

DEVELOPING GUIDELINES ON HENNA:

A GEOGRAPHICAL APPROACH

By

Catherine Cartwright-Jones August 2006

An essay submitted to Kent State University in partial fulfillment of the requirements for the Master of Liberal Studies degree

TABLE OF CONTENTS:

PREFACE

Chapter I:

Introduction: The Emergence of Henna into the West and the Need for a

Systematic Study of Henna

The Problems Created by Henna's Rapidly Changing Geographies

Perspective

The Lack of a Systematic Study of Henna

Identifying Henna and Proposing Criteria for a Systematic Study of Henna

Chapter II:

Criteria for a Systematic Investigation of Henna

The Henna Plant; Lawsonia Inermis

Henna's Growing Range: Global Regions

Henna's Growing Range: Temperature Minima and Henna

Henna's Growing Range: Precipitation and Henna

Henna's Present Growth Range

The Color of Henna

The Basis of Henna Color: Lawsone

The Geography of Skin and Henna: Henna Stains on Skin

Differentiating Henna From Other Forms of Body Art: Tattoos

Differentiating Henna From Other Forms of Body Art: Paints

Differentiating Henna From Other Forms of Body Art: Scarification

Differentiating Henna From Other Indian Body Adornments That Resemble

Henna: Impatiens Balsamica

Differentiating henna From Other Indian Body Adornments that Resemble Henna: Lac

Cultural Carriers of Henna

Chapter III:

Using Criteria to Evaluate Body Markings on Artifacts Criteria Groups for Evaluating Artifacts with Body Markings Criteria Group One: Negative Evidence of Henna

Criteria Group Two: Positive Evidence of Henna Copyright 2006 Catherine Cartwright-Jones Published by Henna Page Publications, a division of TapDancing Lizard LLC 4237 Klein Ave. Stow, Ohio 44224 USA All rights reserved. Criteria Group Three: Supporting evidence of Henna

Criteria Group Four: Ambivalent Evidence of Henna

Using the Criteria Groups to Evaluate Evidence of Henna Body Art

Example One

Example Two

Example Three

Example Four

Example Five

Example Six

Example Seven

Example Eight

Example Nine

Example Ten

The Results of the Evaluations

Chapter IV:

Mapping the Historical Regions of Henna

Location of Artifacts Between 6000 BCE and 3000 BCE That Have Positive

Evidence of Henna Use

Location of Artifacts Between 3000 BCE and 1400 BCE That Have Positive Evidence of Henna Use

Location of Artifacts Between 1400 BCE and 500 BCE That Have Positive Evidence of Henna Use

Location of Artifacts Between 500 BCE and 700CE That Have Positive Evidence of Henna Use

Location of Artifacts between 700 BCE and 1250 BCE That Have Positive Evidence of Henna Use

Location of Artifacts Between 1250 BCE and 1700 BCE That Have Positive Evidence of Henna Use

Areas of Henna Body Art Practices in the Early Twentieth Century

Areas of Henna Body Art Practices in the Early Twenty-first Century: Tradition,

Immigration, Westernization and Para-Phenylenediamine

The Geographies of Henna Emergence in the West

The Geographies of Para-phenylenediamine "Black Henna" as Body Art

The Geographies of Traditional Henna Use in the Early 21st Century

Chapter V:

Conclusion: The Potential of a Geographical Approach to Henna

Appendix:

Larger versions of maps included in Developing Guidelines to Henna: A

Geographic Approach

References

Maps and Mapping Data references

Knowledgeable sources

Additional photographs and drawings provided by author

DEVELOPING GUIDELINES ON HENNA: A GEOGRAPHICAL APPROACH

Chapter I:

Introduction: The Emergence of Henna into the West and the Need for a Systematic

Study of Henna



Figure 1: Henna body art: stain on skin (Cartwright-Jones, 2005)

"I didn't know white people did henna!" (Indian-American girl observing Catherine

Cartwright-Jones apply bridal henna to her older sister: Mansfield, Ohio, 2005) During the last twenty years, henna body art has emerged from South Asia, the Levant, the Arabian Peninsula and North Africa into the popular culture of the USA, Canada, Europe and the UK (Maira, 2000). The western world has little understanding of henna, its techniques, traditions or history, and no legal or commercial framework for definition or regulation of henna. There have been scattered mentions of henna in anthropological, botanical, medical, historical, economic and legal literatures, but there has never been an integrated multidisciplinary study of what henna is. There is no resource on henna that includes where it was used, when it was used, how it was used, why it was used, who used it, nor have these elements been linked. The lack of a coordinated source of information about henna hampers not only academic for discussion about henna's history and traditions, but stands in the way of ordinary people's understanding and enjoyment of henna.

In this first chapter, I will demonstrate the need for a scholarly investigation of henna, particularly the historic regions of henna body art. Chapter two will define the criteria for investigating henna. Chapter three will test the usefulness of the proposed criteria. Chapter four will show how historical regions of henna can be mapped based on these investigations. Chapter five will propose the potential use of mapping the geographies of henna.

Problems Created by Henna's Rapidly Changing Geographies

Henna body art surged into the west following the 1998 release of Madonna's music video "Frozen", when the "Om" patterns on her hands were viewed by millions of people who had never seen henna before. Henna kits and henna tattoos were suddenly the hottest impulse purchase everywhere (Maira, 2000). However, indigenous understanding of techniques, traditions and context did not accompany the shipments of henna powder and paste. The only written references on henna application and traditions were a few popular press publications, quickly published to ride the pop culture profit wave. These either promoted fashionable henna artists (Roome 1998, Batra & Wilde, 1999), or were meant

to sell henna products (Marron 1998, Fabius 1998). Though these gave westerners a "beginners guide" to henna, they did not provide substantive information about the science, art, history and traditions of henna.

An artist must have high quality henna, skill and experience to make get good results from their work. Patrons must understand that they have to keep the henna paste on the skin for several hours, and allow the resulting stain to darken for the following two days. When artists and patrons became impatient with traditional henna techniques, and were unable to find training, they often abandoned henna, substitute a fast-acting, cheap, widely available chemical hair dye: black para-phenylenediamine. This was sold as "black henna." Para-phenylenediamine paste makes a fashionably black stain on skin within an hour, similar in appearance to a needle tattoo. Para-phenylenediamine "black henna" causes severe injuries as seen in Figure 3, and has become a major health concern around the world (Sosted, Johansen, Andersen, & Menné, 2006).



Figure 2: Street side artists attract clients with signs of "henna tattoos" (Cartwright-Jones collection, Greece, 2003)

Figure 2 shows a typical western "henna" sidewalk artisan, working a summer beachfront location on a Greek island, not very different from sidewalk henna artists around the world. This artisan advertises "black henna". There is no such plant as "black henna." These "black henna" tattoos are popular in vacation resorts around the world, and tourists are unaware that this is not henna, and are often injured by the para-phenylnediamine pastes (Van den Keybus, Morren, & Goossens, 2005). The USA placed a ban on imports of henna for body art following the rise in popularity of "black henna", and confusion over the cause of the injuries.

In Los Angeles, one of the first areas of henna emergence in the USA, sidewalk henna artists set up on the Third Street Promenade in Santa Monica in the late 1990's, similar to those in figure 2. Because neither artists nor patrons were familiar with henna, sidewalk

Copyright 2006 Catherine Cartwright-Jones Published by Henna Page Publications, a division of TapDancing Lizard LLC 4237 Klein Ave. Stow, Ohio 44224 USA All rights reserved. artists substituted para-phenylenediamine for henna, marketing it as "black henna". Inevitably, a purchaser developed injuries similar to Figure 3, and sued the city of Santa Monica. The city subsequently banned henna body art. The city may have been unaware that para-phenylenediamine, not henna, was the causative factor in injury, or it may have been unwilling to police artists' mixes for the chemical (White & White, 2001). This sequence has been repeated in many countries.



Figure 3: Blistering and scarring from para-phenylenediamine applied to skin, sold as a "black henna tattoo" in Rome, Italy (Willett, 2005)

An example of the problems created by this lack of information about henna in the west is a discussion at alt.religion.Christian.biblestudy, June 30, 2005, thread 18, an online use group (Willit, 2005b). Willitt writes, "I have challenged gods, all of them, to show themselves. Many times. No result. Two weeks before the latest effort my daughter on a school trip to Rome has a "henna tattoo" done which she reacts to a week later, as many people have done before. This you take to be a Holy Sign from God. So your god gives my daughter a sign that she may bear for the rest of her life as a lesson to me? Mysterious ways? Tell me about it!" Willit shows his daughter's injury, Figure 2, in his weblog (2005a), and writes further about it, "The reason for the heart-to-heart ... was to tell her Copyright 2006 Catherine Cartwright-Jones

Published by Henna Page Publications, a division of TapDancing Lizard LLC 4237 Klein Ave. Stow, Ohio 44224 USA All rights reserved.

that a Christian has put down her problems with the henna tattoo to the wrath of his ever loving and merciful God."

The misconceptions about henna in this statement are not unusual, and evidence the problems of henna's emergence into a geographic area where there is no traditional knowledge of henna. The problems in this are:

- The skin reaction referred to by Willitt is not from henna, which is virtually harmless, but to para-phenylenediamine black hair dye (Stante, Giorgini, & Lotti, 2006.)
- 2. The street artist in Rome incorrectly termed para-phenylenediamine as "black henna." This is often done to create a fast black skin stain by people who do not know how to safely mix and apply henna.
- 3. The British purchaser did not know that there is no such plant as "black henna", and did not know that henna never leaves a black stain on the upper arm.
- 4. Local regulations did not distinguish between safe application of henna and dangerous application of para-phenylenediamine paste.
- 5. The Western writer construes that the blistering and scarring may be an example of the Christian God's judgment against henna, a practice indigenous to "Oriental" cultures.

If the street side artist, the purchaser, and the local regulators understood what henna is, what it is not, how it is applied, and what the history and traditions of henna are, Willit's daughter would not have been injured. The understanding of henna is implicit in the cultures where it has been used safely as body art for thousands of years. The understanding of henna in the cultures where it has recently emerged is poor, and practices are unsafe!

In the USA, there is a fundamental contradiction in the legal status of henna based on lack of information about the history, traditions and use of henna. The USA presently allows henna to be unconditionally imported as hair dye: FDA Code of Regulations, Title 21, Volume 1, Chapter 1, Part 73, Sec. 73.2190: Henna, but forbids the use of henna for body art (FDA, 1997). Customs is charged to confiscate all henna entering the USA that has any evidence that it will be used for body art, "In April, 1997, LOS-DO examined two shipments of a hair color product, brand names Zarqa and Almas, or color additives. Neither product has directions for use. However, the labels for both products declare henna as the sole ingredient and depict designs on the hands and feet. The color additive regulation 21 CFR 73.2190 specifically allows for the safe use of henna in coloring the hair only. The regulation does not allow for the safe use of henna to make colored designs directly on the skin, including the hands and feet." Most of the female population of South Asia, the Levant, North Africa and the Arabian Peninsula adorn their hands and feet with henna at least once in their lives, usually at a wedding, and may use it regularly for celebrating social and religious holidays. Adverse reactions in adults are extremely rare. Dermatologists regard henna as virtually harmless for use in staining skin, (Jung et al, 2006), and henna has been used as body art for thousands of years. The FDA ruling was put in place before there was any awareness that henna was used as a body art in other countries, and before there was a significant immigrant population in the USA that would want to retain henna as part of their traditional culture.

A thorough investigation of henna, enabled by defining of what henna is and is not, is crucial to legal, marketing, health, safety, ethnic and religious issues surrounding henna's present introduction into western culture. Up to this point, there has been no organized study of henna, not even a set of criterion for undertaking that study. This paper proposes to identify the components that would make it possible to construct the history of henna, its traditions, its art and science: a geographic approach to henna.

Perspective:

I have been in a unique position to view the emergence of henna into the west, and the problems and potential created by this emergence. I have been a henna artist and researcher since 1990. Most of the body art photographs in "Developing Guidelines on Henna: a Geographical Approach" are my own henna work. I have had the opportunity research henna history in the archives of the Bodliean and British Libraries, funded by a grant from the Iranian Heritage Foundation. From these experiences as an artist and researcher, I am very familiar with henna and its interaction with skin. I currently own and operate hennapage.com, the henna website consistently ranked top on search engines

since its inception in 1996. During June 2006, The Henna Page had over seven thousand visitors per day, according web stat report from the Visox.net. I also own and operate a business importing and exporting henna, and am familiar with the logistical problems of moving henna across through the legal, cultural, and financial networks. I organize and lecture at the International Henna Conferences, where I am able to meet and work with henna artists from around the English-speaking world. Through these contacts, business records and my academic research, I have been able to observe the movement of henna, and gather information on the emerging and ancient geographies of henna.

The Lack of a Systematic Study of Henna

The western academic community has paid scant attention to henna. As a women's tradition, it was not easily available to male anthropologists and explorers, nor was body art studied seriously as a cultural expression until recently. Henna and HipHop (Maira, 2000) has a thorough and insightful analysis of henna's explosion into the western pop fashion industry in the late 1990's, but does not attempt to set this into an understanding of the plant, the traditions, nor the history of henna. Field (1958) compiled a literature review of mentions of henna from a wide range of sources, including the Ebers Papyrus, Josephus, Pliny III, and Clement of Alexandria through colonial travelers such as Sonnini, Lady Burton, and Tavernier. Rather than illuminating the history of henna, this

revealed that there had never been more than sporadic and disconnected mentions of henna by western observers.

Westermarck (1914 and 1924) documents details of henna traditions in Morocco in the early 20th century, but do not elaborate on the specific materials, techniques, or the artists. Sijelmassi (1974) draws some of the patterns used for henna in his larger work on Moroccan art. Messina (1988) writes about women's henna parties in Morocco, with more detail than her predecessors about the patterns, events, and social purposes. Tauzin writes in great detail about contemporary henna art in Mauritania, and makes a small attempt to assemble some historical references, but falls back on the same phrase spoken in different ways throughout the literature, "L'utilisation du henné est très ancienne, en même temps que le sens à lui donner demeure souvent obscur" (Tauzin, 1988:11). All authors make it clear that henna is longstanding and an integral part of the culture, but they offer neither specifics of its origins nor its connections with henna use in other cultures.

A few indigenous authors have written about henna, though it is unusual for mostly male writers to take much notice of what is essentially a women's art. Saksena (1979) details Rajasthani henna patterns and traditions, but fails to interview or quote any Rajasthani women when discussing henna. He offers his own opinions on henna, such as "Mehndi acts like a charm and would keep your begums confined to their harems if their hands were decorated with mehndi once a week. Then they would need no guards and no chains to hold them (p. 96)." He offers some unfortunate advice on mixing henna, such

adding of kerosene to the henna paste (p. 59). He makes some unusual claims for henna, "if the paste were tied round the joints of a horse's legs, he would go four to five hundred miles without feeling any fatigue" and "a bandage of wet mehndi cures the severest of headaches (p. 96)." Saksena also states that there is no Muslim tradition of patterned henna, and that henna looks dirty and messy on dark skinned people, contradicting abundant evidence of complex henna art in Moorish Spain, Iraq, and Iran in the 12th through 17th centuries, and African henna traditions. Saksena is under the impression that henna originated in India and traveled west from there, a premise widely contradicted by archaeological evidence. "The Victim and Its Masks" (Hammoudi, 1993) mentions the use of henna for Id sacrifice by the Ait Mizane of southern Morocco but does not connect sacrificial henna to range of other henna practices, nor does he attempt to illuminate the history of the practice.

Old medical texts have useful references for placing henna in historical geographies: The Ebers Papyrus, written around 1550 BCE in Egypt details the medicinal attributes of henna grown in soils of differing moisture content, and characteristics of different parts of the plant (Bryan, 1974). Medicine of the Prophet (Al_Jawziyya, tr. Johnstone 1998) lists specific uses for henna, including treatment of migraines. However, medical texts do not concern themselves with henna as body art.

Descriptions of cosmetics and cosmetic formularies are a useful source of historical placement for henna. Ovid's verses about women's cosmetic habits imply Roman women dyed their hair with henna (Schmidt, 1924: 26). Early editions of Chemist and

Druggist provide articles on henna as hair dye, as well as historical mentions, such as that the Dialogues of Lucian mention that Greek women tinted their hair and nails with henna (Chemist and Druggist, 1932). Chemist and Druggist (1926) also sheds light on the confusion surrounding the introduction of henna into the west: the wide varieties of henna hair dye with undeclared ingredients. "Neutral henna", "red henna" and "black henna" were widely sold for blonde, red, and black hair. Only red henna was actually lawsonia inermis. Neutral henna was cassia obovata, and black henna was indigofera *tinctoria*. The dried powdered leaves of all of these plants appear very similar. Exporters of these hair dyes were reluctant to give away their trade secrets, and declarations of ingredients were not required during the early twentieth century. Additional confusion about henna comes from the addition of lead, copper, and iron sulphates and acetates, used to create other tones of hair dye. These are also usually undeclared ingredients in a package simply labeled "Henna" (Chemist and Druggist, 1925). This confusion about what henna is and is not opened the way for the current problems with paraphenylenediamine black dyes substituted for henna, and the subsequent problems with confiscation and banning of henna as body art.

Henna is mentioned in the King James Version of the Bible (Holy Bible, KJV), the Old Testament, by its Latin name, camphire: "I am my beloved's, and his desire is for me. Come, my beloved, Let us go into the open, Let us lodge among the camphire" (Song of Songs 7:11-13), "Your shoots are a royal garden full of pomegranates, with choice fruits: camphire and spikenard" (Song of Solomon, IV, 13), and "My Beloved is unto me as a cluster of camphire in the vineyards of En-Gedi" (Song of Solomon, I, 14). There are

well-documented henna traditions among Armenian Christians, Coptic Christians, and among all of the Jewish groups that lived North Africa, the Arabian Peninsula and the Levant. Yet, some priests such as Father Peter Joseph (2002) condemn henna as unsuitable for Christians. Rabbi Jack (2005), of New York City, posting on the National Conference of Synagogue Youth, advises, "Henna tattoos are Rabbinically prohibited even when two youths asked him pointedly about the Yemenite and Sephardic Jewish henna traditions.

A potential source of information on henna, people who have emigrated from countries where henna is an indigenous tradition, is not as accessible as one would hope. When I began researching henna in 1990, I went to Arab markets in the Akron and Cleveland, Ohio areas, and asked to purchase henna, and how to use it. The answer was usually, "Why do you want that old-fashioned filthy stuff?" This attitude is demonstrated in an article about Egyptian night of the henna in the countryside, "the henna stain remains for weeks; it is thus city couples that find its appearance inappropriate to office or school settings, who tend to abandon this tradition" (Morgan, 1995). In an Iraqi Arabic dictionary, this bias against henna is shown in an example following the definition of henna, "Educated girls don't put henna on before their marriage." (Clarity, Stowasser, Wolfe, Woodhead, & Beene, 2003: 122)

The scarcity of reliable information on henna in western publications adversely impacts legal, economic, health, cultural, and religious issues tangent to henna. A fundamental academic investigation of henna, enabled by defining what henna is and is not, is sorely needed to integrate it into the body of knowledge, and to facilitate henna's introduction into western culture. Up to this point, there has been no organized study of henna, not even a set of criteria for undertaking that study. This paper proposes to identify the criteria that would make the historical, anthropological, economic and legal study of henna possible.

Identifying Henna and Proposing Criteria for a Systematic Study of Henna

To construct a systematic study of henna, it must be identified and understood as a plant, as a material culture including its cosmetic, medicinal, and ritual traditions, and all aspects must be situated in geographies and history. To this end, henna and its uses must be precisely identified.



Figure 4: Henna body art, paste on skin (Cartwright-Jones, 2005)

Copyright 2006 Catherine Cartwright-Jones Published by Henna Page Publications, a division of TapDancing Lizard LLC 4237 Klein Ave. Stow, Ohio 44224 USA All rights reserved. Henna body art is the practice of staining the skin with a paste made of henna, *lawsonia inermis*, leaves that have been pulverized and mixed with a slightly acidic liquid. These stains last longer than pigmented cosmetics, but are not permanent as are tattooing, scarification and piercing. Henna is also used to dye hair and fingernails, and has been used medicinally in India, the Middle East and North Africa. Henna body art is presently popular as adornment for weddings and other celebrations in South Asia, the Middle East and Africa, and there is text and pictorial evidence that henna has been used for adornment for over 5,000 years.

When dried henna leaves are pulverized, wetted and applied to the skin for half an hour or more, lawsone, the dye molecule in henna leaves, breaches cells, penetrates and stains keratin in skin, hair, and nails just as the liquid from a teabag penetrates and stains cellulose in a white cotton tablecloth. Figure 1 shows the stain left from the paste application in Figure 4.

Henna body art is a transitory skin stain and can only be directly observed during the few weeks that it is on a living body. Text and artifact evidence indicate that people may have used henna as an adornment since the late Neolithic, though use can only be indirectly observed, and thus far has been only sporadically studied. The lack of a reliable history of henna underlies the misconceptions held by Willit and Rabbi Jack, and the problematic FDA legislation.

Constructing a history of henna is challenging. We can verify the presence of henna patterns on living skin by observing this characteristic paste application, color after removal, fragrance, and subsequent disappearance of the pattern. We cannot directly observe henna that was applied a month ago, because the henna stains exfoliate within a month. We cannot directly observe henna that was applied several thousand years ago, because the living people are gone. In the absence of direct observation, how can one study henna in the past, particularly in the distant past? Field (1958) provides an archive of henna mentions in text. Barring difficulties with translations of the names of plants, one could assemble historic geographies of henna from text mentions, but this would only reach as far into the past as text exists. Also, text rarely evidences the patterns of henna in body art. How, then, can one establish the existence of henna use and the characteristics of application in the absence of text?

Eastern Mediterranean statuettes and wall paintings from as early as 3500 BCE depict women with red stained hands (Getz-Preziosi, 1994: 49). Can we claim these artifacts as evidence of early henna traditions? How can one prove that a transitory body art existed when there can be no directly observable evidence? One can identify criteria based on direct observations of henna and its interaction with skin that facilitate evaluation of indirect evidence of henna body art within a specific time and location. For instance, in Figures 5 through 14, what evidence would be needed to interpret the body markings?



Figure 5: Two Harem girls, attributed to Mirza Baba, Iran 1811-14, Collection of the Royal Asiatic Society London, 01.002



Figure 6: 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



Figure 7: King Mahajanaka, Ajanta Caves, Maharastra India, 5th - 6th century CE



Figure 8: Postcard 185: Scenes Et Type, Fez, Beuté Morocaine, H. D. Séréro, Fez, Mailed 1909



Figure 9: Post card, purchased from an Ebay auction, labeled "Arab woman"



Figure 10: Ceremonial object, carved stone circle, Figure III from Waring and Holder, 1945 (Fundaberk, 1957: 53)



Figure 11: Detail from Life in The Country: The Nomad Encampment of Layla's Tribe, Tabriz, 1539 – 43, Cambridge, Harvard University Art Museum 1958.75



Figure 12: Figure from the Little Palace, Knossos Post-Palace Period, 1400 – 1100 BCE Gallery X, Case 140, Figure 46, Herakleion Museum, Greece



Figure 13: Figure from Paphos, Cyprus, 700 BCE; The British Museum



Figure 14: Xeste 3, "Lustral Basin" North Wall: Adorants, (Coumas, 1992)

Proxy evidence has used in other archaeological disciplines to study transitory aspects of culture. Such techniques are used to study ancient dance. Dance is an important part of culture. Dance cannot be directly observed except during moment of dance. How then can one study dance as it was done in the seventh century BCE? One can examine pottery fragments with depictions of people who are presumed to be in dance poses and compare them to folk dances still existing in a region (Tubb, 2003). One can examine ancient texts that describe dance and compare those descriptions to eyewitness observations in the modern era (Gabbay, 2003). Scholars reconstruct ancient dance by coupling indirect evidence from thousands of years ago with contemporary ethnic dance studies and the fundamentals of human movement. Similarly, if one has criteria based on what is known about fundamentals of henna body art, the interaction between henna and skin based on direct evidence, then criteria should also apply to proxy evidence of ancient henna.

The strength of these criteria and proxy evidence is that they can assist the study of henna that cannot be directly observed. The weakness of the criteria and proxy evidence is that they cannot definitively prove that henna existed; they can merely support the probability of that existence. They can help support or negate interpretation of artifacts as having evidence of henna. Mapping the artifacts judged "positive for henna" could be used to help reconstruct the historical geographies of henna.

In Chapter One of this paper, I explain the need for a scholarly investigation of henna, particularly henna body art. Chapter Two observes the characteristics of henna to establish the criteria for evaluating evidence of henna. Chapter Three will test the usefulness of the proposed criteria. Chapter Four will show how artifacts that have been judged as having "positive" evidence of henna can be mapped to show the historical geographies of henna. Chapter Five will propose the potential usefulness of these maps for further study of different aspects of henna. The usefulness of a systematic investigation and mapping of henna is that it will clarify what henna and is not, and provide a sound basis for decisions regarding appropriateness, legalization and trade.