

Dallah, Gahwa and the Senses

“Know that access to that by which our soul becomes knowing begins by way of the senses”

Avicenna (Erzen 71)

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Introduction

Rituals are powerful ways to create and maintain group identity, and sometimes used as a way to control and minimize individual deviancy from established group norms. The acts themselves, embodied in materials, objects and the spaces used in the ceremonies have meanings that are ingrained in people's consciousness, carried with them for life and passed down to future generations. Family and domestic rituals are important in maintaining cohesiveness and happiness. Corporations, through institutionalized stories, rituals, material symbols, and specific language create and maintain a desired culture (Robbins 1990, 449-450). The observance of a formalized set of actions helps establish one's place within the group – whether that group is the family or any other group within society. Studies have shown that food rituals have successfully been used to help define group identity within a professional context while helping the group define its boundaries from outside and within, creating a sense of stability through socialization (Thomson and Hassenkamp 2008).

The objects involved in those rituals become incorporated into the mental vocabulary of the participants through a variety of associations made through sensorial cues and the



Fig. 1 Dallah at the Corniche in Doha, Qatar.

works of the intelligence (Malnar and Vodvarka 2004, 41).

Much has been published about the role of the senses in how the world is sensed, perceived and learned. The *dallah*, or Arabic coffee pot, is a domestic object common in the Middle East and Levant¹ countries. It is seen at airport and city souvenir shops, at markets or souqs and also gracing many prominent city spots, for example corniches and roundabouts (see figure 1). This domestic object has been linked to the Arabic culture of many countries. And despite the fact that the *dallah* is mass produced today having no direct links to a glamorous provenance nor to a known tradition of fine craftsmanship, it still connotes to most Westerners images of an exotic and idealized oriental world. To the people of these

Arab countries, the *dallah* is associated with old Bedouin traditions where the ritual of coffee preparation, serving and drinking was a sign of hospitality, generosity and wealth. Bedouins

¹ There are many definitions of what *Levant*, as a geographical region is. For the purpose of this paper *Levant* is defined as including Egypt, Israel, Palestine, Jordan, Lebanon, Syria and Turkey, while the *Gulf* is defined as

used this social time to keep abreast of the news of distant places not easily reached and also on the state of pastures and animal migrations.

Although today the multi-stepped coffee preparation ritual has given way to a more simplified method, similar to the Western coffee making process, the serving of the *gahwa*, or Arabic coffee, as a contemporary ritual is still connected to socializing with friends, family and business partners. Thus, it is present in the main rites of passage, such as births, marriages and funerals.

Despite its major significance in daily life, the exact provenance and design of the coffee pot remains elusive, with manufacturing centers sometimes identified but no known documented history of its design evolution.

The objective of this paper is twofold. First, it aims to explore possible origin for the design of the *dallah*. Second, it intends to show how the *dallah* and *gahwa* are sensed as part of a hospitality ritual particular to the Arabian Gulf, with specific information about Qatar. It must be noted that Qatar has remained largely an oral culture and mentions to Qatar are a result of personal, direct observation and common knowledge imparted by many Qatari nationals.

***Dallah* - The Object**

The *dallah*'s distinctive shape makes it a highly recognizable object, and because of its widespread use in the Middle East and Levant, it is sometimes used as a trademark of some of those countries. As we perceive our environment not only through our intellect but



Fig. 2 Arabic coffee pot, "Baghdad boiler". Bramah 1990, 11.

also through our senses, an object, such as the *dallah*, enters the collective consciousness of a people as a fundamental part of a complex cultural construct, even though today it is no longer an element of the domestic routine of most households.

It should be mentioned that although the form of the *dallah* is generally recognizable by its beak-like spout, there are many variations in its form and style, as it would be expected of an object the presence of which spans such a vast geographical area. One example is shown in figure 2. The body of the pot with its round, bulbous form is wider at the base tapering off towards the centre and gently flaring out again at the top, where the hinged lid rests. The lid, fully enclosed and hollow, is often comprised of two pieces, the lid proper and

a finial that is screwed to its top. The spout, like a thin, crescent moon, starts at mid-base and protrudes from the height of the base of the lid or higher. A hinged flap sometimes covers the top of the protruding part, but it is often open, so one can see the coffee being channeled to the cups. Opposite to the spout is the handle, usually in a curvaceous form, which starts at the base and ends at the rim where it forms the support for the hinge of the lid. Copper, brass, tin and silver have been the choice materials for the pot, although other metals, such as gold and, more recently, even plastic, have also been used.

The Arabic coffee pot has been referred to as “Baghdad boiler” by Bramah in both of his books about coffee making equipment (Bramah and Bramah 1989, 22), but no specific location has been cited in the literature consulted as its place of origin, or if it had a specific “designer”. However, there is knowledge of specific centers of production as observed by Bent in her 1889 trip to the Arabian Peninsula,

The coffee-pots of Bahrein are quite a specialty, also coming from El Hasa, which appears to be the centre of art in this part of Arabia. With their long beak-like spouts and concentric circles with patterns on them, these coffee-pots are a distinct feature. (Bent 1900, 10)

Vidal confirms Bent’s observation as he notes the economic activities of the oasis of Al Hasa (or El Hasa) in Saudi Arabia, “More numerous than the civil servants are the members of the arts, crafts, and professions. In this respect, metalworking (particularly the manufacture of the well-known, large, beak-spouted coffeepots) and textile manufacture are exceptionally noteworthy” (1954, 418).

It has been difficult to determine the exact origin of the first specimens of this object and how or if its design evolved in a systematic manner. A precise date of when the production of the *dallah* commenced also cannot be ascertained. Considering that indications of coffee roasting do not appear until the 13th century and that coffee’s spread within the Ottoman Empire occurred in the 1500s (Bramah and Bramah 1989, 21), it is likely



Fig. 3 Lamp of polished sandstone. 24,000 – 14,000 B.C., Lascaux Cave, France. ARTstor, data from University of California, San Diego.

that the *dallah* in the shape we know it today was developed during this time or afterward. Bramah claims that the Baghdad boiler in this shape and form was developed by the middle of the 17th century, following the Turkish *Ibrik* from 1300 while the first coffee pot was likely the *Jabena* from Ethiopia (1990, 3).

In terms of form, the *dallah* could have evolved from two distinct domestic objects, a specific type of oil lamp and ewer. This hypothesis is corroborated by Baer, who affirms that the Arabic coffee pot is a type of composite object, “which results from a blending of forms originating in functionally different objects – a bulbous ‘vase’ and an ‘oil lamp’ ”(1983, 93).

Oil lamps had been fashioned out of seashells and stones in prehistoric times dating back to 70,000 BCE². Figure 3 shows an example of a prehistoric sandstone lamp. Thousands of years later, technological developments allowed lamps to be created in ceramic, glass and metal. A large number of clay lamps have been found in Syria, Israel, Palestine, Lebanon and Jordan. The prevalence of clay lamps in this region is due to several factors – the regional convergence of Christianity, Islam and Judaism, which used the lamp for practical but also for symbolic reasons; the abundance of the choice fuel, olive oil, widely produced in the region; and the fact that clay is inexpensive, easy to manipulate, accessible and abundant (Lapp 2004, 174-175). Although Lapp’s article focuses on lamps found in the countries mentioned above, oil lamps were widely produced in Mesopotamia, Greece and Rome in antiquity, with slight variations in form and style.

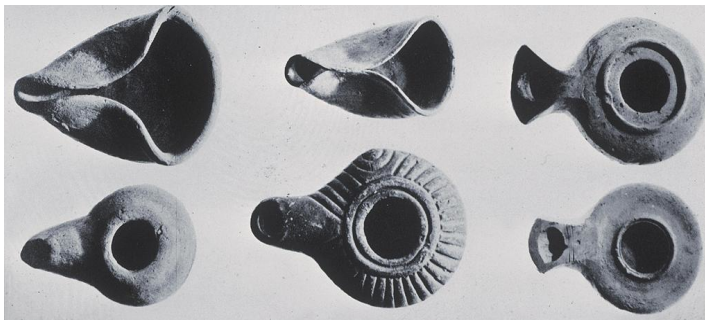


Fig. 4 Oil ceramic lamps found in Herodian house, Roman Palestine. 37 BC – 638 AD. University of California, San Diego. ARTstor Slide Gallery.

The form of the clay lamp mirrored the form of the seashell and evolved from a simple saucer or plate pinched on one side forming a contained space for the wick (see figure 4). With time the lamp gained its more enclosed form as explained in an article from *Eretz Magazine*,

In the Hellenistic period (333-168 BCE), the Greeks introduced the closed oil lamp, which was distinguished by its two separate compartments: the oil reservoir, constituting the major part of the lamp, and the chamber into which the wick was inserted.

Oil lamps, as essential objects, were extensively used to light public spaces and religious services (Baer 1983, 7) in addition to homes or tents. They also assumed great religious symbolism, as they are often cited in the Bible, Qur’ran and the Torah.

² Information from Encyclopædia Britannica Online, 2010, s.v. “lamp,” <http://www.britannica.com/EBchecked/topic/328821/lamp>> (accessed March 17, 2010).



Fig. 5 East Iranian oil lamp. Khurasan or Afghanistan, c. 10th century. Private collection. Baer 1983, 23.



Fig. 6 East Iranian oil lamp, c. 11th century. Fogg Art Museum. Baer 1983, 24.

Through trade, warfare and labor migration styles and techniques in the manufacture of artifacts were intensely exchanged since antiquity. Therefore, it is hard to say with certainty the exact origin of a specific design, especially of pervasive domestic objects. Early Persian Islamic metal forms show strong influence from artifacts from classical Greece and

Rome, as do the Mesopotamian, Egyptian and Syrian forms (Allan 1977). Figures 5 and 6 illustrate how metal oil lamps were fashioned around the 10th century. As Baer notes, in Medieval Islamic art, metal was widely used in architecture, personal and military accessories, weaponry, and also in utilitarian objects, often as a merger of elements of two distinct objects (1983, 303). Its durability, non-flammability and intrinsic value were prized qualities, and because of the latter many examples were melted in times of need.

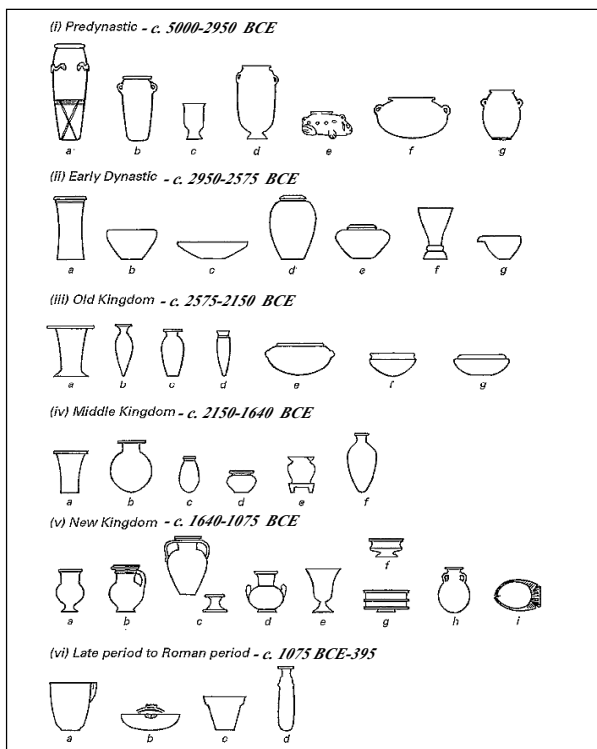


Fig. 7 Chronological chart of ancient Egyptian stone vessel shapes, Oxford Art Online – <http://oxfordartonline.com.proxy.library.vcu.edu/>

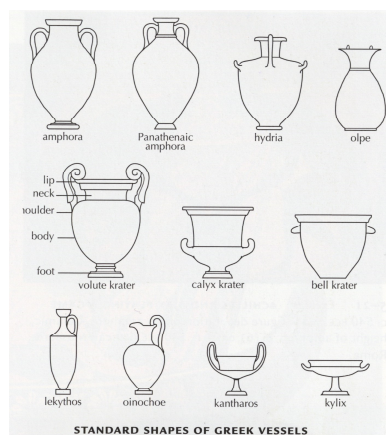


Fig. 8 Greek vessels. Stokstad 2008, 125.

The ewer, another common object used to hold water or other fluids, is most likely the model for the body of the *dallah*, while the oil lamp's shape is echoed by the way the lid, handle and spout are grouped. Ewers or vases were common articles, and similar shapes and forms were shared by a variety of cultures. As figure 7 shows, many forms known today were already common in ancient Egypt (and also in the Near East, for that matter). Hambidge discusses how the Greeks, around the 6th or 7th century BCE, further developed the geometry Egyptians used in planning and surveying. The Greeks painstakingly applied geometry in their quest for perfection and harmony in many areas, for example, architecture, sculpture and pottery (1920). Figure 8 illustrates some of the standard vase shapes created or refined by the Greeks. The Greeks also developed novel and fine decorative techniques, which spurred a large demand for their pottery. It is possible that in medieval times when classic Greek texts were translated within the Islamic Empire, a renewed interest in such pleasing forms arose leading to the design of the *dallah*.

Another possibility is that the *dallah* evolved from the alembic still, developed by the Arabs in connection with alcohol distillation (figure 9). Although alcoholic beverages have existed for around 5,500 years, initially in Mesopotamia, it was not until the Arabs invented and mastered the distillation process, in the 8th and 9th centuries that higher concentrations of alcohol could be obtained. The Arabs were also the first to use alcohol for medicinal, chemical and military purposes (Hajar 2000). In *The Volatile Oils Vol. 1* by Gildemeister, several pictures show how animals were the inspiration for many of the flasks used in distillation at the time. Although the bear (figure 10) is shown as the inspiration for the *alembicus* (alembic), which greatly resembles the *dallah*, it is possible that the alembic itself was the product of the merger of the oil lamp and the ewer.

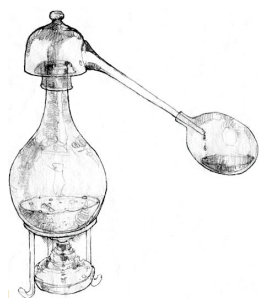


Fig. 9 Early Arab distillation device, used by early chemists like Jabir and Al Rahzi. http://www.grouporigin.com/clients/qatarfoundation/chapter2_3.htm

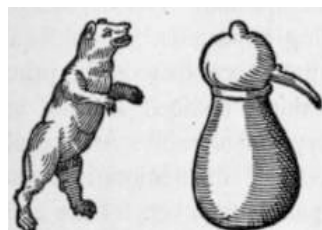


Fig. 10 The bear as the model for the alembic still (Gildemeister, 1913)

The *dallah*'s design, whether an amalgamation of two objects or an evolution from the alembic, was a result of adjustments and improvements likely occurred as a function of material, technology, know-how, aesthetics and use. The Arabic coffee pot, especially as developed in the Middle East, played an active role in the coffee preparation, and was not used merely as a serving pot. Heavier and less graceful than its Persian counterparts, which had narrow necks to avoid spillage and evaporation in the desert heat (Ross 1981, 121), the *dallah*'s shape reflects the recognition that it needed stability to sit on embers and on sand, while the height of its beak minimized the coffee sediments that would pass onto the cups. Its lid sits heavily on the rim unlikely to open as the pot is tilted to pour, and its material is also appropriate for constant transportation.

***Gahwa* – The Content**

It would be incomplete to place the *dallah* in ritualistic and sensorial contexts without considering its “content,” which is the coffee. The history of coffee is a potpourri of facts and legend from an unknown world full of mystery and luxury about which Europeans would dream, fantasize and sometimes fear. It is accepted that coffee originated in Ethiopia, was brought to Yemen, where Sufis drank it as part of spiritual rituals (Wild 2004, 31), and from there it slowly spread to the Arabian Peninsula and all the Ottoman Empire. The most popular legend of the discovery of coffee is about an Ethiopian goatherd, Kaldi, who was intrigued to see his animals become extremely excited after eating the fruits of a particular tree. He also felt energized after trying the fruits. Kaldi related the incident to an abbot at a nearby monastery. Judging the fruit evil the abbot threw the fruit in the fire, causing the release of its captivating aroma. Intrigued by the smell, the religious man decided that the fruits had a divine origin after all, and from then on he would use it in his night prayers to help keep him and his monks awake (Wild 2004, 43). According to Wild, there is evidence that coffee was served amongst the Sufis first “from a ladle dipped into a glazed bowl named a *majdur*” and later from small bowls, which were passed around, echoing the Chinese tea customs (2004, 47) with which Arabs were by that time familiar due to the trade with China. The intense trade established from 1498 with the opening of the sea route around the Cape of Good Hope by the Portuguese (Le Corbeiller 2003, 7), helped spread coffee to the world. By the 1500s coffee was rapidly establishing itself as a choice beverage, and by 1566, in Constantinople alone, there were “six hundred establishments selling coffee, from splendid coffee houses to the humblest kiosk” (Wild 2004, 53). The coffeehouse culture was forged, providing a location for socializing, business and the exchange of ideas, news and poetry.

In Istanbul, before the advent of coffeeshops, people had bazaars, mosques and *hammam* (public bath) venues for socializing outside the domestic arena. However, the coffeehouse arose as an institution geared exclusively for socializing and became a space integrated with dissemination of information, political debates, intellectual exchanges or simply a place for social interaction (Kömeçoğlu 2005, 8). This clearly Oriental, secular institution, popular in all senses (affordable (Topik 2009, 90), non-discriminatory except for women in the Levant and Middle East, generally appealing and trendy), generated much controversy over its repute and potential danger to well-established institutions – political or religious, but it did not take long to become a part of the urban landscape and an agent of change of and within it (Kömeçoğlu 2005, 8-10). It was in the next century, in the 1600's, that coffee gained a foothold in Europe; the coffee rage in the United Kingdom is well illustrated and documented by Pinus (1995, 811-812), and its introduction to France is narrated in amusing details by Ukers (1922, 51-52). Yet, it was not until the 1800s that coffee became truly fashionable in Europe and the Americas. In their beginnings, coffee and coffeehouses were often stigmatized or even banned in the East and West because rulers and religious figures saw coffee drinking associated with addictive practices and coffeehouses as secular and hedonistic establishments harboring drugs, prostitution, pederasty, and the place for the spread of iconoclastic political views – sometimes the most feared danger of all. But slowly coffee became an acceptable beverage favored by the aristocracy and intellectuals. After Europe, it expanded to the Americas and the world. Ethiopia was the first commercially viable producer of coffee until mid-16th century, and it was only after 1544 that coffee was officially introduced to Yemen as a replacement for the banned *qat* (Wild 2004, 70-71). Although Yemen became a producer much later than Ethiopia, it has been more often identified as the primary producer of coffee during coffee's ³earlier stages perhaps due to the intense activities in its Mocha port, which came to be associated with coffee in a variety of ways.

Despite Yemen's efforts to keep its monopoly over the coffee trade by only allowing the export of roasted beans, a few seedlings got smuggled out of the country, giving rise to vast plantations worldwide of the prized plant. Coffee production expanded to most continents, and today it is the second most traded commodity in the world, after oil. Brazil is the largest producer and the United States the largest overall consumer.

³ Qat or khat is a shrub (*Catha edulis*) of the staff-tree family cultivated in the Middle East and Africa for its leaves and buds that are the source of a habituating stimulant when chewed or used as a tea, <http://www.merriam-webster.com/dictionary/qat>.

The preparation and serving of coffee suffered many adaptations and changes throughout the years since coffee became a popular beverage. Methods of preparation and serving vary greatly depending on demographics (geography, income levels, education, etc.) and also on personal tastes.

Technology and globalization have to a large extent dictated some of the major trends in coffee and coffee apparatus consumption. In the Gulf countries alone there are many variations in coffee preparation and serving, although the essence of the ritual is the same. Coffee, in the Arab, Bedouin tradition of the Gulf, was traditionally prepared by a male and in the presence of the guests. The quality and quantity of the coffee served indicated the wealth and generosity of the host and was a form of honoring the guest. The green coffee beans were first roasted over an open fire using a long handled iron pan until the beans turned into a golden brown. The beans would then be ground with a pestle and mortar into a fine powder. In the *dallah*, boiling water was added to the powder and spices. In Qatar, some of



Fig. 11 *Dallah, finjans and gahwa.*

the preferred spices in *gahwa* preparation are saffron, cardamom and cloves; and the coffee is served unsweetened, usually accompanied by dates. While holding the *dallah* with the left hand, the server pours and serves the coffee from the *dallah* into small handleless cups called *finjan* (see figure 11), which are one by one offered to each of the guests. Status and seniority play an important role on the place each person takes in the space and the order in which the coffee is served. There were rules governing all the steps. For example, the person who is serving should be standing and was only allowed to sit and join in when the last *finjan*

was shaken side to side as an indication that no more coffee was wanted. In Qatar, it was understood that when a person, usually a man, did not drink the coffee but placed the cup aside it meant that he came to ask for a favor or to settle a possible disagreement. He would only drink after the matter had been discussed. Not accepting the coffee was understood as a major insult. Today these rules have been relaxed, and although no offense will be taken if the *gahwa* is rejected, if the *finjan* is taken, it is still preferable that the coffee be consumed.

Serving *gahwa* has been a constant feature of Qatari society. The *dallah* is normally used only during special occasions and more formal gatherings. For informal day-to-day occasions the coffee is placed in a thermos. New technologies and services, the urban environment and the demands of contemporary life have transformed the *gahwa* traditional preparation ritual. In most of the Arabian Gulf coffee can be bought in one of the many specialized stores that not only sell the beans but also roast and grind them to customer specifications. If that is still too much trouble for some, the shelves of all major supermarkets have the ground Arabic coffee already packed. Other types of coffee may be served from time to time depending on the household, and global, branded coffeeshops are widely available throughout the region, providing a wide range of specialty Western types of coffee.

It is interesting to note how the rituals incorporating coffee take on different meanings and different levels of intensity in the process of identity building of groups in different countries. Those meanings depend in part on the type of message that is culturally construed within each ritual. Coffee, for instance, is an extremely popular beverage in Brazil, at homes, restaurants, bars, commercial establishments of all sorts and very much a part of the daily life of most Brazilians. However, as Topik points out, “neither the crop nor the *fazenda de café* (large coffee plantations) occupied a large place in the Brazilian national identity. There are few ceremonies, statues, holidays, or folklore characters associated with coffee. Literature and music have largely abandoned the bean” (Topik 1999, 87). This marks a stark contrast to the role played by coffee in the Levant and Gulf countries, where tradition positions the ritual of serving coffee and the *gahwa* itself with reverence and as important cultural identifiers.

Dallah, Gahwa and the Senses

The development of molecular biology has led to exciting discoveries regarding the senses and how we process our environment. An object, through its form, shape and use in the context of our daily lives transmits a wealth of sensorial information to the brain. As one experiences the surrounding world in the form of spaces and objects, through the intellect and the senses, a web of connections is created. A sight, a touch, a sound, a taste or a smell can suddenly awaken a vast network of complex relationships. These relationships will be construed in diverse ways depending on the individual, and how one filters sensation and cognition through his or her cultural framework.

Perception through the senses is not a novel discussion topic. Since Classical Greece there are accounts of the importance of the senses. It seems that throughout history individuals have tried to explain, describe and even attach degrees of importance to each of

the senses, although in Western society since the 20th century there is a clear hegemony of vision over the other senses that has not always been the case (Pallasmaa 2005). Also, in various non-Western societies the senses have been given different ranking. In the Sufi tradition, the engagement of the five senses is strongly related to how one can reach truth (Erzen pg. 71), and this thought has, to a large extent, permeated Islamic art.

Each of the senses works in different ways, with sensory receptors responding mechanically (tactition, audition), chemically (olfaction, gustation) or through electromagnetic energy (vision) (Cytowic 1996, 4,56). Each one of them affects our human experience in a unique manner, and the richness of each experience is amplified by their concerted work. As sensorial beings, we experience everything that surrounds us, and it is possible to imagine that even a simple utilitarian object such as the *dallah* could have been designed with the objective to tantalize the senses. The importance of beauty and pleasant proportions is well known in Islamic art. The *dallah* is an aesthetically pleasing object, and when combined with the experience of object-content (coffee pot and coffee), it articulates all the senses in a concerted manner.

Companies, such as Nestle, who have a high stake in coffee have invested heavily in research and employ thousands of coffee sensory analysts (tasters) throughout the world. According to Lindinger *et al.*, the experience of drinking a cup of coffee is a “multisensory experience” involving “all our senses such as olfaction, taste, texture, trigeminal, and visual sensation” complemented by “emotions and cognitive processes” (2008, 1574). Anyone who has enjoyed a cup of coffee may not be able to articulate it in such specific terms but can attest to the enveloping pleasure it entails.

The *dallah*, through its history and as part of a cultural framework, has become a highly recognizable form, sure to evoke reactions from all five senses through its design and utility. In the context of a cultural ritual, the *dallah-gahwa* relationship provides a wealth of sensorial signals across all senses: vision, audition, tactition, gustation and olfaction.

Vision. In a response to adaptation requirements, early humans were forced to acutely develop vision over the other senses. Vision was then the last sense to be developed and the most specialized (Hall 1966, 40). Ocularcentrism has been prominently featured in Western culture since Classical Greece. Later scientific and technological developments in the form of the printing press, photography, film, and instruments that expand the eye’s ability for exploration from macro and micro perspectives also contributed to the phenomenon (Pallasmaa). Vision is the most conscious and intellectual of the senses: it can be shut down or purposely directed. On the other hand, sight is the sense with the least access to the

subconscious. Despite being a sense that can create distance, when working together with other senses, it can also greatly enhance them. Vision can affect flavor and colors, and textures can be clues as to how something will taste or feel.

The *dallah*'s form is pleasing to the eye. It is elegant and feminine, inviting the eye to gaze on its polished, reflective golden surface. The upper part of lid and spout are reminiscent of the Aladdin's lamp from the "Arabian Nights" so ingrained in the popular consciousness and closely connected to magic. The lid's elongated finial echoes elaborate minarets (figure 12). The unique crescent beak-spout form suggests the delicate lines of calligraphy as well as the Islamic crescent moon, which is a symbol present in the flags of numerous Muslim countries (see figure 13) and also featured in the minarets of many mosques.



Fig. 12 Blue Mosque, Istanbul, Turkey.

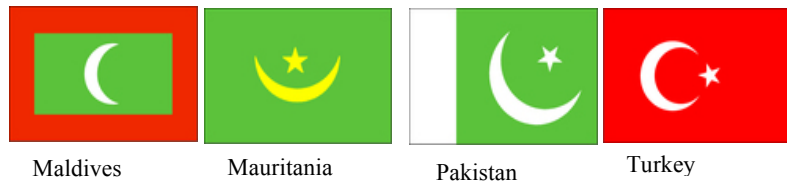


Fig. 13 Flags of some Islamic countries with the half-moon crescent.

The sense of sight has a massive architecture of cells working in parallel allowing humans to identify colors, forms and movement (Pines 1995, 15). The choice of metal also plays an important part in how much vision excitement the object creates. The yellow, warm golden color of the pot and the coffee it contains not only reminds one of luxury and preciousness but also echoes the affable atmosphere a host tries to create for his guests in which the coffee ritual takes center stage. The next level that goes beyond the visual is concerned with the meaning attributed to the coffee pot through what it represents within the ritual – hospitality, generosity, social standing, wealth and prestige. It was common for the *dallah* to be prominently displayed, and the greater the size and number of pots in use, the more affluent and influential the host would be. Ukers, in his seminal book *All About Coffee*, quotes Palgrave on the display of coffee pots

The number of these utensils is often extravagantly great. I have seen a dozen at a time in a row by one fireside, though coffee-making requires, in fact, only three at most. Here in the Djowf five or six are considered to be the thing; for the south this number must be doubled; all this to indicate the riches and munificence of their owner, by implying the frequency of his guests and the large amount of coffee that he is in consequence obliged to have made for them. (Ukers 1922, 660)

Audition. The sound receptor cell is called a hair cell and is located deep in the inner ear. There are 16,000 hair cells in a human cochlea⁴, while the human retina of the eye contains 100 million photoreceptors. On the other hand, sound receptors are extremely sensitive and respond at an incredible speed while photoreceptors are much slower. In fact, the auditory system can respond up to 20,000 times faster than the eye (Pines 1995, 38-40). As with vision, many instruments have been created to extend the ear, such as the radio. The alternation of sounds and silence form an important part of our understanding of the world. Although audition is a mechanical sense usually experienced as external, it does approximate us to our surroundings, our inner selves and to each other. Two colors cannot coexist in the same space without altering each other, but two sounds cannot only occupy the same space in time, they can join in to create truly inspiring music that elevates the soul and calms the body. Of course, music also has the power to stir passions or to invoke nostalgia and sadness. More than one hundred years ago, Bent noticed that “In the bazaars of Manamah and Moharek coffee-vendors sit at every corner with some huge pots of a similar shape simmering on the embers [*sic*]; in the lid are introduced stones to make a noise and attract the attention of the passers-by” (1900, 10). The sounds of the coffee preparation – the tingling of the iron stirring spoon and pan while roasting the coffee beans over the open fire, the rhythmic pounding of pestle to grind the beans, the *gahwa* being rushed into the little *finjans*, the crackling of the fire – the sounds of greetings, conversation and laughter are all incorporated in the Arab tradition of hospitality, and in turn into the meaning of the objects that are part of such ritual.

Tactition. The haptic is probably the most intimate of senses. The skin is the body’s largest organ and its point of contact with the world. Our hands can cure, comfort, nourish and produce; and touch conveys temperature, texture, pressure, pain and pleasure. Touch is not thought of as closely related to food. However, it allows us to experience cold and hot coffee, the freshness of mint, the tingling pop of carbonated drinks and the crunchiness or smoothness of some foods.

Besides taste, touch also works closely with vision and a caress is often invited by the lure of the *dallah*’s sensuous lines, the distinctiveness of its form and its surface decoration. As Pallasmaa puts it, “The surface of an old object, polished to perfection by the tool of the craftsman and the assiduous hands of its users, seduces the stroking of the hand” (2008, 56). Other elements also contribute to the richness of this sense as it applies to the ritual involving

⁴ Cochlea is “a bony, snail-shaped structure about the size of a pea that is located deep inside the inner ear” (Pines 1995, 36).

the *dallah* and *gahwa* duo: the grasping of the warm *finjans*, the textiles on which guests sit, and the warmth of the fire. Furthermore, just as a door provides a passage, a transition, the hinged lid of the *dallah* is an intriguing and ludic element compelling one to open it, to experiment with the movement and to inspect the interior of the pot.

Gustation. Taste is a social sense (Ackerman 1996, 127). First, it is better enjoyed in good company, and second, it is also a chemical sense that needs a companion to work to its fullest. Without the olfactory system, taste is suboptimal. In order to test this affirmation, one needs only to eat while plugging his or her nose. Gustation can be controlled to a certain degree in that we only taste what we choose to put in our mouths. It has been widely believed that the tongue is mapped out for taste sensations – bitter, salty, sour, sweet. However, recent research has shown that such belief is false. Plus, there is a fifth taste sense, umami, responsible for a taste sensation that is protein-like, meaty or savory such as glutamate. All areas of the mouth that are taste sensitive will respond to a flavor stimuli; however, the taste zones will vary in their relative sensitivity to stimuli (Spanier 2001, 35, 50). This observation is further elaborated in the *Scientific American* magazine article Making Sense of TASTE, which states that

One of the most dubious "facts" about taste – and one that is commonly reproduced in textbooks – is the oft-cited but misleading "tongue map" showing large regional differences in sensitivity across the human tongue. These maps indicate that sweetness is detected by taste buds on the tip of the tongue, sourness on the sides, bitterness at the back and saltiness along the edges.

Taste researchers have known for many years that these tongue maps are wrong. The maps arose early in the 20th century as a result of a misinterpretation of research reported in the late 1800s, and they have been almost impossible to purge from the literature. (Smith and Margolskee, 2006)

If the nature of taste is a social one, the *gahwa* ritual provides it with the perfect background, as *gahwa* is an inseparable element of Qatari social life. The coffee is traditionally served accompanied by dates whose sweetness offers a stark contrast to the bitterness of the drink. Taste, which is closely associated with flavor, gets a large percentage of its effect through olfaction. Because taste and smell work so closely, the relationship will be further elaborated in the next section.

Olfaction. After being enveloped in mystery for millennia, scientists are starting to unravel the secrets of the olfactory system. The sense of smell is the only sense that is processed by the same network of neural structures as emotions - the limbic system. The amygdala, which is the brain's center of emotion (and part of the limbic system), actually responds to smells, illustrating how closely linked olfaction and emotions are (Herz 2007, 3-4), hence the olfactory system's capacity to instantaneously recall memories and feelings associated with our past. The loss of any of the senses is a life-changing event, as life quality is severely impacted. Scientists have discovered that in the short run the loss of sight is felt as the most dramatic, and in terms of ability to carry on daily vital tasks, smell is considered by most as the least important of the senses. However, research has also shown that in the long run the loss of smell or anosmia, causes the most psychological harm as the ability to fully experience the human existence becomes radically impaired (Herz 2007, 4-5). The loss in anosmia patients of some of the essential connections that enable the recall and creation of new memories associated with smells causes them to feel disconnected from the world. The impairment of their ability to enjoy food and sex, to decode their environment and to sense danger, leads to depression and could possibly have fatal consequences.

Smell, like taste, is a chemical sense and the most closely connected to the subconscious. Olfaction is not deliberately directional but can reach beyond the scope of vision. The sense of smell was one of the first senses to be developed, aiding early humans in locating food, regulating sexual behavior and warning of dangers. This is the most easily stimulated sense but the most fragile, as long exposure to determined scents will lead to odor adaptation. A human can distinguish around 10,000 odors, and it takes "only eight molecules of substance to trigger an impulse of smell in a nerve ending" (Pallasmaa 2008, 54).

As in the case of taste, the *dallah* can only be linked to the olfactory system through its content, the coffee. Between green and roasted coffee, more than a thousand flavor compounds have been identified with the help of some advanced technologies (Flament 2002, xi). Simple and complex constituents are transformed, created and liberated in the roasting process, producing an intense and complex aroma that has been the subject of continuous study since the beginnings of coffee as a beverage.

The concern of Islamic Art with the engagement of the senses is exemplified by a poem by Tadj-Eddin-Aid-Almaknab-ben-Yacoub-Mekki Molki relayed by Kadhi Hodhat (Ukers 1922, 663), where the poet describes how to savor a cup of coffee and how coffee entices all the senses, especially olfaction:

As with art 'tis prepared, one should drink it with art.
The mere commonplace drinks one absorbs with free heart;
But this—once with care from the bright flame removed,
And the lime set aside that its value has proved—
Take it first in deep draughts, meditative and slow,
Quit it now, now resume, thus imbibe with gusto;
While charming the palate it burns yet enchants,
In the hour of its triumph the virtue it grants
Penetrates every tissue; its powers condense.
Circulate cheering warmths, bring new life to each sense.
From the cauldron profound spiced aromas unseen
Mount to tease and delight your olfactories keen,
The while you inhale with felicity fraught,
The enchanting perfume that a zephyr has brought.

Conclusion

In order to better understand the world around us with all its complexities, humans have a great need to categorize, tag and rank all that is encountered. Despite this tendency, it is clear that to have a personal, full understanding of our surroundings, all senses are necessary and equally important. They do not work in isolation but in unison, complementing each other, therefore enhancing our sensations and emotions.

When an object is part of a shared ritual in a society, it links people to their past common traditions and triggers collective memories. Additionally, it serves to identify a group or culture, clearly setting it apart from others.

The *dallah*'s design, can be argued, was developed as a merger of two common objects – the oil lamp and the ewer, was a derivation of the alembic, or perhaps both. Its connection to the ritual of drinking coffee ties it closely to a whole set of values upheld by several countries in slightly different ways. The *dallah* and the coffee preparation, serving and consumption can be seen from a rich sensorial experience that serves to consolidate the object-content relationship that embodies those values. The pot itself captures the eye, invites touch and creates sounds, but it is its content that mostly entices the senses of hearing, taste and smell. Smell in particular, the sense of memory, “detonate[s] softly in our memory like poignant land mines, hidden under the weedy mass of many years and experiences” (Ackerman 1996, 5).

Whether at Sufis religious ceremonies, at a Bedouin tent, the palace of a Sultan, or an urban coffeehouse, coffee has developed within contexts that are highly socialized and ritualized. The utensils used in the serving of coffee vary greatly with the occasion and the level of formality required. Coffee can be consumed in styrofoam cups and poured from a thermos or in fine china cups and poured from silver pots. It is, though, a unifying beverage in that it knows no boundaries, be those geographical, economical and intellectual, of gender or race. In Qatar specifically, while the traditional coffee continues to be enjoyed in a variety of social interactions or just as part of the daily diet of many households, many types of coffee are available and consumed by the population at large. The country has many specialty coffeeshops offering an array of choices. The *dallah*, an object neither originated in Qatar nor exclusive to the Qatari culture, is still deeply connected to the local culture through its Arab roots and traditions. As a domestic object its use has become less prominent in favor of modern apparatus such as the thermos. The preparation ritual has changed to a great degree. Nowadays one can buy the beans already roasted and ground, or go to many of the Arabic coffee shops that are specialized in roasting and grinding the beans to customer specifications. But the serving of *gahwa* as part of a socializing ritual is still prevalent.

That said, it is not far fetched to predict that in the future other varieties such as the plain black coffee, cappuccinos, café lattes and many others, will be slowly more and more integrated into such ritual. The *dallah*, as it embodies an important cultural aspect of the people of the Gulf, will probably continue to be featured in special occasions. Its design is a reminder of the function it once performed and of Islamic aesthetics that saw great value in sensorial stimulation. Perhaps new alternatives in material, form and technology could soon be a reality for the Arabic coffee pot. With design studies becoming more prominent in the region it is possible that a new design version of the *dallah* could become as relevant as the current one to the local cultures.

The design of the *dallah* as we know it today has remained largely unchanged for hundreds of years. Here, two possibilities were presented, and one hopes that soon more can be asserted about this humble, yet fascinating object.

Bibliography

- Ackerman, Diane. *A Natural History of the Senses*. London: Phoenix, 1996.
- Al-Ghadeer. *Desert Voices*. London: Tauris Academic Studies, 2009.
- Al-Mahadin, Salam. *An Economy of Legitimizing Discourses: The invention of the Bedouin and Petra as national signifiers in Jordan*. *Critical Arts: A South-North Journal of Cultural & Media Studies* (1992-6049): 86-105.
- Allan, J. W. *Originality in Bronze – A Thirteenth Century Persian School of Metalworkers*. *Iran* 15 (1977): 156-164. <http://www.jstor.org/stable/4300571>
- Baer, Eva. *Metalwork in Medieval Islamic Art*. Albany: State University of New York Press, 1983.
- Başarir, Selen. *A Comparative Study on Design of Turkish Coffee Brewing Machines for Self-Service: “Telve”, “Kahwe” And “Gondol”*. Master’s thesis, İzmir Institute of Technology, July 2005. <http://web.iyte.edu.tr/arch/industrial/thesis.html>
- Bent, Theodore, and Mabel Bent. *Southern Arabia*. London: Smith, Elder, & CO., 1900. Project Gutenberg. <http://www.gutenberg.org/2/1/5/6/21569/>
- Bramah, Edward and Joan Bramah. *Coffee Makers. 300 Years of Art & Design*. London: Quiller Press Ltd, 1989.
- Bramah, Edward. *Coffeepots and Coffee Makers*. Wigston, Leicester: Magna Books, 1990.
- Breslin, P. A. S. Human Gustation and Flavor. In *Food Flavors and Chemistry: Advances of the New Millennium*, ed. Arthur M. Spanier et al. Cambridge: Royal Society of Chemistry, 2001.
- Cole, Donald P. *Where Have the Bedouin Gone?* *Anthropological Quarterly* 76, no. 2 (Spring 2003): 235-267. <http://www.jstor.org/stable/3318400>
- Cytowic, Richard E. *The Neurological Side of Neuropsychology*. Cambridge, Mass.: MIT, 1996.
- Douglas, David Arthur. *The Development and Demise of the Early Bronze Age IV, Near Eastern Oil-Lamp*. PhD diss., Commonwealth Open University, 2001. <http://faculty.ksu.edu.sa/archaeology/Publications/Neolithic/>
- Eretz Magazine. *Let There Be Light*. November - December 2004: 31-32. <http://www.eretz.com/NEW/lamp.shtml>
- Erzen, Jale Nejdet. *Islamic Aesthetics: An Alternative Way to Knowledge*. *Journal of Aesthetics & Art Criticism*, Blackwell Publishing Limited, n.d. <http://www.scribd.com/doc/15493130/Islamic-Aesthetics-an-Alternative>
- Flament, Ivon. *Coffee Flavor Chemistry*. Chichester: John Wiley & Sons, 2002.

- Gildemeister, E. *The Volatile Oils*. Vol. 1. New York, John Wiley And Sons, 1913.
<http://chestofbooks.com/health/aromatherapy/The-Volatile-Oils-Vol1/Methods-Of-Distillation-And-Of-Distilling-Apparatus-Part-2.html>
- Hajar, Rachel. *Alcohol: Friend or Foe? A Historical Perspective*. Heart Views 1, no.9 (September-November 2000): 341-344.
- Hall, Edward T. *The Hidden Dimension*. Garden City, N.Y.: Doubleday, 1966.
- Hambidge, Jay. *Dynamic Symmetry: The Greek Vase*. New Haven: Yale Univ. Press, 1920.
<http://www.archive.org/details/cu31924019526882>
- Herz, Rachel. *The Scent of Desire*. New York: HarperCollins Publishers, 2007.
- Jay, Martin. *Downcast Eyes: The denigration of vision in twentieth-century French thought*. Berkely and Los Angeles: University of California Press, 1994.
- Kömeçoğlu, Uğur. *The Publicness and Sociabilities of the Ottoman Coffeehouse*. The Public 12 (2005), 2: 5-22. www.javnost-the-public.org/media/datoteke/2005-2-komecoglu.pdf
- Lane-Poole, Stanley. *Saracenic Art*. London: Chapman and Hall Limited, 1886. <http://www.scribd.com/doc/23775561/Art-of-the-Saracen>
- Lapp, Eric C. *Clay Lamps Shed New Light on Daily Life in Antiquity*. Near Eastern Archaeology 67, no.3 (September 2004): 174-175. <http://www.jstor.org/stable/4132379>
- Le Corbeiller, Clare and Alice Cooney Frelinghuysen. *Chinese Export Porcelain*. The Metropolitan Museum of Art Bulletin, New Series 60, no.3 (Winter 2003): 1+5-60.
<http://www.jstor.org/stable/3269266>
- Lindinger, Christian, David Labbe, Philippe Pollien, Andreas Rytz, Marcel A. Juillerat, Chahan Yerezian and Imre Blank. *When Machine Tastes Coffee: Instrumental Approach To Predict the Sensory Profile of Espresso Coffee*. Analytical Chemistry 80, no. 5 (March 1, 2008): 1574-1581. <http://pubs.acs.org/doi/full/10.1021/ac702196z?cookieSet=1>
- Malnar, Joy Monice and Frank Vodvarka. *Sensory Design*. Minneapolis: University of Minnesota Press, 2004.
- Mintz, Sidney W., and Christine M. Du Bois. *The Anthropology of Food and Eating*. Annual Review of Anthropology 31 (2002): 99-119. <http://www.jstor.org/stable/4132873>
- Necipoglu, Gülru. *The Topkapı Scroll*, ch. 5. Sabra, 2 vols. (London: Warburg Institute, 1986). Quoted in Erzen, Jale Nejdet. *Islamic Aesthetics: An Alternative Way to Knowledge*. <http://www.scribd.com/doc/15493130/Islamic-Aesthetics-an-Alternative>
- Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses*. Chichester: Wiley-Academy, 2008.

- Pincus, Steve. *"Coffee Politicians Does Create": Coffeeshouses and Restoration Political Culture*. *The Journal of Modern History* 67, no. 4 (December 1995): 807-834. <http://www.jstor.org/stable/2124756>
- Pinder-Wilson, R. H. *An Islamic Ewer in Sassanian Style*. *The British Museum Quarterly* 22, no. 3/4 (1960): 89-94. <http://www.jstor.org/stable/4422643>
- Pines, Maya, Geoffrey Montgomery and Jeff Goldberg. *Seeing, Hearing and Smelling the World*. Chevy Chase, Maryland: Howard Hughes Medical Institute, 1995. <http://www.scribd.com/doc/2830796/Our-senses-Seeing-hearing-and-smelling-the-world>
- Robbins, Stephen P. *Organization Theory – Structure, Design and Applications*. Englewoods Cliff, N. J.: Prentice-Hall, Inc., 1990.
- Ross, Colyer Heather. *The art of Arabian costume: a Saudi Arabian profile*. Fribourg, Switzerland: Arabesque Commercial SA, 1981.
- Satloff, Robert, Eunice Youmans and Mark Nakhla. *Assessing What Arabs Do, Not What They Say*. Washington, D.C.: Washington Institute for Near East Policy, 2006.
- Shiner, Larry. "Primitive Fakes," "Tourist Art," and the Ideology of Authenticity. *The Journal of Aesthetics and Art Criticism* 52, no. 2 (Spring 1994): 225-234. <http://www.jstor.org/stable/431169>
- Smith, David V. and Robert F. Margolskee. *Making Sense of TASTE*. *Scientific American Special Edition* 16, no. 3 (September 2006): 84-92. <http://proxy.library.vcu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,cookie,uid&db=mth&AN=24591249&site=ehost-live&scope=site>
- Steven Topik. *Coffee as a Social Drug*. *Cultural Critique* 71 (Winter 2009): 81-106. http://muse.jhu.edu.proxy.library.vcu.edu/journals/cultural_critique/v071/71.topik.html
- Steven Topik. *Where is the Coffee? Coffee and Brazilian Identity*. *Luso-Brazilian Review*, XXXVI II. Board of Regents of the University of Wisconsin System, 1999. *Luso-Brazilian Review*, 36/2: 87-92. www.jstor.org/stable/3513657
- Stokstad, Marilyn. *Art History*. 3rd ed. Vol. 1. Upper Saddle River, N.J.: Pearson Prentice Hall, 2008.
- Thomson, Di and Anne-Marie Hassenkamp. *The social meaning and function of food rituals in healthcare practice: An ethnography*. *Human Relations* 61 (12), (2008): 1775-1802. <http://hum.sagepub.com/cgi/content/abstract/61/12/1775>
- Ukers, William H. *All About Coffee*. New York: The Tea and Coffee Trade Journal Company, 1922. Project Gutenberg. <http://www.gutenberg.org/files/28500/28500-h/28500-h.htm>

Vidal, F. S. *Date Culture in the Oasis of Al-Hasa*. Middle East Journal 8, no. 4 (Autumn 1954): 417-428. <http://www.jstor.org/stable/4322638>

Wild, Antony. *Coffee – A Dark History*. London: HarperCollins Publishers, 2004.

Woolley, C. Leonard. *The Prehistoric Pottery of Carchemish*. Iraq 1, no. 2 (1934): 146-162. <http://www.jstor.org/stable/4241569>