or to doing something to the henna after application to darken the stain, such as wrapping, warming with steam, or rubbing with walnut leaves.

The descriptions of henna in Persia are consistent with what we presently understand about henna. The henna process seems to have changed very little over a thousand years; is not substantially different from it is at present. Therefore I propose that which can be demonstrated with henna today is a reasonable explanation for what we see and read about henna in the past.

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<sup>5</sup> For further notes on mixing henna with mildly acidic liquid, see Appendixes 2 – 4



**Figure 8: “Shirin Examines Khusraw’s Portrait”, late 15th century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140**

## Part Two: Henna Depicted in Six Examples of Persian Visual Arts

During the second century of Islam, commentaries on the Qur'an decreed that while calligraphy was the most revered of pictorial arts, as it was devoted to the sacred word, painters who depicted living things would be punished as blasphemers on judgment day for daring to emulate the power of the Creator. This ruling was not universally applied, and there arose interpretations stating that pictorial representations could be used for non-religious literary texts, and for the ornamentation of secular architecture and objects.

Figurative art continued in this secular capacity to illustrate literary works during the Safavid period. Artists gained favor in fifteenth century Persia as they worked on books patronized by a wealthy elite in Shiraz, Isfahan and Tabriz. (Diba and Ekhtiar, 1999, p 105) It is from this period of artistic excellence and generous patronage that images of people come down to us. Some of these include images of women with hennaed hands. This source allows us to corroborate the texts of poets and travelers, and reconstruct the henna arts from half a millennium ago.

Figure 8 represents a scene from an epic poem about a long and troubled courtship of Sassanian prince who falls in love with a Christian princess, Shirin. In this illustration, Shirin is shown a portrait of Khusraw: the representation is so lifelike and handsome that

she immediately falls in love. This scene is reminiscent of the festive occasion described by Pietro della Valle in 1620, and the assertion that henna was customary for all celebrations. Four women in this painting have patterned hands. Since it is not possible to play tambourine (at lower left and figure 9) or carry a dish (at lower middle) with henna paste on the hands, the hand markings should be interpreted as representations of stain rather than paste.



**Figure 9: Detail: “Shirin Examines Khusraws Portrait” late 15th century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140**

Since Kisa'i Marvazi wrote of black fingertips in the tenth century, and it is not difficult to darken henna on fingertips and palms to near black, it is entirely possible that these are meant to represent extremely dark or blackened henna stains. The technique of adding pomegranate juice and citron to the henna paste, thick applications, wrapping and

keeping the paste on overnight, all of which darken stain, were mentioned by Pietro della Valle, Tavernier, and Olearius (see page 12) could have been used to create very dark henna stains. Sonnini (1798, vol 1, p. 294) details a Syrian method of blackening henna stain on hands: “The belts which the henna had first reddened become of shining black, by rubbing them with sal-ammoniac, lime and honey.” There is no reason to assume that method of blackening henna was not also used in Persia.<sup>6</sup>



**Figure 10: Detail: “Shirin Examines Khusraw’s Portrait” late 15th century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140**

Figure 8 has orange, red, russet and brown paint, so the choice of black to represent the hand patterns is deliberate, not simply a lack of option. The color of the hand patterns is entirely black; it is not graded to brown or red, though there is detail and subtlety in women’s garments and faces have shading to indicate folds, cheeks, lips and other subtle colorations. There may have been a canon to represent henna as black, or the ideal of henna may have been black, not the orange color as is used to outline Shirin’s mouth and nose in figure 10. The women’s faces are idealized with beauty marks, elongated

<sup>6</sup> See Appendix 4 for details of blackening henna with ammonia

eyebrows, plump chins and tiny mouths; henna stains may have been similarly idealized to black, though not black in reality.<sup>7</sup>



**Figure 11: Detail: “Shirin Examines Khusraws Portrait” late 15<sup>th</sup> century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140**

Though original image size 4 ½ “ x 3 11/16”, the patterns on the hands are meticulously detailed within the tiny space allowed. Each hand would be less than ¼” across at its

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<sup>7</sup> In my practice as a henna artist, I find there is usually a broad range of stain color produced in a single batch of henna on a group of people because of individual skin difference. Some people easily get very dark henna stains, and others never do.

widest. The effort required to fit patterns into this space implies significance was attached to having henna, dark results, and elegant patterns. The patterns on Shirin's hand in figure 9 appear to include words, as does the golden embroidery on her blue gown.

The diamond shaped patterns may have actually been relatively broad and heavy when on the hand, which would permit a heavy henna application and darker stain results, or the patterns may have actually been more complex than was possible to represent in the tiny space. These patterns appear to wrap around from the front to back of the hand. The wrapping of the pattern from the palm to the back of the hand typically produces a darker tone on the palm than on the back. This is not indicated in the painting, which lends support to the proposal that henna stains were idealized as completely black, rather than actually being black.

These broad areas might also have had resist or “scraped” patterns<sup>8</sup>. This would be a reasonable thing for a henna artist to do, though very difficult for the painter to illustrate.

Figure 11 is a detail of a woman at Shirin's party who is swooning at the portrait of Khusraw, and Shirin's reaction to it. Her hands also have blackened fingertips, diamond shaped designs wrapping from the palm to the dorsal side of her hands, and what may be a representation of text written in henna. An attendant whose hands are not marked with henna comforts her.

There is a similar fifteenth century representation of henna in an illustration of two seated women in the The Court of Ya'qub Beg, by Shaykhi, 1478 – 90, Tabriz, held in the Topkapi Saray, H. 2153; Sals 90b – 91a. This shows an extremely dark stain on the back of a woman's hand, and the henna is represented as black.

Comparable fifteenth century Persian representations of henna are in the Divan of Amer Khusran Dihlan, 1430, Bahram Gur in the Green Pavilion, Khamsa of Nizami, 1475 – 81, from Tabriz, Topkapi Saray library, Istanbul, H.762, fol. 189,5 and Majnun Hears of Layla's Marriage, 1450 – 60, Khamsa of Nizami, Shiraz, Oriental Beitung der Staatsbibliothek, Preussischer Kulturbesitz, Berlin, Diez A., fol 7.

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<sup>8</sup> See “scrape-away” pattern technique in Appendix 5



**Figure 12: Detail: “Bilqis visiting Solomon”, about 1530 CE, Iran, from Assembly of Lovers, Bodleian Library Oxford MS Ouseley ADD 24 Folio 1270**

I have twice had the opportunity to examine the original Safavid illustrated manuscript, *Assembly of Lovers*, MS Ouseley ADD 24, held in the Bodleian Library in Oxford. Some illustrations in this manuscript show no evidence of henna on women’s feet and hands. Others show only blackened fingertips. One set of illustrations in the manuscript, including those for the story of Bilqis and Solomon, show a profusion of complex patterns on women’s hands and feet. Different illustrators worked on the book, and one seems to take a great interest in henna. Figure 12 is one of the illustrations for the story of Bilqis and Solomon in the manuscript.

In this image, Bilqis has lifted her skirts to wade through what she believes is a small river, noted by the fish next to her feet. This was a trick, set to reveal whether Bilqis was a *djinn* (spirit or devil) or a human woman. Had she been *djinn*, she would have hooves, but instead she had hennaed feet like any other woman. This picture clearly shows the idealized style of hennaed feet for a woman of the period: hennaed to the ankles, stained

toes and toenails, stained sole and ornamented across the top of the foot but not up the leg, and with an extremely dark stain. I examined this image and the rest of Assembly of Lovers under magnifying lenses and a jeweler's loupe: the patterns are all represented as black, not red or brown. They all have black fingertips and toes, fingernails and toenails. They all have a diagonal pattern, both for feet and hands. I believe it is possible that the dark diagonal band represents a resist or "scape-away" part of the pattern<sup>9</sup>. Because a heavy paste application works well with these techniques, achieving a very dark or near black stain would be possible.



**Figure 13 Detail: "Bilqis visiting Solomon", about 1530 CE, Iran, from Assembly of Lovers, Bodleian Library Oxford MS Ouseley ADD 24 Folio 1270**

Just as in "Shirin Examines Khusraws Portrait" the use of black to represent henna on the women's hands is not for lack of a more subtle palette: the leaves of the plants in figure 13 are a brown that would have been suitable for brown-toned henna stain. The red flowers and woman's jacket would have represented a red henna stain. This red is used on the women to outline their chins, their lips, and add contour to their noses. The artists clearly intended to designate the henna stains as black, either by the actual stains being extremely dark, or by the ideal of stains being as dark as possible. Shiraz, a great center of arts, culture and book production at that time, is in the south of Iran, near henna-growing areas. St. John writes that henna was grown, processed and exported from Bam, east of Shiraz (1876, Volume 1, p 86). There would have been no shortage of very fine

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<sup>9</sup> See Appendix 5 for an example of this technique.

henna available in Shiraz, and travelers report techniques of wrapping, heating and mixing that would have enabled extremely dark stains.



**Figure 14 Detail: “Bilqis visiting Solomon”, about 1530 CE, Iran, from Assembly of Lovers, Bodleian Library Oxford MS Ouseley ADD 24 Folio 1270**

Though the majority of images of women through the Safavid period do not have patterning on their hands and feet, there are similar depictions of stain from Persia in other Safavid manuscripts from the same period. The John Rylands University Library in Manchester UK has several Safavid Persian manuscripts that show women with patterned hands and feet: “Yusuf Restrains Zulaika from Suicide” 1518 CE, Robinson 563, Ryl Pers 20, folio 107 verso, and a painting of “Khusraw Spies Shirin Bathing” 1575 CE Shiraz, Robinson 638, Pers 856 folio 25a, and “Bahram Gur in the Red Pavilion”, 1575 CE, Shiraz, Ryl Pers 856, Robinson 646, folio 121 verso (b).

All of these illustrations have henna patterns depicted as black, with black fingertips and fingernails. The canon for depicting women in deluxe Shirazi secular manuscripts remained fairly consistent through their sixteenth century production of luxury books. Ideal images of perfect women showed black hair, placid round pale faces, tiny mouths, beautiful silks and jewels, iconic gestures ... and if they had henna, it was either dainty blackened fingertips or full patterned hands with the darkest possible stains.

If travelers reports are accurate reflections of the techniques, henna artists were using ammonia, wrapping, heating, walnut and organic solvents to achieve nearly black stains, just as henna artists do now.



**Figure 15: “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the *Khamsa* (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

Figure 15 is attributed to Mir Sayyid ‘Ali by Stewart Cary Welsh, and dated later than The Assembly of Lovers, to the same time as 1539-43 *Khamsa* of Nizami in the British Library. Welsh also believed that “A Nomadic Encampment” and “Nighttime in the Palace”, figure 22, may have been part of the same work at one time, though each was cut in half and remounted, and separated from their original contexts.

Mir Sayyid “Ali was the son of a painter, Mir Musavvir, and was considered one the finest artists of the period. His father taught him the techniques of brilliant detail and ornamentation, but ‘Ali brought life and grace to the often-static medium of Persian painting. A lesser artist may have painted a recognizable and highly detailed sheep, but ‘Ali had the talent and genius to express a ewe’s glowering defiance of a dog as she nurses her lamb (center of image, figure 15)

The purpose of the two paintings shown in figures 15 and 22 is contested: they are not identifiably parts of a manuscript, we cannot identify the narrative, and they are larger than manuscript illuminations: they are 28 cm x 19 cm, 28.6 cm x 20 cm. Grabar and Nativ suggest these may have been atelier paintings meant to show off the artist’s skills and repertoire (2001, p. 176). If these were painted for the master of an atelier, library or arts patron at a princely court ‘Ali may have used these two works an opportunity for a bravura performance, to show his extraordinary virtuosity. Certainly, the representations of henna in “A Nomadic Encampment” and “Nighttime in a Palace” are more varied and detailed than in any other Safavid painting. If we accept that these are paintings meant to show off a mastery of visual representation, and that henna would be as meticulously represented as flowers, ropes, cooking pots, beards, textiles, and a nursing dam, then we can propose that these two paintings show a accurate information about henna in mid 16<sup>th</sup> century Persia.

In “A Nomadic Encampment”, there are twenty-one male figures of differing age and social importance. None of he males are represented as having any patterns on their hands or feet. There are eleven females. The three women who are represented as elderly do not have ornamentation on their hands or feet. Four young women have very dark, complex ornamentation on their hands or feet. One has red stains on her hands and feet. One woman has soles stained brown without a pattern, and another young woman does not have patterns. One woman peers from inside a tent, and her hands and feet are not visible. The infant is not represented with any body markings.

The woman in figure 16, middle left detail of “A Nomadic Encampment” listens intently to the men’s conversations in the center tent. This has been interpreted as depicting Layla listening to Majnun’s father requesting that she be allowed to marry Majnun, which her father declines. The patterns on her feet and hands are diamond, triangle and chevron shaped henna patterns reminiscent of those in “Shirin Examines Khusraw’s Portrait”, figure 22. Since ‘Ali is the more skillful artist, and is working in a larger format, we can propose that this representation is a clearer view of what the original patterns looked like; they are more delicate and precise, and more carefully wrapped across the margin from palm to dorsal side of the hand and foot. The patterns are depicted as black on palm and dorsal side of the skin, though the actual color would have differed on these two different skin surfaces. There are similar geometric pattern elements on the mat in the men’s pavilion under the man in the light blue-gray robe<sup>10</sup>. In ‘Ali’s work, there are several instances where henna patterns mirror nearby textile or decorative patterns.

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<sup>10</sup> The man in the light blue-gray robe is interpreted as Majnun’s father leans forward with a hopeful expression and extends his hand to a man interpreted to be Layla’s father’s, and asks permission to take Layla as his son’s wife.



**Figure 16: Detail: “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**



**Figure 17: Detail: “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

The woman wringing out laundry, near the top center of the painting, also has dark patterns on her hands up to the wrists. The black flecks at her upheld forearm appear to be the canonical representation of droplets of water, similar to coming from the fountain in figure 35, and probably should not be considered as evidence of henna extending

above the wrist. The markings on the forearm that wrings the cloth between her knees appear to represent bracelets. It would be illogical for these markings to represent anything other than henna: cosmetic paints would wash away with the laundry water. Her markings are similar to the swirling patterns of stylized vines and leaves in the blue parts of the red and blue tent textiles.



**Figure 18: Detail: “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

The woman in figure 18 has no stains on her hands, but has hennaed her soles, as can be seen where her heel slips from her shoe. There does not appear to be any pattern intended, and the henna has left a brown stain. Women who needed to tend the cracking and discomfort that is common to their feet (Al-Jawziyya, 1998, p. 259 and Field, 1958, p. 110) applied henna each week when they visited the hamam so they would have soft, pretty feet. Another example of a solid brown sole stain is on the central reclining woman of “A Gathering in a Garden, done in glazed tile, done in Isfahan in the first half

of the seventeenth century; presently in the Victoria and Albert Museum in London, 139-1891.

This single brown sole shows that ‘Ali differentiated between red, brown and black henna stain results, and must made deliberate choices of which to use in each case in “A Nomadic Encampment”.



**Figure 19: Detail, “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

Figure 19 is a detail from the middle right of “A Nomadic Encampment”. These women have red and black markings on their hands, different from the brown marking on the foot of the woman. Two women are in a tent, the woman in a brown robe offers her heavy breast to a child. A second, smaller female with a pale blue gown is partly reclining, raises herself with the assistance of the tent pole; she gazes at the child. Though the child seems nearly the size of a one year old, it is swaddled and the nursing woman supports the child’s head as if it is newborn. Its hair is light colored, as is often the case with Caucasian newborns. Both women are represented as having patterns on their hands and feet, one has red patterns and the other has black patterns.

The nursing woman's fingernails and toenails are stained and elaborately patterned. Her feet are patterned on the soles and up over the arches, in the shape of a pair of slippers. Her patterns are represented as black, the fingernails and toenails appear to be reddish-black. She has similar patterns on her palms and fingers. The patterns are swirling motifs of vines and leaves, similar to other decorative patterns in the painting. The color results are consistent with the results of darkened henna in Appendix 4.



**Figure 20, Detail, “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

This pair of women presents an interesting puzzle for interpretation: Is the woman in pale blue a young mother who has just given birth? Is the nursing woman the mother of

the child? Why do the two women have different colors of hand and foot ornamentation? Why is one woman sitting in the open and the other partly hidden behind a curtain?



**Figure 21, Detail: “A Nomadic Encampment”, (1539 – 43, Iran) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, Arthur M. Sackler Museum, Harvard University Art Museum 1958.75**

The female in figure 21, wearing pale blue and holding onto the tent pole, has red stains on her hands and feet. The stains on her hands and feet appear at first to be an

undifferentiated red henna application, but on closer inspection, there are patterns in the red. If the designs were a broad application with no pattern, one might interpret her as having a lower social position, a sister or serving girl viewing the woman nursing the child.

The color of her stains is similar to figure 3a, the orange-red of henna paste just removed. There is folkloric evidence that a woman could be hennaed for childbirth to ward off the Evil Eye, or to make her beautiful for the afterlife if she died in childbirth (Olearius, 1669, quoted by Laufer, 1919, p. 337). When henna is applied to skin and wrapped overnight (as is described by Pinkerton, 1811, vol. 9, pp 48-9), the pattern is often slightly blurred with perspiration when it is first unwrapped, but the pattern tends to clarify over the next two days as the stain darkens. Based on the evidence of traditional henna applications to new mothers, and the appearance of henna wrapped overnight to create a dark stain, this may be interpreted as an accurate representation of a young woman who has recently labored to give birth to her first child, fatigued but beautifully adorned, who is looking out from the curtain partitioning her birthing bed, and raising herself up by grasping the tent pole to see her new child.

A girl would often be wedded around the time of her first menstrual cycle, so a professional nursemaid might be hired to assist by nursing the newborn and the young mother as she recovered from giving birth.

In “A Nomadic Encampment”, ‘Ali has depicted three very different results of henna stains. The young mother of figure 21 has red henna stains, as when the paste has just been removed, slightly blurred from being wrapped overnight. The woman holding a basin, figure 18, has brown henna stains on her sole, possibly a treatment for roughened feet. The other women have blackened henna stains. These could have been blackened by the means suggested by Sonini, Della Valle, Tavernier and Olearius. One other possibility for blackening stains stands in the picture with the women: if henna stains are rinsed with the urine from sheep, goats and camels, the ammonia in their urine will blacken henna.



**Figure 22:** “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76

Nighttime in a Palace has also been attributed to Mir Sayyid ‘Ali, and is often paired with “A Nomadic Encampment” for analysis of style and content. If the pleasures and activities of nomadic life are idealized and illustrated in the former, life in town at a home of a wealthy citizen are outlined in “Nighttime in a Palace”.

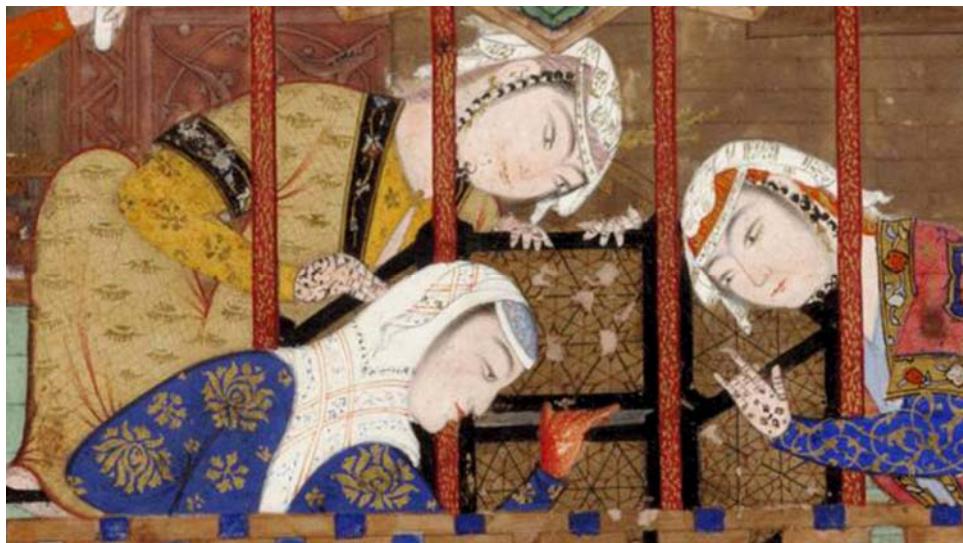
This illustration has thirty males, one of whom has red stains on his soles. There are eight females, six of whom have patterns on their hands. One white dog, which appears to be a

male saluki puppy, figure 23 has red-stained ears, tail, and forelegs, consistent with the appearance of white fur stained with henna. The painting shows a party in a wealthy house with abundant food and entertainment, tradesmen in the street outside, and women in the harem, separated from the party.



**Figure 23: Detail: “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

The puppy looks down from a roof and barks at the goings-on in the street, paralleling the women in figure 24, who are watching the party in the room below. There is ethnographic evidence of henna being passed around for all the women to use at celebrations, on favored animals as well. (Watson, 1979, p 211-2 and 281)



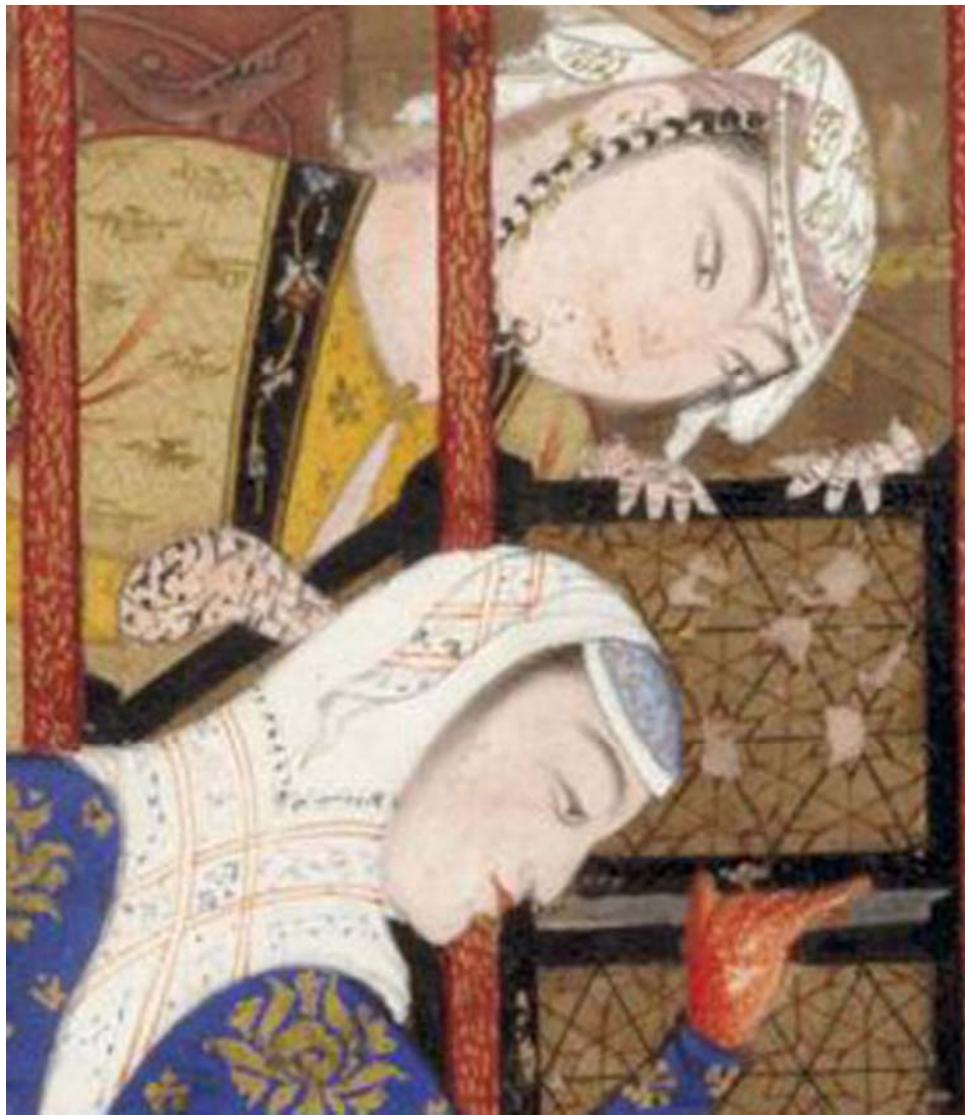
**Figure 24: Detail: “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

In figure 24, three harem women peer through an opening in the roof to snoop upon the men's party from which they are excluded. Each has henna stylistically different from the others, in contrast to the depictions of henna in figure 8: "Shirin Examines Khusraw's Portrait" and figure 12: "Bilqis visiting Solomon". The patterning in figures 8 and 12 show hennas that are similar within each image. The fact that the henna represented by a superior artist in "A Nomadic Encampment" and "Nighttime in a Palace" differs from one woman to the next implies that *neginin* hands, henna technique and style varied from one woman to the next and were an expression of personal style, taste, ability and means. Henna artistry was not generic, and there was no single "Persian style". In these paintings, their patterns mirror surface adjacent decoration in rugs, clothing and a domestic architecture: women may have copied ornamentation from the stylish things they loved, just as they do today, and Mir Sayyid 'Ali's work reflected that diversity.



**Figure 25: Detail: "Nighttime in a Palace" (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid 'Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

The patterns on the woman's hands in figure 25 would have been fairly easy to apply with a twig or kohl pic: the pattern could be accomplished, in my estimation based on tests done with twigs, wires, broom straws and brushes, shown in Appendix 5, in about fifteen minutes. The lines can be done quickly by rolling a broom straw in a saucer of henna paste, then pulling it across the skin. The dots that make up the central pattern can be done by picking up a small blob of henna on the tip of a blunt stick or tip of a brush, then dabbing it onto the skin.



**Figure 26: Detail: “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

The women in figure 26 have different patterns and different stain colors. The woman in the yellow robe has a blackened pattern with lines on her fingers, and a swirling leaf pattern on the back of her hand. This pattern mirrors the blue and gold brocade sleeve worn by the woman across from her. The swirling pattern takes me about half an hour to

accomplish with henna and a brush. The woman in the blue and gold robe has a pattern that is reddish brown, as if the henna paste has just been removed within the previous few hours and has only begun to darken.



**Figure 27: Detail: “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16<sup>th</sup> century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

Figure 27 shows a rare depiction of a man with henna stains: his soles are stained red, and he is elderly. Henna was used to treat a variety of ailments: henna was applied to wounds and was used topically to relieve pain and swelling, and Prophet Mohammed hennaed his feet to relieve his migraines. (Al-Jawziyya, 1998, p. 259) There is no indication of pattern on his soles. This may be evidence of medicinal, rather than celebratory or ornamental use of henna. There is no way of knowing whether this is an application of lower quality henna which would remain red, or whether it is a higher quality henna, with the paste just removed.

The woman sitting with him has elegantly patterned hands, with darkened henna, similar to the other women in the painting.



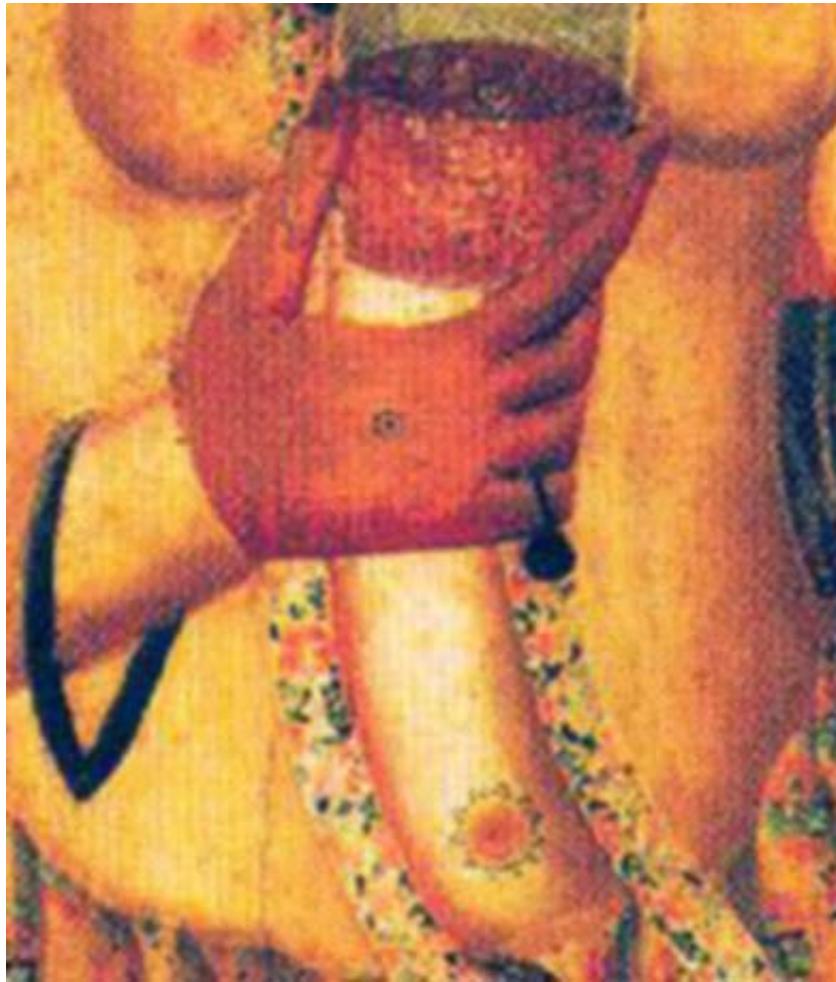
**Figure 28: “Two Harem Girls”, attributed to Mirza Baba, Iran 1811-14, Collection of the Royal Asiatic Society London, 01.002**

Figure 28 is one among many large paintings of harem women done for the Qajar court. The painters never actually saw the harem women they were hired to depict, so the faces, coiffures, bodies, fashions and henna are idealized images of a highly desirable, ideal harem favorite. The representations of the women are life size, so it is possible to observe in minute detail what was desired in a beautiful woman at the royal court. Many of the women in the paintings are depicted with small tattoos: tiny figures of moon, stars, birds and suns were pricked into the chin, the base of the throat, the back of the hand, around the navel, and sometimes in a line from throat to navel. These are corroborated by Shoberl (1828, pp 121 – 23), Sykes (1909, p.177) and Porter (1821, vol. 1 p. 233) and as having been popular in the early half of the nineteenth century in Iran. The women have elongated eyebrows blackened with antimony, kohl around their eyes, placid smiles, tiny closed mouths, rouged cheeks and perfect skin. They are shown in their best clothing, dancing, making music, often with symbols of invitations to sexual intimacy.

The two women in “Two Harem Girls”, painted in the first quarter of the 19<sup>th</sup> century have a different sort of henna style than was depicted during the Safavid period: a generalized dip without patterns. Schoberl observed Persian women having henna stained hands with a solid color up to the wrist, and their soles stained as well (1828, pp 113-114).

I have personally examined several more paintings of court favorites done during this period, stored in the Victoria and Albert Museum in London. In the detail in figure 29, a tattoo pattern at the center of the woman's hand is clearly visible under the orange, and darker patterns along the thumb and forefinger are obscured, but still visible.

In several of the pieces, their overall orange color of the hands is painted over a palimpsest, obscuring a barely visible earlier layer of dark, complex henna patterns. The official fashion of henna may have changed, and the paintings changed to accommodate style. Had these patterns not been scraped away and repainted, we would have a record of henna artistry in the royal harem in the early 19<sup>th</sup> century, but we are left with only a few fragments that weren't completely covered.



**Figure 29: Detail: “Two Harem Girls”, attributed to Mirza Baba, Iran 1811-14, Collection of the Royal Asiatic Society London, 01.002**

In 1815 Malcom describes Persian women staining their hands with henna the day before their marriage, and Tancoigne corroborates this writing, “The Persian ladies ... stain their

nails, the palms of their hands and the soles of their feet with an orange color ...”  
 (Malcolm, 1815, vol 2., p 607) (Tancoigne, J. M., 1820, p 207)



**Figure 30: “A Female Acrobat”, Tehran, about 1815, 151.5 cm by 80.4 cm, London, Victoria and Albert Museum, 719-1876 6**

In regular henna practice, it is certainly easier to keep up an overall orange stain than a patterned application. A glove-like stain can be achieved by repeating a brief application every few days, and the color kept overall reddish orange. Darker patterning has a peak in color on the second or third day after application. As the pattern exfoliates, the appearance of the pattern degrades, and can appear more like a soiled hand than a

beautiful work of art. The harem women may have decided that it was preferable to always have nice looking, though unornamented hands than to have beautiful patterns for one week a month and look untidy for the next three.

Another of the paintings that appears to have had a palimpsest of henna patterns removed and painted over is “A Female Acrobat”, Tehran, about 1815, 151.5 cm by 80.4 cm, London, Victoria and Albert Museum, 719-1876 6, figure 30. The flesh-toned paint representing the woman’s hands is clearly cracked, showing damage and repainting of an earlier surface. None of the adjacent areas have been scraped and repainted. The repainting is not as delicate and detailed as the depiction of the pearl cuffs and silk brocade.

Her nails are represented as hennaed, and it appears that her palms may be represented as hennaed (judging by the orange line at the palm side of her thumbs), but there are vestiges of a very dark pattern obscured under the new pink paint representing her hands. Her feet are represented as having henna stains, but these do not appear to have been repainted, at least in superficial examination.



**Figure 31: Detail: “A Female Acrobat”, Tehran, about 1815, 151.5 cm by 80.4 cm, London, Victoria and Albert Museum, 719-1876 6**

In the detail figure 31, it is easy to see disturbance in the paint on the fingers, particularly to the upper thumb, but no disturbance in the surrounding area. If the damage were

accidental or random, it should not have been confined to the fingers. In other paintings, the hands are just repainted thickly with a solid orange henna color, and pattern sows through in some. In this one, the skin colored paint may not have covered the previous patterns, and the painter may have resorted to scraping off the old paint, damaging the canvas, and causing the disruption in the paint surface that we see here.

The style of the woman's elongated eyebrows, tiny mouth, and beauty spot not disturbed. Her hair is dyed black with henna and indigo, and parted into tiny long braids at the back, as described by Bishop (1891, vol.1, p 217, and 319 - 20). The details of her gown, the embroidery and jewels, are untouched. Only the henna became objectionable and was changed.



**Figure 32: Detail: “A Female Acrobat”, Tehran, about 1815, 151.5 cm by 80.4 cm, London, Victoria and Albert Museum, 719-1876 6**



**Figure 33: Detail “Ladies around a Samovar” Isma’il Jalayir, Tehran, third quarter of the 19th century; Victoria and Albert Museum, P. 56-1941**

By the late nineteenth century, European fashion norms as well as court artists' assimilation of European painting techniques influenced the depiction of henna body art. Figure 33 was painted during the period of Nasir Al-din Shah (1848 – 96), and appears to be a diorama of harem life at court. Ten women are depicted in the painting, and one young boy. Four of the women can be seen wearing skirts based on ballet tutus, decreed to be the desired court dress by the Shah who became enchanted with them on his visit to the Paris Opera. Six of the women have their hands or feet visible. Of these six women,

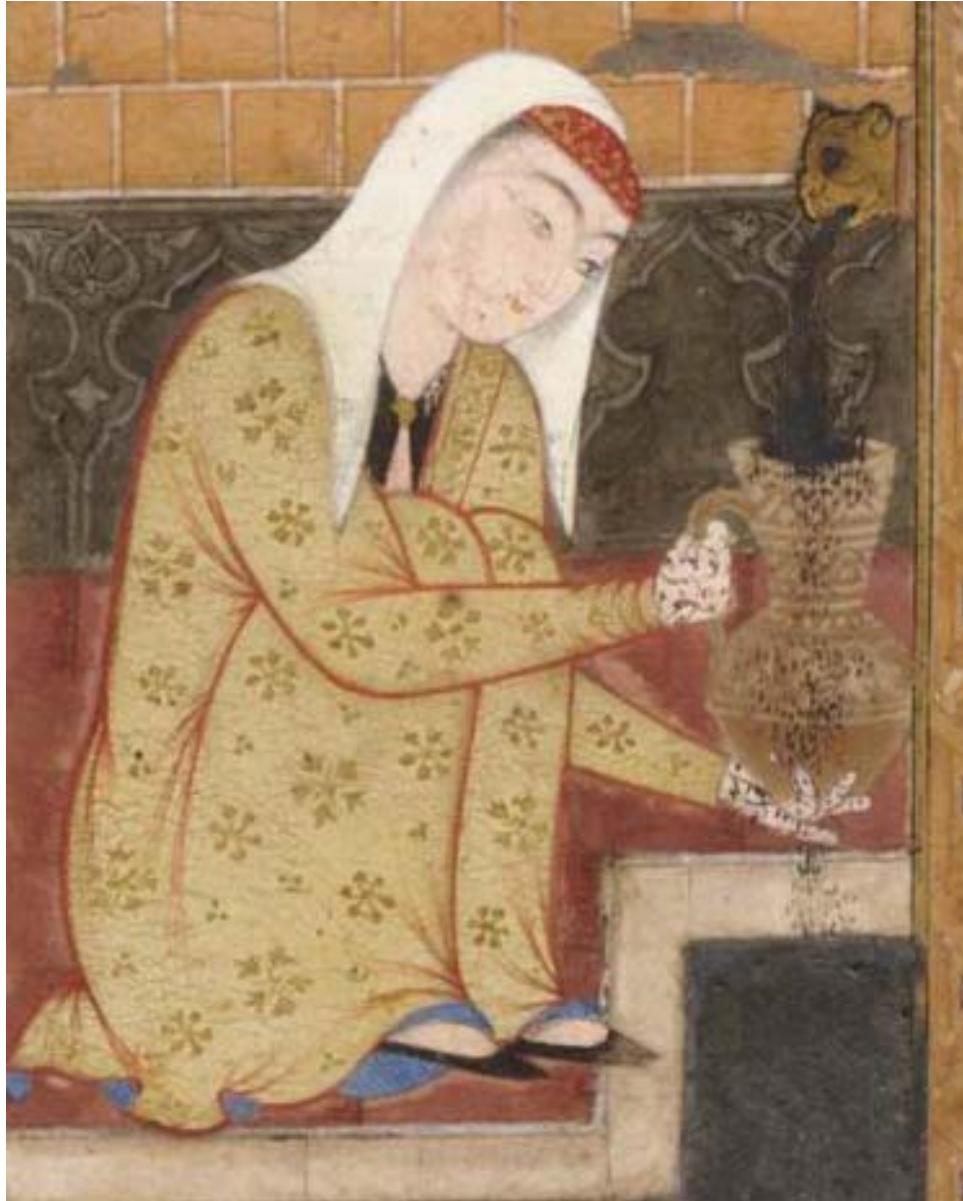
one clearly has henna patterns on her palm, fingers and fingertips; two others may have henna on their palms.

This is consistent with Isabella Bishop's observations visiting Persia the late 19<sup>th</sup> century, "the fingernails, and the inside of the hands are stained with henna." Bishop, 1891, p.319 – 20)

The depiction of this henna is within the range that one would expect of fading henna color; a lighter sort of hazelnut tone on the fingertips tending to orange on the backs of the fingers and palm. It is neither the vivid orange representation of the earlier period, nor the exaggerated black of the Safavid period. The pictorial canon of henna appears to have been dropped to a "the less noticed, the better", while the details of women's vibrant silks, embroideries, jewels, carpet, delicate fruits and tea service are detailed to the level of meticulous inventory, as if to count every stitch and pearl as proof of her wealth.



**Figure 34: Detail "Ladies around a Samovar" Tehran, third quarter of the 19th century; Victoria and Albert Museum, P. 6-1941**



**Figure 35: Detail: “Nighttime in a Palace” (1539 – 43, Iran), folio from a manuscript, attributed to Mir Sayyid ‘Ali (Persian, 16th century), Arthur M. Sackler Museum, Harvard University Art Museum 1958.76**

### Summary: Henna, Fashion, and Persian Cannons of Poetry and Art

Some investigators have dismissed these patterns as not being made by henna, because of the perception that henna makes only red-orange stains on skin, or that ornate henna body art practices originated and existed only in India (Baker, 1995: 51) (Saksena, 1979, pp. 85 – 86). Very little has been written about the art of henna in Persia, because it never gained the status of calligraphy, silver or textiles. Henna was done by women in the harem or at the baths, and was out of sight of men who might chronicle their work.

Archeological or forensic investigation of henna is nearly impossible, because henna stains leave no artifacts after the skin stains are gone, so unless henna is applied at death (as it was on some Egyptian mummies) there is nothing left to examine. Tattoos may be studied on mummified remains; jewelry, textiles and hair may remain in place after death, but henna is transitory. Therefore, to study henna, we must rely on literary references, traveler's reports, and representations in the visual arts, and attempt to explain these by reproducing them with known and testable henna techniques.

From the range of color reported by travelers, poets and artists, Persian henna artists, *negarin*, have understood for many centuries how to produce manage the variants of henna stains, but it is not possible to go beyond the limitations of skin and chemistry. Black stains are not difficult to produce on palms and fingertips, but in my experience as a henna artist, it is unusual produce coffee-dark or black stains below the fingers on the back of the hands. A typical range of henna stain on the back of hands is shown in figure 36. In Persian paintings through the 15<sup>th</sup> and 16<sup>th</sup> centuries, stains on the backs of the hands are usually represented as black. This presents a problem for interpreting the body markings in the paintings.



**Figure 36: Typical henna color on the backs of hands: the fingertips are stained nearly black, but the stains are gradually lighter towards the wrist.**

The middle class American women who are my clients and models have dark brown, but not black stains on the backs of their hands, because the skin on the dorsal side of the hand is thinner than the palm. It is possible that 16<sup>th</sup> century Persian women had relatively coarse skin on their hands and feet as a result of their daily labors. My models work at desk jobs and use moisturized soaps and lotions. Their hands are smooth and soft.

Travelers and poets describe henna more often red and brown than black, though black is mentioned: Abul Hasan Abu Ishaq Kisa'i Marvazi describes henna stains as black, and several descriptions of blackening processes are offered by della Valle, Sonnini, Olearius, and Tavernier (Field, 1958, pp. 101 – 105)

Safavid Persian women used calcium hydroxide as a depilatory (Elgod, 1970, p. 204), which might have toughened and alkalized their skin, and blackened henna stains. Syrians used a mixture of sal ammoniac, lime and honey to blacken henna (Sonini, 1798, vol. 1, p 294). Though women may have darker stains from toughened, alkalized skin, the stains may not have been absolutely black. If an extremely dark or black stain were considered highly desirable, though not always achieved, the artistic canon may have simply declared that patterns be rendered as black, just as the canon for beautiful women seemed to favor dainty feet, clear skin, big eyes, and tiny smiling mouths.

The preference for blackened, patterned henna seems to have dominated Persian art through the early 19<sup>th</sup> century, then changed. The influence of European taste at the court may have diminished the fondness for henna. Certainly, many European travelers to the Middle East were critical of henna, comparing the look of hennaed hands to filth-stained hands. Buckingham (1827, p.551) commented, “The palms of (women of all ranks and classes) are so deeply dyed with it (henna) as to resemble the hands of a sailor when covered with tar.” The Qajar court paintings of the early 19<sup>th</sup> century had blackened patterns at one time, but these patterns were scraped away and painted over with a light orange, as if the women gave up the fashion of patterned henna, but not the comfort and skin softening effects of henna.

I believe it is also possible that the stains were rendered black to visually enhance their importance as a display of conspicuous consumption. The realistic (as defined by the 19<sup>th</sup> century European understanding of realistic painting) representation of henna in figure 34 “Ladies around a Samovar” records but does not “show off” the effort and expense of elaborate henna. In that painting, the henna stain is the toffee color easily produced in henna applications on the back of the hands.

We cannot be absolutely certain what henna was like through the centuries of description and representation in Persian art and literature, but we can be sure there have been continuities and changes. Henna art in Persia has not been static: fashion seems to have pushed different colors and techniques into favor during different periods. There seems to have been a high point of complexity during the Safavid period when wealthy women had the time and interest to indulge in a display of conspicuous consumption. There seems to have been a sense of diminishing or even embarrassment about henna during the Qajar period, influenced by European ideas about beauty. The representation of henna colors in each generation’s paintings was probably canonized to reflect a cultural ideal of the moment.

Through the late 20<sup>th</sup> century, henna was regarded as “old fashioned” in Iran, though not entirely forgotten (Friedl, E. 1991). The henna mills in Yazd now grind henna for the hair dye market in Russia and Eastern Europe, not for delicate ornamentation. In popular understanding, Hindu India has replaced Muslim Persia as the ancient source of elegant, complex henna patterns, though it appears that Persian mastery of henna predated Hindu use of patterned henna by many centuries. I believe it is important to investigate the evidence of Persian henna as it existed five hundred years ago so the beauty and elegance that once blossomed on women’s hands is not lost to neglect and historical revision.

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**Images:**

“A Female Acrobat”, Tehran, about 1815, 151.5 cm by 80.4 cm, London, Victoria and Albert Museum, 719-1876 6

“A Nomadic Encampment”, (16th century) folio from a manuscript of the Khamsa (Quintet) of Nizami, attributed to Mir Sayyid ‘Ali, courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, Gift of John Goelet, formerly in the collection of Louis J. Cartier [1958.75], photo by Photographic Services.

“Bilqis visiting Solomon”, about 1530 CE, Iran, from Assembly of Lovers Bodleian Library Oxford MS Ouseley ADD 24 Folio 1270

“Ladies around a Samovar” Tehran, third quarter of the 19th century, Victoria and Albert Museum, P. 6-1941

“Nightime in a Palace”, 16th century, folio from a manuscript, attributed to Mir Sayyid ‘Ali, courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, Gift of John Goelet, formerly in the collection of Louis J. Cartier [1958.76], photo by Photographic Services.

**Figures:**

“Shirin Examines Khusraws Portrait”, late 15th century Iran, plate 2, Khamsa of Nizami, Arthur Sackler Gallery, Smithsonian Institution, s1986.140

“Two Harem Girls”, 1811-14, attributed to Mirza Baba, Iran, Collection of the Royal Asiatic Society London, 01.002

**Figures:**

All other images and henna work are by the author.

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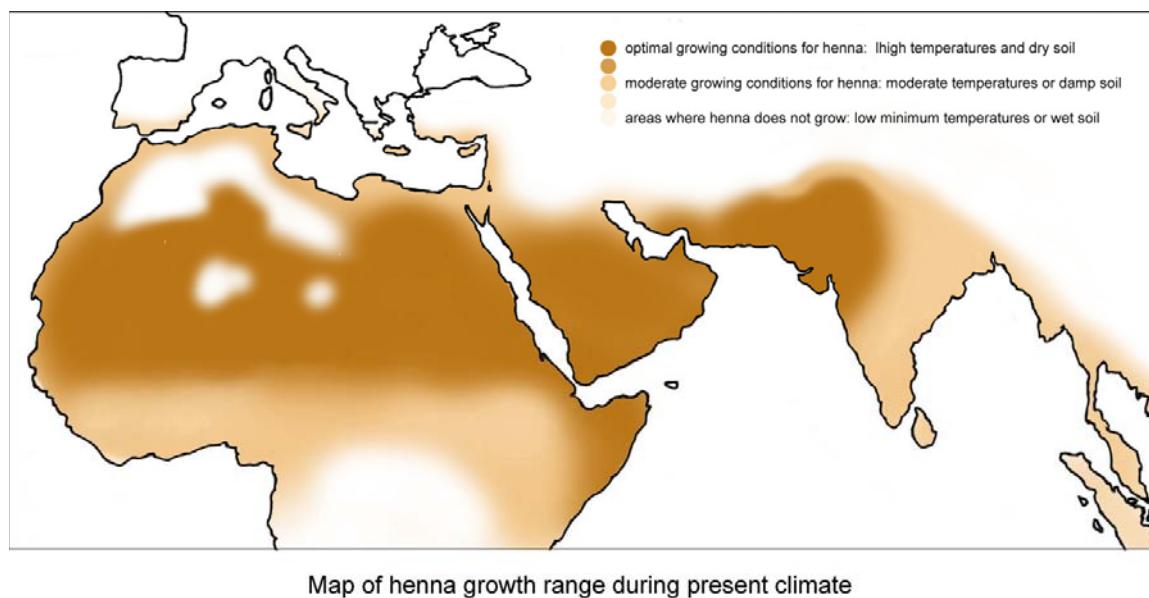
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10983 005 and 17257 006  
submitted to Dr. F. Smith:

Research project #2, Spring Semester 2009:  
Hennaed Hands and Feet in Six Persian Art Works, Persian Poetry and Traveler’s Descriptions: Evaluation and Reconstruction of Henna Techniques



**Figure 37:** *Lawsonia Inermis*, henna, showing growth following summer rain. The red color in the leaves indicates the presence of lawsone in the leaf. Lawsone stains keratin orange-red.

## Appendix 1: Henna: *Lawsonia Inermis*



**Figure 38:** The growing range of henna: the semi-arid regions of North Africa, the Arabian Peninsula, and the area along the Persian Gulf to India.

Henna, *Lawsonia inermis*, is a small semi-arid zone tree seen in figure 37. Henna grows naturally in the southern area of Iraq, along the Persian Gulf, in the frost-free regions around Shiraz, Kerman. Henna is processed in Yazd, an area whose henna mills date back several centuries, being mentioned by Tavernier and other European travelers. This area still produces henna, largely exporting to Russia and Eastern Europe for use in hair dyes, though some is of very fine quality and used for body art. The cultivation of henna in Iraq has declined, with farmers favoring more profitable fruit and vegetable crops.



## Appendix 2: The Color Range of Henna

Alex Morgan designed a chart of the range of skin stain colors produced by the dye molecule in henna, *lawsone*. Variations on this chart may occur because the henna stain is translucent, and the amount of melanin in the skin will alter the appearance of the stain. This chart most accurately reflects henna stains on light-colored skin.

Very low stain saturation makes the colors near F6. These typically occur if the henna is left in place for only a few moments, if the henna has very low lawsone content, or if the stain is nearly exfoliated from the skin.

Keratinized palm and sole skin fully saturated with lawsone is often a color near F1, and the stain color normally oxidizes to a color near A6. If the stain is further darkened by

use of solvents, heat or alkaline, the color may be near A1 on thick, keratinized skin. As the skin exfoliates, the stain color tends to progress downward and to the right from its peak across the color chart.



**Figure 39:** Henna paste on skin and just removed from fingertip, leaving stain color F1. The gold color is resist paste used to create a negative pattern.



**Figure 40:** Henna one day later, stain color B3 to C3 on palm and C5 below wrist



**Figure 41: Henna two days later, Stain color A1-2 on palm and B4 on wrist. Henna left on the skin for two minutes in the resist area produced the F6 color on fingers.**

The henna for figures 39 – 41 was a very high dye content henna from Yemen mixed with lemon juice and an organic solvent and left on the skin, unwrapped, overnight, in a room about 70F.

The henna for figures 42 and 43 again show very high dye content henna mixed with an acidic mix and a few drops of organic solvent, just after paste removal and two days later.

Figures 42 and 43 show the results of another high dye content henna as the stain darkens during the forty-eight hours after paste removal. There is slight hazing of the red-orange stain in figure 43, and the pattern become sharper as it darkens in the following days. This is because henna will run slightly on perspiration, especially if wrapped, but relatively low content of dye in the hazed area do not penetrate the skin as do a solid line of henna paste, and tend to disappear rather than darken. Figure 21 is very similar to figure 42, with a bright, slightly blurred orange color. Figure 26 appears to have darkened to a point between figure 42 and figure 40, about D3, perhaps representing a stain about four hours after paste removal.

Figure 44 was done in what might be considered ideal conditions: the henna powder had very high dye content, was very fresh, mixed with an acidic liquid and an organic solvent, and the paste was left on overnight in hot, humid weather about 98F. On my hand, the stain was virtually black two days after removing the henna. However, it is not possible for henna to always be perfectly fresh, nor applied under perfect conditions, on hands that always take stain well. It is my experience that if fifty middle class American women are

hennaed with the same paste as used in figure 42 or 44; there will be fifty different stain results. Most will get stains near B2, a few will get A1, and a few will get C3.



**Figure 42:** Stains from high dye content henna, with the paste just removed.

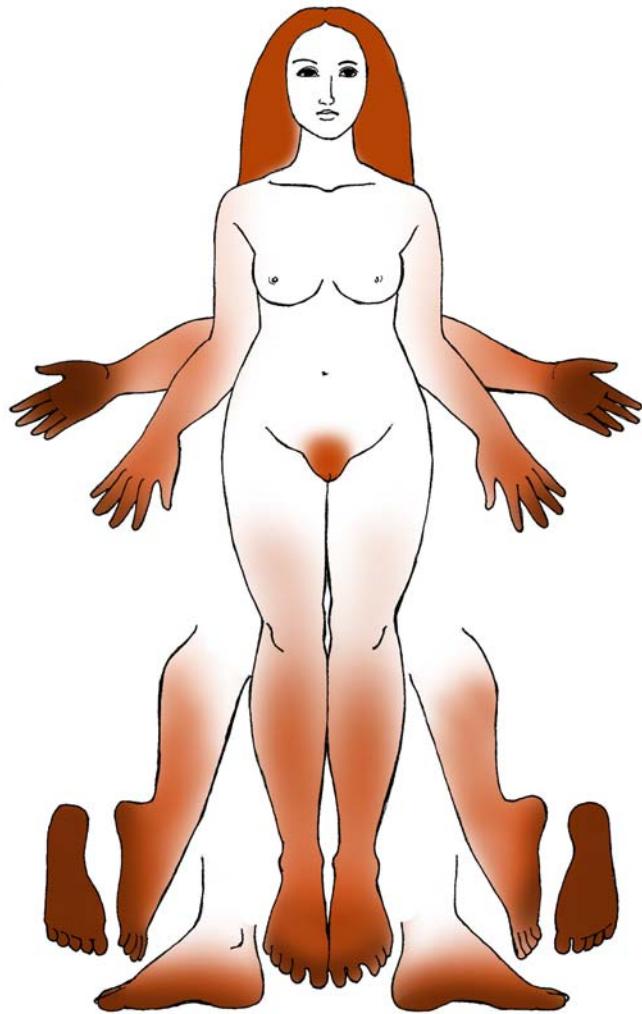


**Figure 43:** Stains from high dye content henna, two days after paste removal.

This presents a challenge for interpreting the uniformly black representation of stains in Safavid art. Should we assume that the skin on Persian women's hands was the same 500 years ago as it is now, and that the range of stain color that was represented as black because of a fashion preference? Should we assume that the skin on their hands was more keratinized from the semi-arid climate, more rigorous daily work, and limited access to washing and emollients? If make the assumption that the skin on their hands might have been coarser, it is more plausible that their stains would have been nearly black. If we assume that their hands were not very different from what they are today, and that written reports of orange, red and brown stains were as observed, then the pictorial representation of uniform black stains must have been a choice based on preference rather than observation.



**Figure 44: A henna stain two days after paste removal: henna applied overnight at 95F**



**Figure 45: Map of differential henna stains across the body**

### Appendix 3: Stain and The Placement of Henna

The chart in figure 45 is prepared from my experience as a henna artist and corroborated by “Number of Cell Layers of the Stratum Corneum in Normal Skin” (Ya-Xian, Z., Suetake, T., & Tagami, H. 1999, 291: 555 – 559), a study on the differential depth of skin across the body. Henna does not stain equally across the body because skin is unequal across the body. It is possible to get *some* stain anywhere on the skin, but the darkest stains will be on the thickest and most keratinized skin.

In Persian visual arts henna stains are only represented on hands and feet, the most effective places for staining, except for one incidence of henna patterning on the torso in a Khamsa of Nizami in the John Rylands library in Manchester, UK, Robinson 642, RY1 Pers 856, F71a, dated to Shiraz, 1575. This Khamsa has an illustration of Majnun in the wilderness, bare-chested, with a brown chest marking consistent with Farsi written in henna. This marking may read “Laila”, the name of his beloved, whom he has been forbidden to marry, and without whom he despairs.



**Figure 46: Henna stain from henna mixed with lemon juice, wrapped overnight after application, and heated by a wood stove**

#### Appendix 4: Darkening henna

Henna may be darkened with prolonged application, and addition of heat, as in the picture above. The henna paste was left on the skin overnight, wrapped, and darkened with dry heat the next day by holding the hand near a wood stove. If henna is left on the skin overnight, wrapped and kept warm, the skin will be more saturated with henna and will produce a darker stain.

Henna can be blackened with physical processes such as heat and wrapping. Henna can be blacked through chemical reactions such as with lime and ammonia. Mixing an organic solvent into the paste can blacken henna. Henna artists in some countries presently add paint thinner or benzene to their henna mixes for fast, dark stains (Castella et al, 2001) (Hassan et al, 2009, p. 1146) though these are dangerous for use on skin. One current henna exporter's ingredient list for "henna oil" for darkening henna declares eucalyptus oil, turpentine, citronella oil, palmrosa oil, lemongrass oil, and clove oil (Rawat, S. 2009). Safavid women may have used similar organic solvents such as ethanol based perfumes or distillates with high levels of monoterpenic alcohols in henna to create

the black stains. Distillates of lavender, spikenard, pine, sage, thyme, mint, marjoram, and rosemary have high levels of monoterpane alcohols and darken henna, and were used in Persian perfumes (Donkin, R. A. 1999, pp 20 and 48). Distillates of citrus with cyclic terpenes are also effective solvents, though have a higher likelihood of causing skin irritation. The observation by Olearius in 1669 indicates that citrus oil may was one of the organic solvents used to darken henna. Camphor will darken henna, but was associated with funerals (to mask the smell of decaying flesh) so was probably not used by itself in henna, though several of the favored Persian perfumes did include some camphor (*ibid* pp 141-142).

There is evidence that women used slaked lime during the Safavid period to remove their body hair, as required by custom and religious law, and I believe this is a probable source of blackening (Elgood, C. 1970). The hair removal was done at the bath, and henna was applied immediately following the bath, so a woman's hands would have been alkalized from applying the depilatory, and repeated alkalization would have made her skin more coarse, favoring darker henna stains.



**Figure 47: Henna stain from henna mixed with lemon juice, organic solvents, and heated repeatedly with steam**

It is possible to make henna virtually black with heat and the addition of a distilled organic solvent, or alcohol-based perfume. In these two pieces, the henna paste mixed with essential oils with high levels of monoterpane alcohols was left on the skin overnight, and kept warm. In the picture above, the henna was further darkened with steam from a teakettle.

Watson describes rural Iraqi women applying henna for a celebration, mentions that they sit near a fire to darken the color (1979, pp 211-2). The henna books published in Gujarat by Naveneet Publications all recommend in their instruction section that women hold their hennaed hands over a fire grate filled with smoldering cloves and coals to darken their henna stains. Persian women may have regularly held their hennaed hands near a cooking fire or steamed them at the baths to darken their stains. Repeated heating, both during the time that the paste is on the skin, and after the paste has been removed, will significantly darken henna stains. In my experience, if I hold my hennaed hands in a teakettle's plume of steam, the stain will visibly darkened in a few moments of heat.

Pietro della Valle described women applying henna in the evening, then wrapping the henna to their skin to keep it on overnight (Pinkerton, 1811, vol 9, pp 48-9). This keeps the henna in place and slightly moist for many hours for maximum dye uptake. The added warmth of the wrap and the slight accumulation of perspiration under the wrap make the resulting stain much darker than applications without a wrap, as can be seen in figure 48, where the middle two fingers were wrapped overnight.



**Figure 48: Henna stains from henna mixed only with lemon juice, but with the middle two fingers wrapped overnight.**

The red-orange lawsone molecule can be blackened with an alkaline. In skin, this is not an absolutely reliable way to blacken henna but the process of blackening henna with an alkaline was known and practiced. Syrians used a mixture of sal ammoniac, lime and honey to blacken henna (Sonini, 1798, vol. 1, p 294). Persian women used calcium

hydroxide as a depilatory (Elgood, C. 1970), and this may also have been used to blacken henna.



**Figure 49: Henna stain just after removing the paste**



**Figure 50: Henna stain twenty minutes after dipping hand in household ammonia for ten minutes**

In my experience, ammonia, both liquid and powdered are more reliable agents for blackening henna than calcium hydroxide. An especially convenient form of ammonia for blackening henna is urine, particularly if the urine is from a person or animal that is under some stress of heat and dehydration. Alkaline have a caustic effect that can exfoliate skin faster than it can darken henna, but the ammonia in urine isn't as harsh as more pure forms of ammonia. Camel urine has the highest ammonia content, and is still used in some areas of Africa to blacken henna. Because camel urine is solid, not liquid, it can be conveniently stored and applied to henna stains.

The alkaline must be applied to a henna stain soon after the paste has been removed. The alkaline oxidizes the henna stain rapidly, and a henna stain will change from red-orange to black in less than a day, depending on skin, alkaline and conditions. In figures 48 and 48, I put my henna-stained hand into a shallow bowl of household strength ammonia (sold for cleaning floors and walls) for ten minutes. Twenty minutes later, the red stains had turned dark brown, and in a few hours, the stains were jet black. The transformation was not as vivid on the back of my hand, but the stains were darker than before dipping. It is also possible to blacken henna by alkalinizing the skin before or after application.



**Figure 51: Henna pattern done in five minutes with a small brush.**

## Appendix 5: Application Techniques

Though there are potentially many ways to apply henna, travelers' descriptions of henna application in Iran specifically mention daubing, dabbing and smearing. Since henna was applied in the women's quarters (harem) or the women's baths (hamam) male visitors would have been unlikely to have had many opportunities to observe the application. Therefore, other techniques might have been used, but not recorded. Dabbing is consistent with using an application tool such as paintbrush, twig, or wire, and all of the patterns recorded in Persian visual arts can be achieved with these tools.

Large areas of solid henna, such as fingertips and soles can be laid down quickly by smearing henna across the skin with fingers or a blunt knife. The henna in figure 52: "Two Harem Girls" was probably done by henna quickly smeared on and then rinsed away, or by dipping hands and soles in a watery henna mix.

Watson describes Iraqi rural women creating henna patterns by dabbing henna with twigs (1979, p 211-2). Early Navneet henna pattern books recommended applying henna with

an ivory stick or wire (Navneet 1997 and earlier). In “A Wedding Song” (Slymovics and Dugan, 1990) the henna artist mentions henna was once applied with a needle or pin, and comments that the needle “dabbing” technique was very slow compared to applying henna with the modern henna artist’s tool made by rolling a thin plastic sheet into a small cone, like a miniature pastry cone.<sup>11</sup> Because henna paste has a texture similar to oil paint, brushing and dabbing with brush, twig or wire is an effective application technique. The henna paste has to be dabbed in a technique similar to oil painting impasto technique, rather than stroked by the brush, because it tends to cling to itself in a viscous clump, and because bushed out applications of henna don’t stain as well as thick applications



**Figure 53: Henna pattern done in five minutes with a twig**

With experience, an artist can learn to use henna’s idiosyncratic texture to advantage, dabbing, pulling, and draping the blobs of paste. The curving, leafy patterns seen in Safavid henna are not difficult to emulate with brush, twig or wire, as seen in figures 50 through 52.



**Figure 54: Henna pattern done in five minutes with a wire**

Henna may be stringy, and adding sugar may increase its natural stringiness. When a brush, twig or wire is dipped into henna, an experienced henna artist can pull up a thread

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<sup>11</sup> In my personal experience with henna in a nearby city park, a very old Yemeni woman foraged for a suitable twig to show me how to apply henna: she found my henna cone perplexing and difficult to use.

of henna (as one might do when playing with molasses or honey) and drape that thread across the skin into a line.

The henna patterns in figure 15, “A Nomadic Encampment” and figure 22, “Nighttime in a Palace” are consistent with the results or the application techniques in figures 50 though 52.



**Figure 55: Henna patterns created by smearing, dabbing and “scrape away”**

In figure 8, “Shirin Examines Khusraw’s Portrait” and figure 12, “Bilqis visiting Solomon”, there are broad areas of henna that may have had patterning detail that was not reproducible in the scale of the painting. If henna paste is broadly smeared on, then quickly scraped away with a wire or twig as demonstrated in figure 53, it is very easy to accomplish complex patterns. This technique facilitates the preferred dark stains because of the thickness of the paste. “Scrape away” has to be done very quickly, or henna will stain the skin before the paste is removed, and then the pattern will not be visible.

Other parts of the patterns in figure 8, “Shirin Examines Khusraw’s Portrait” and figure 12, “Bilqis visiting Solomon” appear to be directly applied, as with the techniques in figures 50 to 52.