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Looking Islam in the Teeth: The Social Life of a Somali Toothbrush

*The Arabic miswak (Somali, adayge) is a tooth-cleaning stick from the *Salvadora persica* plant. In this article, we trace the social life of a “thing,” examining meanings inscribed in the stick brush, drawing on interviews with 82 Somali refugees in Massachusetts and an analysis of local and transnational science and marketing. The miswak toothbrush symbolizes relationships to nature, homeland culture, global Islam, globalizing dental medicine, and the divine as it intersects with the lives of producers, marketers, distributors, and users, creating hybrid cultural forms in new contexts. [ethnodentistry, Islam, Somali diaspora, commodification, miswak]*

This is the story of a stick, known as a *miswak* or *siwak* to Arabic speakers or, in the case of the Somali refugees we will discuss here, an *aday* or *adayge*.¹ It is the story of a toothbrush, a material object with a social life—a cultural biography—that includes land, nature, migration, ethnic identity, history, global trade networks, green technologies, and connection with the divine. The miswak forms part of a whole

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range of daily activities, bodily processes, and material objects in the religious life of Muslims following the *sunnah*, imitating Muhammad. Standard social scientific measures of religiosity, anchored in Protestant models of religion, do not register tooth brushing alongside church attendance, prayer, and scripture reading. Yet it is this Muslim attention (or unconscious embodiment of habitus, such that no attention is required) that gives rise to the cliché, among American Muslims at least, that Islam is not a religion, but a way of life.

Historians of religion and comparative religionists commonly accept this definition of religion as a way of ordering life, not just the extraordinary moments when the “more than mundane” is present. For religiously involved Muslims, submission to God’s will (*islam*) is the chief preventive “medicine” for both individuals and society (Antes 1989). States of impurity (*najasah*)—whether in body, mind, soul, or environment—create vulnerability to disease, malfunction, and suffering. Hence, preserving and restoring purity (*tabarab*) is the foundation of Muslim health maintenance and healing practices. Indeed, WHO reports applaud as health assets Muslim ablution rituals concerned with washing away bodily fluids after toileting, intercourse, or contact with soiled environments (Allegranzi et al. 2009). This concern for hygiene and purity (or purity and danger) is where both scholars of religion and health professionals situate use of the miswak. Medical anthropologists may thus explore the symbolic networks, shifting meanings, and multiple contexts within which the miswak appears in everyday life, and how this material object participates in a “sustained argument . . . about the contemporary significance and meaning of the sources of sacred wisdom and revealed truth” (Appleby 2000:33).

Entry Point

In 2010, a team of dentists, primary care physicians, epidemiologists, statisticians, and anthropologists embarked on a research project, directed by the Refugee and Immigrant Health Program, Massachusetts Department of Public Health, to explore “access to dental care, English language skills, and current oral health status of Somali . . . refugees in Massachusetts” (Geltman et al. 2013). The project was driven by data showing that among refugees newly arrived in Massachusetts, oral abnormalities are the most common health problems in refugee children and the second most common in refugee adults (Cote et al. 2004).

The study involved surveys and clinical exams of 439 Somali and Somali Bantu refugees in Massachusetts. Only 2% arrived directly from Somalia; others came from refugee camps in Kenya (78%), from Ethiopia (9%), and from 15 other countries. Less than 3% of the sample reported brushing less than once a day; the majority (74.5%) brushed two or more times a day. Forty-three percent said they continued to use the traditional miswak. The larger study concluded that Somali refugees have generally good oral health status and personal hygiene, although only a minority (36%) had seen a dentist for preventive care in the prior year (Geltman et al. 2013).

The study included qualitative interviews with a 20% subsample of 48 women and 34 men. The interviews were conducted by two medical anthropologists (LLB and LDL), assisted by two Somali research assistant interpreters.² Throughout these conversations, the use of the miswak stands out. As a Somali cultural practice, it may be continued, transformed, or sometimes lost in the transition of refugees from

Somalia to refugee camps, third countries, and, finally, to the sites of resettlement in the United States. Yet even such loss does not mean disappearance.

Key Questions

Because of their important roles as vehicles of sacred power and practical utility across various religious and cultural traditions, material objects—ranging from medicinal plants to mechanical and electronic devices—have long been studied by anthropologists of health and medicine. Victor Turner’s classic study of Ndembu ritual symbols (1967, 1969) focuses on the ability of natural objects to communicate, express, and condense symbolic aspects of religious life amid the mundane. Such concerns with material culture are increasingly part of the social scientific study of “lived religion,” in dialogical relationship with normative or cumulative traditions (Ammerman 2007; Orsi 2005), and the relatively new emergence of sociological studies of “everyday religion” (Ammerman 2007, 2013; McGuire 2008). This article will argue that: (1) mundane bodily activities and material objects of daily life “come to matter” in diverse ways to Muslims; (2) many believe oral hygiene matters both to God and to the Massachusetts Department of Public Health, though for different reasons; and (3) the unfolding social life of a toothbrush discloses symbolic relationships to nature, to homeland culture, to global Islam, to globalizing dental medicine, and to the divine.

The Social Life of Things

The life disjunctures and world displacements that erupt from civil war become part of the global cultural disjunctures described by Appadurai (Saskia 2001:267). Shami (1998:617) observes that the resulting transnational networks “structure and restructure economic exchanges, familial bonds, cultural identities and political mobilization.” Such networks also become conduits for material expressions of religiosity, whether in the form of the things that people take with them, that others send to them, or that enter the global market as commodities marketed to diasporic and other consumers (see Hoskins 2006; MacKenzie 1991).³

Arjun Appadurai (1986) has argued that, to understand the “social life” of things, “we have to follow the things themselves, for their meanings are inscribed in their forms, their uses, their trajectories.” Methodologically, he says, it is “the things-in-motion that illuminate their human and social context” (p. 5). Initially, Turner’s idea of natural objects as multi-vocal, condensing different kinds of meaning, might seem to be at odds with Appadurai’s argument that things move through different “regimes of value in space and time” (Appadurai 1986). Turner focused primarily on how a given symbol passes through different ritual contexts in a given location, eliciting attention to a subset of its possible meanings, in fluid and context-dependent configurations. His process theory describes one kind of movement. Appadurai demonstrates another way that symbols or things generate multiple meanings as they move through different regimes of value. As Appadurai notes, “The commodity candidacy of things is less a temporal than a conceptual feature, and it refers to the standards and criteria (symbolic, classificatory, and moral) that define the exchangeability of things in any particular social and historical context” (1986:13–14).

In this vein, anthropologist JoAnn D'Alisera follows the "I [Heart] Islam" bumper stickers, posters, and other objects in spaces like taxi cabs and on hot dog stands in Washington, DC as media for the expression, negotiation, and contestation of transnational Sierra Leonean Muslim identities. These objects communicate and transmit both ideology and identity to and for the distributors, consumers, and public beholders (D'Alisera 2001; compare D'Alisera 2004).⁴ Likewise, Gregory Starrett follows the social life of religious objects in Cairo's markets produced by craft artisans, mass manufacturers, or printers to document cultural change in contemporary Egyptian attitudes toward the sacred words of the Qur'an (Starrett 1995).

Similarly, and of greater significance for medical anthropologists, van der Geest and colleagues write about modern pharmaceuticals "as powerful technical devices and cultural symbols," as both products and producers of human culture: "They carry ideology, facilitate self-care, promise efficacy, and thus direct thoughts and actions" (van der Geest et al. 1996:156–157). The authors delineate a biographical order for the social life of such medicines. In the first stage, pharmaceuticals are prepared by scientists and marketed by businessmen to wholesale suppliers and a variety of retailers. The second stage sees these symbolic objects distributed to consumers, through direct sales or prescription. The last life stage occurs when consumers use the medicine (usually in their own household) to restore, maintain, or improve health. It is at this stage that the "meaning" of the pharmaceutical's life is constituted. Van der Geest et al. (1996) include the "efficacy" or outcome as the "life after death" stage of a pharmaceutical's biography. At each stage, the biographer must pay attention to context, actors, and to the "regime of values" implicit in "distinctive sets of ideas about medicines" (e.g., scientific research, market commodities, mediator of clinical relationships, solutions to health problems) (p. 156).

We argue here that the simple miswak stick, as a single artifact, is a health-related technical device and cultural symbol with its own social life, extending from its cultivation, through various stages of processing, marketing, distribution, and consumption by U.S.-based users. For Somali refugees in Massachusetts, this social life travels alongside their migration, resettlement, and diasporic lives—its social life inextricably linked to suffering resulting from a history of colonial occupation, civil war, and violent displacement. Indeed, certain phases of the miswak's social life unfold only because of the refugees' displacement. Gupta and Ferguson observe that expanded mobility "combines with the refusal of cultural products and practices to 'stay put' to give a profound sense of a loss of territorial roots, of an erosion of the cultural distinctiveness of places and of ferment in anthropological theory" (1997:37). For refugees, however, the loss of physical connection with territory may actually intensify the effort to sustain a territorial imaginary. Correspondingly, the miswak becomes a vehicle for the refugees as active agents to sustain this imagined Somalia, while bracketing—but never forgetting—the reality of discontinuities and disjunctions. Its meanings configured through a process of "combinatory symbolism" (MacKenzie 1991:28), the stick brush facilitates healing at bodily, spiritual, cultural, and ecological levels, while simultaneously expressing, negotiating, and adapting cultural and religious identities of people on the move. As we follow the

movements of the stick brush, we thus hope to trace what Kopytoff (1986) refers to as a “cultural biography of things.”

Background: History of the Stick Brush

The social life of stick toothbrushes began millennia ago, in trees common to ancient Mesopotamia and Arabia. In a 1916 article for the journal *Oral Hygiene*, William Belcher describes the nascent industrial production of “modern” bone and hog bristle toothbrushes at a factory in Florence, Massachusetts. He claims “the history of all peoples go back to a ‘chew stick’ for cleaning the teeth” (Belcher 1916:7). Belcher cites examples of the “little white sticks” that Indians of all castes use in their morning ablutions, adding references to Japanese, Filipino, South African, Chilean, Patagonian, and Persian groups. He recalls seeing “black Africans” in the “African Village” at the 1901 Pan-American Exposition in Buffalo, New York “busy scrubbing their teeth when not otherwise employed,” using sticks they carried with them (p. 8).

Similarly, Weinberger’s *Introduction to the History of Dentistry* finds cross-cultural evidence of stick toothbrushes. Citing a Talmudic requirement for a particular wood (*manger*), the bulk of his description focuses on the miswak of the “Arabs.” He refers, as well, to the Qur’an, *hadith* (oral reports of what the Prophet said, did, or allowed to be done in his early community), and medieval medical texts (Weinberger 1948:142). In different parts of the world, various native trees were used for oral hygiene. The most common source, used in the Horn of Africa and Arabian Peninsula, is the tree *Salvadora persica*. Elsewhere, people continue to use lime (*Citrus aurantifolia*), orange (*Citrus sinensis*), and neem (*Azadirachta indica*) trees, among others (Almas and al-Lafi 1995). The African and Arab usage of the miswak from the *S. persica* tree thus takes its place in the folkloric, exotic Western history of professional dental care. While the stick toothbrush is used widely in Africa, South Asia, the Middle East, and other parts of the world by Muslims and non-Muslims, and often without connection to religious tradition, our analysis emerges from conversations with our local Somali informants and extends to transnational networks of exchange where various regimes of value operate.

The Adayge as *Cultural Thing*

Study participants experience the aday as part of their foundational traditions, representing social customs of everyday “common sense reality” (the lifeworld or stock of knowledge) imparted from parent to child. Recalling life in Somalia, participants said of the adayge: “It’s kind of a traditional thing . . . kind of a culture thing. If you want to have good teeth, use those things” (Female, 49, #5). Another said: The best [adayge] is the root. . . . They make some medicine, goes good for your teeth and the health of your gum. So that’s why [I] still have, when [I] get up, when [I am] praying, when [I] eat, all the time” (Female, 65, #193). Many described learning to brush their teeth as children in Somalia:

The first is your parents who give you advice the way you can take care of your tooth, and the mouth. And also the society, also just tell you that you

better clean your teeth, otherwise is going to be diseases or something bad will happen to you. (Male, 50, #23)

The parents they say, “When you get up, first thing you have to do is wash your hand, wash your face, and brush. Before that, you’re not going to eat.” We used that stick brush, the root and the branch. The branch you used for a week, and then it gets dry, and you’re going to throw it and get the new one. (Female, 40, #22)

The Adayge as *Natural* Thing

In addition to being a “cultural practice,” the adayge was also part of the natural environment:

There’s a special tree. You just get the twig, you cut it off, whatever you want to do with it. When you cut it off, at that time it’s fresh, it’s so soft, and it’s easy to chew and clean. But if you left [it] aside, or put it somewhere, it’s going to get dry and get harder, and you can’t even chew that kind. Most of the time people don’t use the same things every day, because this tree’s outside; you can get a fresh one every day. (Female, 31, #2)

Several participants had vivid memories of going outside in the morning and grabbing a fresh twig for the day. One said, “Nobody sells. The trees are everywhere” (Male, 61, #66). Here, we glimpse the adayge’s role as “natural medicine,” integrally rooted in Somali memories of home and attachment to the land. Those who had lived in larger towns and cities relied on street vendors for their adayge. One woman recalled:

There’s some people who make trade or business for bringing them from the bush, or the countryside, to the big towns, big cities. . . . [They] wet the trunks of trees. . . . After that, when the stick gets wet, they going to burn a little bit, and get little bit dry, so you can chew and you can use it. (Female, 31, #2)

Somali parents fostered the regular use of these “natural” toothbrushes, to maintain adequate oral health. Their children—now adults—remembered instructions to brush in the morning upon arising, after eating, before the five daily prayers, and before bedtime. As older children, this could mean brushing their teeth at least eight times per day (Male, 36, #76). The connection with prayer rituals, however, points to an additional dimension of this health practice.

The Adayge as *Religious* Thing

Beyond pointing to nature and to cultural tradition, other participants emphasized the stick’s religious connection. Imitating the habits and practices of the Prophet Muhammad—the exemplar of living in submission to God’s will as revealed in the Qur’an—is foundational for Muslims’ daily lives. Beyond ritual acts of worship,

Muslims incorporate the ethics and manners of the Prophet into every aspect of their own lives, from toileting to trade to marital and interpersonal relations. The adayege or miswak is but one example of how the Prophet's practice becomes a custom (*sunnah*) to be emulated by those in his community. As one young woman stated, "It's part of our religion that our Prophet said, 'I will make people to wash their mouth five times a day. But I don't make that [obligatory] because some of my people might not be able to do it.' So it would be nicer" (Female, 23, #169).

This comment echoes the historical tradition of prophetic medicine in the Muslim world. Ibn Qayyim al-Jawzīyah, a 14th-century scholar, collected traditions of the Prophet Muhammad in his *Tibb al-Nabawi (Medicine of the Prophet)* (1998). He references hadith about the miswak: "In the two books of the Sahih, from the Prophet [peace be upon him] it says:

If it were not that I would make it difficult for my community, I would order them to use the siwak before every time of prayer (*salat*). . . . In the *Sahih* of Bukhari, his comments are that the Prophet [peace be upon him] said: "The siwak is a means of purifying the mouth, pleasing to the Lord." (Ibn Qayyim al-Jawzīyah 1998:230)

Even on his deathbed, the Prophet Muhammad is reported to have asked for a miswak to clean his teeth.

Seyyid Hossein Nasr, introducing Johnstone's translation of Ibn Qayyim's work, argues that the *materia medica* (the substances and techniques recommended by the Prophet Muhammad for maintaining health) are efficacious precisely *because* the Prophet, as Perfect Human and vehicle of revelation, recommended them. Miswak, accordingly, becomes a metonymic representation of both the Prophet Muhammad and of one's submission to the will of God revealed through (and to an extent, in) him.

Ibn Qayyim's treatise blends medieval Islamic humoral theories of medicine with these prophetic traditions to enumerate the health benefits of using miswak:

[It] refreshes the mouth, strengthens the gums, cuts phlegm, makes the sight clear, removes cavities, makes the stomach healthy, purifies the voice, assists the digestion of food, and facilitates the passages of speech, giving energy for recitation, invocation and prayer, repels sleep and pleases the Lord, delights the angels and increases one's good deeds (see Kanner 1926).⁵

It is recommended at all times; it is confirmed at times of prayer and for ablution, on awakening from sleep, and when the odour of the mouth changes. It is recommended for a person breaking his fast and for one fasting at all times, because of the general nature of those *hadith* concerning it, because the person fasting has need of it and finally because it pleases the Lord. . . . Furthermore it purifies the mouth; and purity for the person fasting is one of the most excellent of deeds. (Ibn Qayyim al-Jawzīyah 1998:231)

Although unfamiliar with Ibn Qayyim's work, study participants *were* familiar with many of these arguments, identifying them with Muhammad and with their own identities as Muslims. Thus, for many of these Somali refugees in Massachusetts, the miswak evokes complex intersecting memories of Somalia's nature, culture, and etiquette, while simultaneously providing symbolic and ritual connections with prophetic tradition and healing practice. Without explicitly referencing humoral theories, participants routinely viewed the adayge as benefiting overall health.

Migration of People and Toothbrushes

Just as people migrate from one setting to another, so do their cultural practices and objects. Much like D'Alisera's research, Celia McMichael's study of Somali refugee women resettled in Australia found that choices of food, styles of dress, daily prayer, decoration, and arrangement of space articulated a Muslim identity. Islam as performed in mundane daily practices provided a sense of portable home for these women dislocated from a more familiar Somali life-world (McMichael 2002). Emma Tarlo discusses the global expansion of hijab fashions as part of "complex debates about identity, faith, politics, ethics, aesthetics and belonging" among "visibly Muslim" minorities in the West (Tarlo 2010). The practice of tooth brushing (although less visible than the hijab) may likewise be an arena for preserving or constructing "home" in the midst of resettlement, thereby embodying another stage in the social life of the miswak.

When Somalis fled their country, many arrived in UN-run refugee camps, the largest of which were in Kenya. Others fled to Yemen, Ethiopia, or other countries. A 22-year-old recalled using Colgate [which study interpreters explained as "the Somali word for toothpaste"], available in the camp shops, alongside the adayge, though he used the stick brush alone at the mosque (#339). Camp vendors in Kenya continued to sell fresh adayge to refugees. For instance, one woman who fled to a camp in Ethiopia reported, the "only time they used to use the toothpaste in the morning. The rest of the day, you use adayge itself, nothing with adayge" (61, #66). A man remembered: "When I was in Pakistan . . . most of the people they use brush. But most of the Somali people, they using aday. You can buy [it] too [in Pakistan]" (23, #338).

Some participants recalled first encountering a plastic toothbrush and toothpaste during their brief stay at the Nairobi Transit Centre before leaving for the United States. The U.S. State Department supports two-day cultural orientation classes at the Transit Centre to introduce refugees to aspects of life in the United States. Some interviewees received toothbrushes and Colgate on the plane and were advised to use them "because this is what Americans do."⁶ David Redd of World Relief Atlanta describes participating in a cultural orientation session coordinated by the International Organization for Migration (IOM) for Somali refugees in the Nairobi Transit Centre. Among other things, he mentions the provision of toothbrushes, other toiletries, beds, and clothing as part of the total package of cultural orientation (Redd 2003). Photographs from the IOM confirm that, "as part of the orientation refugees are shown how to use a toothbrush to brush their teeth" (IOM 2012). One 62-year-old man reported that the "UN people provided toothpaste and the brush"

in the refugee camp, “because they realized they’re coming to the United States, so they have to learn.” He continued, “When they flew back to Nairobi on the airplane, they give it to them. Brush and toothpaste” (#119). A 25-year-old woman affirmed that she, too, had received a brush and toothpaste in the Nairobi transit camp before her departure to the United States (#75).

Others told us that when refugee resettlement agencies brought them to an apartment in the United States, they found the bathroom stocked with plastic toothbrushes and toothpaste (Female, 31, #2). Learning to use these new tools was an adjustment that many made as a matter of course: “The difference is when we move here, we find there’s something called, uh, toothpaste and the mouthwash. And you have to use it. Back home, we don’t have those” (Male, 62, #119).

When asked, “What happened when you came to the U.S.?” one 25-year-old man replied, “Oh, we switched to toothbrush, toothpaste. Right away, yeah. It was a totally different experience, yeah. But we get used to it” (#21). Still another learned by observation: “Since I came America I don’t use it (adayge). I just see people using [plastic toothbrush] so I just started using. My decision” (Female, 20, #113). In Somalia and in the camps, many participants had been accustomed to carrying their adayge around with them—something they no longer did with their toothbrush. Our translator paraphrased one man, saying:

Most of the time in Somalia, when he was [doing] prayers, he have stick brush in his pocket all the time, and he used to use. . . . He says but when he eats something, he always uses brush. But he can’t bring [the toothbrush] with him all the time like stick brush back home. (Male, 44, #18)

Many Somali refugees continued to prefer the adayge over a plastic brush, but local pharmacies and supermarkets do not carry miswak sticks in the produce or health-and-beauty sections. Not quite half of our participants explained that they stopped using the adayge because they couldn’t find them. One participant explained, “The difference is . . . back home, you can get [it] every day, everywhere. Here, you have to bring them in first.” Second, one had to replace the aday more often: “It’s going to be shrinking [because one cuts the end off after each use]. So after a week, you lose it. So you have to go back and buy a new pack. So that’s why; that’s the difference” (Male, 62, #119).

Nevertheless, 18 participants reported still using the aday exclusively, saying they did so because it was familiar, better for their gums, or because they found Western toothbrushes uncomfortable. As one participant said: “[I]f you compare the normal brush—this plastic brush; the plastic brush . . . you feel it can hurt your gums. And the adayge’s softer . . . you kind of even feel it when you’re brushing. It’s soft and makes also cleaner as a brush” (Male, 22, # 339). But where did they find them?

Second Entry Point: Researchers Shopping for Toothbrushes

Several students and the first author went looking for miswaks in Boston. One shopkeeper at a halal grocery remarked, “Once in a while people buy them . . . the clientele is mixed, mostly South Asian and Arabic [*sic*]. . . . I order about two dozen every other month from the distributor.”⁷ His comment serves as a reminder that

Somali refugees in Boston live not only in the context of a surrounding dominant culture, but also of other Muslim groups for whom the miswak holds potentially distinct meanings. As Gupta and Ferguson note:

Physical location and physical territory, for so long the *only* grid on which cultural difference could be mapped, need to be replaced by multiple grids that enable us to see that connection and contiguity . . . vary considerably by factors such as class, gender, race, and sexuality and are differentially available to those in different locations in the field of power. (p. 50)

One could therefore, in theory, develop such intersecting grids for the miswak's social life in relation to other Bostonian Muslim users and their sense of its place in their own global identities.

The Al Makki brand of miswaks that the shopkeeper sold are hidden behind a clutch of *tasbeih* beads, under a wall of phone cards, condoms, and cigarettes. A handful of tubes of Miswak [herbal extract] toothpaste sit nearby on a shelf. Like Starrett's note on religious commodities in Egypt, the "haphazard arrangement of merchandise that appears to violate all rules of precedence and placement"—copies of the Qur'an in a housewares shop, for instance (Starrett 1995)—the miswak participates in a social field populated by the paraphernalia of piety, transnational communication, safe sex, and the toilette. At another store, the Nepali shopkeeper said, "I don't know why; Americans buy [miswak], but not Indians. Indians are Americans now; maybe they want American toothpaste? . . . White people know about it, because they are the ones who buy it. . . . In Nepal people all use toothpaste like Colgate, and they like that." Somali men told us that when they have found adayege, it has been at local Islamic centers and *masajid*, where multiple ethnic, immigrant, and refugee cultures intersect with a globalizing Islamic identity.

Like any religious object, practice, or tradition, the meaning of the miswak is contested. A group of university students met with a local imam and discussed their reading of Ibn Qayyim, whose *Medicine of the Prophet* is available in the mosque's bookstore. He downplayed these hadith and prophetic medicine in general, as "just the Prophet speaking as a human, not as a prophet." For him, none of these medical practices had the status of law. In contrast, the gift shop manager and several customers insisted that "every Muslim uses the miswak. It is what the Prophet did!" (While only 43% of the Somali participants claimed to still to use the stick regularly, such hyperbole speaks to the symbolic value of the miswak itself.) There in the gift shop, vacuum-packed stick brushes sit alongside black seed (*Nigella sativa*) bitters, blood purifiers, honey, and bee pollen products, Neem and Miswak [brands of extract] toothpastes, organic soaps and a myriad of essential oils and perfumes; not to mention the candy bars, religious books, *adhan* alarm clocks, Throne Verse wall hangings, evil eye beads, tasbeih rosaries, prayer rugs, and hijab fashions.

Sale in the mosque did not ensure satisfied buyers. Several people complained that the dried, packaged sticks available in the United States, even at the masjid, were not as good as the fresh ones available in Somalia or Kenya. Taste and appearance matter in stick brushes. The availability of fresh adayege depended on friends and family members smuggling them back from visits to Kenya or Somalia: "Some of them, when the people visit back home, they bring it as a gift, if the immigration

people . . . let them keep it” (Female, 67, #135). One man reported that it was easier to smuggle sticks in when he first came to the United States. He brought one from Kenya, saying of the customs inspectors: “The first-time refugee, they don’t bother you, because they know you’re refugee, you don’t have nothing.” On the other hand, “Now if you go back and try to [bring] something, that’s the time he gets a lot of inspection through the customs” (33, #51).

Another confirmed, “We used to put our bags full [of] the roots and the stick brush. But, unfortunately, immigration people from airport, they don’t allow us” (Female, 50, #5). Still another man said, “Some people making business for these things. Some people brought some illegal stuff and all that” (Male, 64, #141), while several people distributed long, smuggled adayge sticks to friends and to members of our research team, advising us to put them in the freezer (ironically) to maintain “freshness.” Much like the Cook Islanders who bring “love food” from home to their relatives in New Zealand, the smuggling of sticks likely speaks more to miswaks’ “affective materiality” as an element of gift exchange relationships (Alexeyeff 2004)—yet another regime of value—than to the lack of miswak products in Boston.

Through these voices, we hear different stories, values, and explanations for why people buy (or do not buy) or import miswaks. In the culturally complex American Muslim context in which Somali refugees navigate their lives, the aday represents a sense of continuity with the culture and religion of another place. It symbolizes something of their shattered lives that is portable and familiar. Like clothing, jewelry, essential oils, and other imported material objects, these things are rich, both with nostalgia for what has been lost, and with symbolic power to proclaim identity in a radically different environment.

The material toothbrush is in many ways a condensed symbol of the land and traditions of Somalia, of religious identity, and of connections with a transnational Islamic community (*ummah*). We contend here that these regimes of value overlap and interpenetrate; rather than simply being separate phases of the social life of a thing, the thing may bear (attract or condense in its multivocality) traces of history, tradition, religion, nature, and place when it enters the phase of marketing and consumption. This capacity for intersecting and interpenetrating symbolic multivocality may only be fully elicited and understood through the processual examination of the phases of that social life, as emergent meanings are “inscribed in their forms, their uses, their trajectories” (Appadurai 1986:5).

Third Entry Point: Global Marketing and the Social Life of the Miswak

Because the Muslim *ummah* is transnational and mobile, the selling and distribution of the stick brush is not limited to markets in Somalia or ethnic and religious shops in Boston. Rather, that commodified aspect of its social life extends into a global marketplace, where ethnic and religious identities merge with commerce, industry, and entrepreneurial creativity, yielding multiple hybrid expressions. (Think of the global platform provided by the Alibaba Group in Mainland China.) Somali immigrants engage in this sphere as well, with many staying closely connected with relatives not only in Somalia and worldwide, but also throughout the United States by virtue of Facebook and Skype and other online resources. As members of a

global diaspora in constant flux, they are therefore full contributors to these hybrid forms. Some participants indicated that they now use the *adaye* with toothpaste, a combinative practice that takes advantage of the best of both worlds in dental hygiene. The openness to such hybridity is not lost on global manufacturers like Colgate, whose Misvak (Urdu transliteration) toothpaste is imported from Pakistan by Ann Arbor, Michigan's Crescent Imports, labeled as containing "calcium and fluoride toothpaste" with "halal ingredients," and "approved by the Pakistani Dental Association" (Crescent Imports 2013).

Taking our cues from the interviewees' comments about finding stick toothbrushes in initial sites of migration (e.g., Pakistan or Egypt) and their use of the Internet, our research team performed a number of Internet searches for miswak sites and found a range of popular science and religion blogs as well as commercial sites from which one may order miswak products. The analysis presented here is partial and exploratory, intended to describe the range of contexts within which the stick conducts its social life.

Binsbergen (1998) has argued that the concept of virtuality constitutes one of the key concepts for a characterization and understanding of the forms of globalization in Africa, positing that particular forms of virtuality are themselves part of the globalization process. The point holds equally for Somali refugees, extending to encompass the identity of the miswak. Indeed, in the transnational space of web-based media and marketing, the miswak assumes a *virtual* social life, in which its commodity capacity expands to integrate an even wider range of symbolic meanings and associations with other objects and ideologies. Accordingly, marketing messages for miswak products tend to foreground three key themes: (1) modern science; (2) cultural or religious heritage; and (3) natural or environmental benefits. Each one resonates with symbolic meanings assigned to the *adaye* by Somali refugees.

The globally symbolic capital of science, coupled with an imperative in Islam to investigate the natural world, results in a focus on the scientific efficacy of the miswak. Major producers of brands like Al-Khayr, Al-Falah, and Dabur highlight the complementarity of science and Islam. Two blog articles, for instance, gather most of the phrases and citations used in these companies' Internet advertising copy. The first, simply entitled, "The Islamic View," by Anwar Ayaz, positions the stick brush scientifically:

The World Health Organization (WHO) recommended the use of the *miswak* in 1986 and in 2000 an international consensus report on oral hygiene concluded that further research was needed to document the effect of the *miswak*.

A 2003 scientific study comparing the use of *miswak* with ordinary toothbrushes concluded that the results clearly were in favor of the users who had been using the *miswak*, provided they had been given proper instruction on how to use it.

Ayaz goes on to argue that the miswak's efficacy derives from its chemical composition, citing studies that compare the *Salvadora persica* with oral disinfectants

and anti-plaque agents like triclosan and chlorhexidine gluconate. To drive home the point, he details the stick's biochemistry:

The Minerals in this root or twig include potassium, sodium, chloride, sodium bicarbonate and calcium oxides. These ingredients all strengthen the tooth enamel. The bark contains an antibiotic which suppresses [*sic*] the growth of bacteria and the formation of plaque. Research shows that regular use of *miswak* significantly reduces plaque, gingivitis and growth of cariogenic bacteria. It is [*sic*] naturally strengthens and protects the enamel with resins and mild abrasives for whiter teeth and fresher breath. It reduces stains from tobacco products, coffee and teas. (Ayaz 2012) (see, too, Akhtar et al. 2011; al-Bagieh et al. 1994; Al-Otaibi et al. 2003; Kaufman and Elvin-Lewis 1995; Sofrata et al. 2011)⁸

Ayaz's blog introduces Lebanese physician Rami Diabi, an active researcher and public health advocate for smoking cessation campaigns by the WHO's Eastern Mediterranean Regional Office. Having spent 17 years studying "the effects of *miswak* on health, and especially its anti-addiction effects on smokers (curative and preventive sides)," Diabi, observes Ayaz, has written about *miswak* medicine theory or Sewak puncture medicine, in "Beyond Sewak: World of Science and Research" (Ayaz 2012; and see Tubaishat et al. 2005).⁹

At the same time, Diabi's *miswak* medicine theory situates itself squarely in the second theme—cultural and religious heritage, comparing the Prophet Muhammad's use of the miswak with Jesus' New Testament healing a mute man's tongue, and with Chinese tongue acupuncture techniques (Diabi N.d.). Ayaz himself returns to the prophetic origins of the miswak, calling to mind the lists of Ibn Qayyim. He reminds us that the miswak not only strengthens and refreshes teeth and gums, but also improves eyesight, brain function, back strength, hair growth, facial beauty; increases intelligence, wisdom, memory, and pure thoughts; cures every disease and delays aging; pleases angels; and increases the reward of prayers. At the time of one's death, its use reminds the user of the confession of faith and helps the soul leave the body.¹⁰

Third, Ayaz makes the pitch for environmental sustainability, introducing yet another regime of value drawn from contemporary global discourse in this marketing phase of the stick's life. "The Miswak," he emphasizes, "is 100% organic," another way to "Go green for the environment." Cultivating miswak contributes, too, in the fight against desertification" (Ayaz 2012), a point that Sarah Melamed's environmentalist blog, Green Prophet, reiterates, while adding that miswak production provides a sustainable source of income and preserves cultural traditions in Middle Eastern communities. "Nature's Twiggy Toothbrush," writes Melamed, is an alternative to plastic toothbrushes, but suitable for the modern lifestyle. She, too, uses science as a legitimizing tool: "For centuries *miswak* was known to be effective [*sic*] against tooth caries yet scientific research has only recently validated this age-old tradition." Melamed cites "a research group from Sweden" that found the miswak to be "as effective as tooth brushing for reducing plaque and gingivitis, and that the antimicrobial effect of *S. persica* is beneficial for prevention and treatment of periodontal disease" (Melamed 2011).

Adding virtual commodification to the mix, all three themes—science, religious/cultural tradition, and environment—appear in the marketing campaigns for miswak products online. For example, Dabur and Al-Falah cite scientific research comparing the miswak’s effectiveness in fighting caries and gingivitis with that of toothbrush and toothpaste. Al-Khayr’s ads include WHO’s recommendation. Dabur and Al-Falah’s ad copy appeals to traditional use in the Middle East and Africa, while Al-Khayr’s ads cite Islamic sources, including the Prophet Muhammad’s recommendation. Each ad uses the terms “organic” and “natural,” with Al-Khayr emphasizing the “indigenously growing root in the Southern Parts of Pakistan.” Natural scenes of lakes, mountains, trees, and meadows complement product displays, and a Dabur advertisement for Meswak-extract toothpaste sits alongside a glass holding miswak sticks and toothbrushes, or hybridized miswak sticks with blue-and-white nylon bristles.¹¹

Two additional green marketing projects deserve mention, because they are geared not only to a Muslim customer base, but also to a broader audience oriented to organic products. As such, they illustrate ways in which a practice rooted in a particular traditional world can be compartmentalized and excerpted, with the parts serving as synecdoches for the whole, even as they facilitate the incorporation of emphases from other cultural domains or regimes of value.

The first, “THIS toothbrush,” is the creation of Lebanese designer Leen Sadder. THIS toothbrush, “aims to repackage and promote the miswak as an organic, biodegradable, portable, more beneficial substitute for toothpaste and a toothbrush.” With custom peeling blade and carrying case, it is marketed to an ecologically focused public as an “even healthier and more hygienic alternative to toothpaste, PLUS it helps people in need.” Sadder’s website unites history, environmentalism, and aesthetics. The ironic combination of the natural stick packaged in a plastic test tube with a cigar-cutter lid appeals to (or perhaps offends) a diverse set of values and traditions. Helping “people in need” refers to an online campaign Sadder started, “which offered to donate a tooth-stick to a person in a developing country with every THIS purchase” (Sadder 2012).

The second creative synthesis of traditional, natural, and modern technology is the Kickstarter campaign for the “Electric *Miswak*”: “Invented by Dr. Maged Metwally in his own personal battle against gum recession, Organic *Miswak* takes the best of both worlds—it integrates the anti-bacteria fighting *miswak* with the comfort and technology of today’s high-speed rechargeable toothbrush.” An electric toothbrush with a rotating head (both synthetic bristle and miswak twig heads are included), the product appeals to a larger Western market seeking a medically approved, technologically advanced natural alternative in a convenient, familiar package (Metwally N.d.). The inventor includes instructions and a full bibliography of scientific research studies on the miswak’s effective role in dental hygiene.

These marketing strategies echo Maarten Bode’s findings in relation to the marketing of Ayurvedic and Unani medicines in India by large South Asian firms.¹² Bode notes a consistent “embracing of both tradition and modernity” (2008:204) in which, “at the marketing level, adaptation and resistance to biomedicine are paradoxically linked.” Modern laboratory and clinical research “validate” and “authenticate” the products (p. 209), even as they are marketed as “green alternatives” without “harmful side effects” (p. 212). Indeed, the joining of traditional, Islamic,

and natural medicine with scientific, clinical research and even WHO, through the vehicle of the miswak, exemplifies the multivalence of the stick brush for consumers, among whom, of course, are Somalis in a global diaspora that includes Massachusetts.

As Bode's work suggests, and as Van der Geest et al. (1996) argue, scientific studies of the efficacy of traditional medicines may, in fact, be part of a health product's "afterlife." Simultaneously, however, the science becomes part of the marketing stage of a commodity's social life. Scientific symbolism joins the religious and the natural in the conjunction of traditional and modern dental hygiene technologies.

The virtual dimension of the miswak's social life plays to complex consumer audiences, each of whose subgroups are drawn by different combinations of the various thematic dimensions, representing different regimes of value. The fact that many of these marketing websites offer instructions for use implies that companies target not only traditional users like the many Somali refugees who grew up with *adaye* readily available, but also to new users. The latter may include converts seeking an alternative to conventional, biomedically (or commercially) framed and produced instruments for oral hygiene. Among these alternative users, converts to Islam confront the limits of their own prior exposure to traditional practices, along with the need to address this lacuna.

One more comic example is Qwertyfshag, the online persona of a Muslim convert and self-proclaimed satirical "mindless zealot" with costume glasses with thick black rims and ever-changing headwear. Qwertyfshag has created a fast-paced YouTube video in which he illustrates how to peel the stick and brush one's teeth, his lessons interspersed with occasional hadith excerpts (Qwertyfshag 2010). Those more seriously inclined to learn traditional Islamic *fiqh* (jurisprudential) and *adab* (etiquette) perspectives on the use of miswak may consult sources like Trinidad-based "The Miswaak Page" (Islam.tc N.d.). Insofar as many second-generation Somali Americans and other Muslim Americans may not have grown up using the miswak, those who adopt it later in life may find themselves among the audiences for these kinds of sites.

Back to Life

As we return to the social life of the miswak/*adaye* in the lives of Somali refugees in Massachusetts, though, we find that religious, cultural, and dental care continuity are subject to interpretation. When we asked one middle-aged Somali man how he took care of his teeth, he told us that he does it the same way he did in Somalia. Did that mean he continued to use the stick brush? "No," he said, "I use a toothbrush and Colgate. I do the same thing." The homology of miswak and plastic toothbrush—one rejected by online arbitrators of *adab* as a "modernist" delusion (Islam.tc N.d.)—is yet another example of the contested nature of combinative practice.

Those who explained that they began to use a plastic toothbrush in the United States did not generally return to using a stick brush, even after learning where to find them. In our data, we also saw generational differences, as younger generations lost the cultural context of the stick brush. Two participants laughed as one said, "Yeah, [my] kids always tease [me] because they don't know what [I'm]

doing. And this is because they grew up here so they use only the [plastic] brush” (Female, 51, #110).

Conclusion

The miswak is one of many health-preserving and restoring technologies available at open-air markets, ethnic and Islamic stores, masajid, pharmacies, and convenience stores, while also being traded globally on the Internet. Black seed products and honey (among dozens of other bee products, including pollen and royal jelly) become a part of Muslim bodies, pantries, and medicine cabinets throughout North America. Essential oils to adjust the user’s mood add to the pharmacopeia, as do other herbs and spices that infuse the everyday lives of Muslims across the world. Whether they are part of a Unani, Greco-Arabic, or prophetic medical system is irrelevant. Just as halal foods and hijab fashions act as markers of Muslims’ identities, so might this seemingly insignificant stick mark a symbolic and practical link with the Prophet Muhammad, whether between the teeth, tucked in a woman’s headscarf, in a pocket protector, or on the sink where guests and mothers-in-law might snoop.

A focus on the miswak opens the door to exploring the fluid, contested nature of lived Islam in the United States and in transnational diasporas. Somalis, Muslims, and non-Muslims throughout the world engage in the selective appropriation and adaptation of traditions, “customizing practice” (Narayanan 2006). Meanwhile, the stick functions as a magnet for the selective assimilation of symbols of nature, land, science, culture, technology, environmentalism, commerce, and religion, allowing for myriad interpretations. The social life of the miswak intersects with the lives of people adapting to new and changing cultures.

The stick brush is metonymic, in that it expresses a relationship of contiguity, or connection between multiple terms, multiple objects. Sokoloff defines a metonym as “the coinclusion of two terms within a single ensemble of semantic components,” with the terms implying “one another in an integral way” (1984:103–104). Fernandez adds that such contiguous elements must exist in the same frame of experience (1974:125). In this case, the miswak is a small part of a tradition that for many stands for the whole of Islam. Similarly, van der Geest et al. argue that a “prescription is an ‘offshoot’ of the doctor, his metonymic representation. Taking along the prescription is like taking along the doctor himself, with his knowledge and good advice, his concern, and his access to medication” (1996:161).

Thus, for many Muslims, the miswak and its accompanying ahadith invoke symbolically the presence of prophetic prescriptive knowledge and access to the divine. Its capacity for metonymic expansion can constitute contiguous relationships with different constructions of Islam and of being Muslim, even as contiguity can emerge with non-Muslim advocates of a green way of life. That is, contiguity can exist in relation to different and potentially unrelated “ensembles of semantic components.” The Internet ads appealing to the green and natural market speak to the miswak’s life in a regime of value different from its meanings for the network of relatives and friends trying to smuggle them in from Somalia and Kenya.

For many Muslims, such metonymic expansion finds expression in the different ways they argue for and against the miswak as sunnah practice and how they combine stick, paste, herbs, and plastic or electric brushes. These different arguments

allow us to glimpse the ongoing adaptation and application of the legal and customary traditions of Islam in daily life. Johan Fischer, in his book *The Halal Frontier*, argues that “Food consumption and its religious, social, and cultural context may be the closest one can come to a core symbol in the everyday lives of middle-class Malays” in London (Fischer 2011:160). We make no such broad generalizations based on our research, although we use a similar language of symbol and metonym and tread the same field of religion, ethnicity, and consumption. Rather, the miswak is a small, largely invisible, and easily overlooked material object that occupies a “social” field shared by more visible halal markets, products and services, and hijab fashions (Tarlo 2010), along the “frontier” where multiple cultures, religions, and dental medicine traditions intersect in the everyday lives of Somali Muslim refugees.

While not drawing too tight an analogy, the miswak/adayge sticks and the people who use them are uprooted, processed, shipped abroad, and transformed as they live in a U.S. setting. The struggle for continuity, authenticity, and identity connects this material object with those who actively remake their worlds of meaning in a new place. The dynamic evolution of religiously prescribed or approved health, beauty, and diet aids is part of the transnational flow of cash, goods, services, values, and advertising messages as well as the transnational flow of people and of life itself. At each stage of the journey, the commodity candidacy of the miswak/adayge sticks undergoes transitions. As different parties apply shifting symbolic and classificatory criteria, the stick moves back and forth from being a gift to a commodity, with each individual user engaging as a specific variation on the broad-strokes portrait of a consumer in that location. Kopytoff writes:

Out of the total range of things available in a society, only some of them are considered appropriate for marking as commodities. Moreover, the same thing may be treated as a commodity at one time and not at another. And finally, the same thing may, at the same time, be seen as a commodity by one person and as something else by another. Such shifts and differences in whether and when a thing is a commodity reveal a moral economy that stands behind the objective economy of visible transactions. (1986:64)

In light of such persisting ambiguity, how can we constructively examine the shifting values, strategies, and meanings of the actors in each stage of the social life of a toothbrush? We have attempted to trace multiple trajectories to reveal how dental medicine, prophetic medicine, global trade, and the everyday lives of refugees, immigrants, and other less mobile persons intersect, blur, and tangle along the way.

We have demonstrated how multiple regimes of value overlap and interpenetrate; how the multivocality of the miswak as symbol and metonym enables traces of history, tradition, religion, nature, and place to remain as the stick as object passes through life stages of marketing and consumption. Beginning with a grounded, systematic analysis of interview data on dental hygiene practices among Somali refugees, we entered local markets as a second research site and Internet blogs and marketing sites as a third. Both of the latter sites deserve more comprehensive sampling and analysis in future research. Nevertheless, the complementary, conflicting, and hybridized themes of science, cultural and religious tradition, and nature, and

the relationship of all three to commerce, are consistent with emerging research on religion, consumption, and health (Fischer 2011; Tarlo 2010).

So when a Somali refugee in Massachusetts brushes with a “real adayge,” she does so with the Prophet, with angels, with God; with the land of Somalia, the soil of East Africa; with pious and profit-making Muslims around the world; with green technology and clinical evidence; combining the explicit approval of the Prophet with tacit approval from the Massachusetts Department of Public Health. While cleaning her teeth and gums, she strengthens her intellect, her voice, her faith, and her connection with a transnational diaspora, all as she sustains the Earth.

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Notes

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1. The terms miswak and siwak are used interchangeably by most Arabic speakers; Somali speakers in our interviews similarly used aday and adayge to refer to the stick brush. The distinctions between the words in both languages have to do with the material substance versus the tool made from it.

2. The English portions of the interviews were transcribed, reviewed, and coded. Thus, the voice shared through participant quotes is often that of the interpreter. While the interpreted content is accurate, some of the flow and richness of the Somali voice may have been lost.

3. This process differs from the juncture of globalization, religion, and commodities among Ghanaian Pentecostals, who simultaneously create modern consumers and make foreign commodities safely consumable through ritual prayer (Meyer 1998:751). It also differs from the links between health, piety, and market participation in Africa described by Jean Comaroff insofar as medicine operated in the service of a larger colonizing project (1993). We find greater parallels with Janet Hoskins’s review of Maureen Mackenzie’s work on string bags in Central New Guinea (1991):

made of looped twine from bark fibres (bilum) . . . used to hold young children, vegetables, fish, firewood, and carried by both men and women, with women carrying them from the head and men carrying them from the shoulders. As “the most hard-worked accessory of daily life” (Mackenzie 199:1) in Papua New Guinea, the string bag mediates and manifests a whole series of social relationships for the Tekefol people—nurturance, decoration, supernatural protection, spirit divination, gift exchange, etc. A new tourist and export market has also given the string bag value as a trade commodity, and it can be spotted on the shoulders of

teenage girls in American shopping malls as well as Melanesian villages. Particular styles of string bags are badges of regional identity, initiatory grades and ritual status. (Hoskins 2006:79)

4. D’Alisera’s larger work argues for greater attention to the fluid “boundaries of place” in anthropological “siting of culture” as it unfolds in the “diverse experiences of people’s everyday lives, daily practice, and discourse” (2004:6–7).

5. See Kanner’s quote from Abu l-Tayyib Muhammed al-Washsha (d. 936 c.e.), who wrote a lifestyle book called *On Elegance and Elegant People (Kitab al-zarf wa’l-zurafa’*; also known as the *Kitab al-Muwashsha*):

Even the approach of his death did not keep the Prophet from asking for the siwak, for it certainly is the most elegant thing that is used, and the most suitable that is considered beautiful, for it makes the teeth white, clears the mind, makes the breath fragrant, quenches the bile, dries the phlegm, strengthens the lower portion of the gums and gives vigor to the gums and to the teeth, makes the sight clear, sharpens the eyes, opens the constipations and stimulates the appetite. (1926:694)

Such etiquette manuals advise Muslims of the suitable times and places for using and carrying the miswak, to maintain privacy for the act of cleansing and purity for the stick itself.

6. Although the social life of the plastic toothbrush—the history and evolving practices related to its design, manufacturing, marketing, and related meaning and health claims—could readily lend itself to a parallel inquiry, we were unable to identify any such research.

7. One can readily find such distributors online. For example, the Alibaba Group (located in China) provides “a platform for cross-border wholesale trade serving millions of buyers and suppliers around the globe” (Alibaba N.d.). Other online vendors like Dar-us-Salam Publications and the Miswak Sunnah Shop also provide wholesale quantities. Some Muslim immigrants look for still other options. For example, one participant on Yahoo Answers solicits advice on how to grow his own miswak tree, after relocating from Saudi Arabia to Houston, to replenish his stock instead of buying dried imports. He received several responses. After a little further digging, the truly dedicated can find *Salvadora persica*/tooth brush tree seeds on Amazon.com (\$1.29 for three) and eBay (\$1.99 for 50, or \$40.00 for 5,000), although locating actual instructions for cultivation proves more challenging.

8. Several scientific studies have compared the efficacy of the toothbrush with the miswak stick. In Muslim-majority countries, the use of the stick brush is studied in the context of Islam, whereas in West and East Africa, studies are often concerned to tout the health value of the “low cost” stick brush. In Islamic contexts, the use of the stick brush is current practice across economic divides. In West and East Africa, India, as well as more secular contexts in the Middle East, use of the brush is labeled “old-fashioned,” and its use an effective choice for those in rural areas without money or access to toothbrushes.

9. Studies of the miswak’s efficacy vary in focus. Some authors seem interested in showing the almost supernatural powers of the tree from which the stick brush is derived, as one affirmation of Mohammed’s wisdom (Akhtar et al. 2011). Others frame the use of the stick brush as a practice of older adults (Tubaishat et al. 2005).

10. Miswak dentistry (<http://miswakdentistry.com/>), a self-described “boutique” practice in Chicago, describes benefits of the miswak:

In addition to strengthening the gums, preventing tooth decay and eliminating toothaches, the *miswak* is also said to halt further increase in decay that has already

set in. Furthermore, it is said to create a fragrance in the mouth, eliminate bad breath, improve the sense of taste and cause the teeth to glow and shine. In addition, benefits not related to the teeth and gums include sharpening memory, curing headaches, creating a glow on the face of the one who continually uses it, strengthening the eyesight, assisting in digestion and clearing the voice.

This description quotes almost directly (uncited) from Ibn Qayyim's 14th-century treatise on prophetic medicine—sans Prophet, angels, Allah, spiritual, and afterlife benefits—further illustrating the selective appropriation of tradition in a new environment.

11. The following websites for miswak products are the subject of this preliminary analysis: <http://alkhaircqw.com/alkhair-miswak-pakistan.php>; <http://www.alibaba.com/product/hahmad-214562339-0/Miswak.html>; <http://www.onlineislamicstore.com/a5160.html>; <http://www.islamicbookstore.com/a5158.html>; <http://henho.us/body-care/dental-hygiene/miswak-sewak-al-falah.html>; http://www.al-rashad.com/Sewak-al-Falah--Box-of-60-Individually-Vacum-Packed-Miswaks_p_3337.html; http://www.anwarco.com/SPT-0--571-default-Sewak_AlFalah_Traditional_Natural_Toothbrush.asd; <http://www.alkitab.com/11033.html>; <http://www.dabur.com/Products-Health%20Care-Meswak>

12. See Emma Tarlo's discussion of "hijabshop.com," uniting a non-Muslim clothing designer committed to fashionable integration of immigrants in the Netherlands with a Muslim entrepreneur in Britain who aims to "make money" and "serve the Islamic community" (Tarlo 2010:169).

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