

# CHAPTER 1

## **Sanitation, culture, and civilisation in the Arab East: a historical and ecological reflection**

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**Abstract:** This paper explores the sophisticated sanitation practices in the Arab East from ancient times to the early Islamic period, challenging recent derogatory characterisations of the region. By examining the evolution of sanitation practices, including the cultural significance of euphemisms in Arabic, the use of organic waste in agriculture, and the historical innovations of Mesopotamia and Islamic civilisations, the paper illustrates a long-standing tradition of ecological awareness and civilised discipline. This study not only refutes modern misrepresentations but also highlights the region's contributions to global public health and hygiene.

### **Introduction**

Recent statements by Israeli Prime Minister Benjamin Netanyahu, where he referred to the people of the Middle East as “barbaric uncivilised people”, have sparked controversy. Such remarks not only perpetuate harmful stereotypes but also fundamentally misrepresent the rich history and sophisticated culture of the region. This paper aims to counter these claims by exploring the historical episodes of sanitation in the Middle East, showcasing the region's long-standing and refined approach to managing both human and animal waste. This exploration serves as a testament to the region's deep-rooted tradition of civilised discipline, contradicting the derogatory labels used by Netanyahu.

### **Historical innovations in sanitation**

The Middle East, often referred to as the cradle of civilisation, has historically been at the forefront of various innovations, particularly in the field of sanitation. Archaeological evidence suggests that by the late 4th millennium BCE, cities such as Uruk and Babylon had already implemented extensive networks of drainage systems, managing both rainwater and waste, thus preventing disease and maintaining urban hygiene (Garbrecht, 1994).

From the late 4th to early 3rd millennia BCE, evidence shows that households in Mesopotamia had adopted deep pit latrines and sloped drain toilets leading to underground sewage channels. By the 2nd millennium BCE, these designs had evolved to include flushing mechanisms that employed water to ensure the cleanliness of facilities. The innovation of toilet seats, integrated sewage systems, and flushing capabilities utilising rainwater is believed to have originated in Mesopotamia before then spreading to Crete. By the 4th century BCE, such technologies had become commonplace across Greece, illustrating the far-reaching influence of Mesopotamian ingenuity in sanitation. These approaches were not merely practical but were also a reflection of the high value placed on cleanliness, a concept that would later be deeply embedded in Islamic teachings (Mitchell, 2014).

### **Islamic contributions to sanitation**

Following the advent of Islam in the 7th century CE, the emphasis on cleanliness and hygiene became even more pronounced. Islamic jurisprudence (*fiqh*) provided detailed guidelines on the maintenance of personal and public hygiene, extending principles established by earlier civilisations. The Prophet Muhammad emphasised the importance of cleanliness, declaring that “cleanliness is half of faith” (Sahih Muslim, 223). This

religious mandate translated into practical applications, with cities across the Islamic world implementing advanced sanitation systems. The city of Baghdad under the Abbasid caliphate is a prime example of such innovation. Established in the 8th century CE, Baghdad featured a sophisticated network of public baths (*hammams*), sewage systems, and waste disposal methods that were unparalleled at the time. These systems were designed not only for the elite but for the general population, reflecting a societal commitment to public health. The integration of waste management with agricultural practices, as seen in the use of compost derived from organic waste to fertilise crops, further underscores the advanced understanding of the ecological cycle in the Islamic world (Al-Jubouri, *Reflections on Sanitation*).

### **Euphemism in Arabic: a reflection of cultural sensitivity and linguistic evolution**

In the Arabic linguistic tradition, euphemism plays a central role, reflecting a deep cultural sensitivity towards subjects considered unsavoury or inappropriate to mention directly. Arabs often employ euphemisms to substitute terms for concepts they find distasteful, thereby protecting their language as they shield their eyes and ears from unpleasant sights and sounds. This practice underscores a cultural ethos where what is deemed offensive is articulated with linguistic refinement and discretion.

True sophistication in this cultural context is not necessarily tied to one's outward appearance – whether in the form of a beautiful dress or elegant shoes – but is instead found in the manner of speech, the choice of words, and the subtlety with which they are conveyed. The cultivated nature of such communication serves as a reflection of an individual's true character. Even if one is dressed in the simplest or even tattered garments, the refinement and care with which they speak render their outward appearance secondary. In this regard, the essence of one's sophistication is carried not by material adornments but by the grace and thoughtfulness of their speech – a value deeply embedded in Arab culture.

A pertinent example of this linguistic tendency is the term الغائط (*al-ghā'it*), which traditionally referred to a 'lowland'.<sup>1</sup> Historically, Arabs were reluctant to install toilets within their homes, preferring instead to seek out a secluded 'lowland' (*ghā'it*) to attend to their needs, far from prying eyes. It became customary to refer to someone's absence by saying, "he went to the *ghā'it*", implying that they had gone to relieve themselves. Over time, the term *ghā'it*, which originally denoted a geographical feature, evolved in its usage to signify defecation itself. This shift illustrates the natural linguistic process wherein euphemistic terms gradually assume new conventional meanings, diverging from their original definitions to represent the acts or concepts they initially alluded to in a more abstract or indirect manner (Woods, 2005).

### ***Istinja'* in early Islamic practice: an examination of sanitation and ritual purity**

In the Arabian Peninsula prior to Islam, the practices surrounding hygiene and sanitation were largely dictated by the environment and available resources. The arid climate and scarcity of water in the region meant that the methods of cleansing, including *istinja'*, evolved out of necessity and practicality. It was within this context that Islam introduced a more structured and obligatory approach to sanitation.

The concept of *istinja'* (الاستنجاء), which refers to the cleansing of the private parts after relieving oneself, is deeply rooted in Islamic jurisprudence (*fiqh*) and holds a significant place within the daily practices of Muslims. The origins of this practice can be traced back to the early Islamic period, where it was not only a matter of personal hygiene but also of religious significance. The emphasis on cleanliness in Islam is well-documented in both the Qur'an and the *hadith*, which consistently stress the importance of purification as a precursor to worship and spiritual activities.

One of the key verses that scholars often cite is found in Surah al-Ma'idah (5:6), which instructs the faithful on the importance of washing and cleanliness before prayer: "O you

who have believed, when you rise to [perform] prayer, wash your faces and your forearms to the elbows and wipe over your heads and wash your feet to the ankles.” While this verse primarily addresses the ritual of *wudu* (ablution), it underscores the broader Islamic ethos of cleanliness, within which *istinja'* is a critical component.

### Islamic jurisprudence on *istinja'*

Islamic jurisprudence developed detailed guidelines on *istinja'*, which were elaborated upon by scholars from different schools of thought. The practice was seen not only as an act of hygiene but also as a religious duty that had to be performed in a specific manner. The use of water was emphasised as the most effective means of cleansing, a practice which differentiated Islamic sanitation practices from those of other cultures at the time.

The Prophetic traditions (*hadith*) offer further insight into the practice of *istinja'*. For instance, the *hadith* collections of Sahih Muslim and Sahih al-Bukhari include numerous narrations where the Prophet Muhammad instructed his followers on the correct method of cleansing after defecation and urination. In one narration, the Prophet is reported to have said “When one of you goes to relieve himself, he should cleanse himself with three stones”. This *hadith*, while prescribing an alternative method of cleansing using stones (a practice known as *istijmar*), ultimately highlights the principle that cleanliness is paramount, regardless of the method.

### Challenges in translating and understanding *istinja'*

Translating the concept of *istinja'* and the broader Islamic jurisprudential discussions surrounding it into English poses unique challenges, inasmuch as English may not have equivalent terms. The term itself, while often simply translated as “cleaning”, carries with it a wealth of cultural, religious, and legal implications that are not easily conveyed in a single English word. Additionally, the practice of *istinja'* must be understood within the context of its religious significance in Islam, rather than as a mere hygienic routine.

This dual aspect of *istinja'* highlights the broader Islamic worldview, where the physical and spiritual realms are intertwined, and where acts of physical cleanliness are seen as foundational to spiritual well-being, and are manifested in the daily practices of Muslims worldwide.

One of the daily practices that may seem foreign to many outside the Muslim world is the use of water in restrooms for cleansing after using the toilet. While this might seem like a simple act, its significance runs deep. Ablution, or *wudu*, serves as a constant reminder of the importance of physical cleanliness as a foundation to spiritual purity. Expanding on this, many Muslims worldwide have extended the use of water for personal hygiene after using the toilet, as it is believed to provide a superior level of cleanliness compared to dry methods.

As a child, I was always puzzled why in our home and within the broader Iraqi community, the toilet was referred to as 'الطهارة' [*al-tahara*], which literally means “purification”. This naming intrigued me, especially given the clear juxtaposition of the term's actual meaning of purity or cleanliness. The explanation, as referenced by Ibn Hanyan,<sup>2</sup> traces back to the renowned grammarian Ibn Faris.<sup>3</sup> He highlighted the Arab linguistic tendency to denote an unpleasant thing by its opposite, a nuance best captured by grammarians.

The esteemed preacher, Sheikh Sa'id al-Kamali, observed,<sup>4</sup> “Arabs have a tradition of using euphemisms for terms they find distasteful, often choosing words with opposite connotations to address unsavoury acts.” He illustrated this by mentioning the stanza by the renowned Arab poet Zuhayr bin Abi Sulma<sup>5</sup> that can be translated as:

“And often you'll find, one silent in admiration towards you,  
Their worth increases or decreases by their speech.”

In this stanza, the poet suggests that a person's value or impression can be elevated or diminished by the words they choose to speak. It emphasises the weight and importance of speech in shaping perceptions.

As a result, when a euphemised term for a distasteful concept, like faeces, becomes too familiar or commonplace, they search for another euphemism. Over time, faeces have been described using over 15 different euphemistic expressions.

In Islamic tradition, the use of soil and dust as a method of purification and sanitation highlights a profound understanding of natural elements as effective agents for cleanliness. This practice is rooted in the teachings of the Prophet Muhammad, who emphasised the importance of using earth in cleansing rituals, particularly in instances of minor impurity (*hadath*). Scientifically, soil and dust contain beneficial microorganisms and organic matter that can effectively degrade pathogens and pollutants, offering an environmentally sustainable alternative to chemical disinfectants. Studies have demonstrated that such natural materials possess antimicrobial properties, making them suitable for sanitation purposes. By integrating these traditional practices with contemporary scientific insights, we can appreciate the holistic approach of Islamic purification methods, which align with modern sustainability principles.<sup>6</sup>

### **The synergy between waste, earth, and flowers: an ecological reflection on traditional practices in the Arab East**

The Arab East has long been celebrated for the intoxicating aromas of its diverse floral species, each possessing a distinct and memorable fragrance. Carnation flowers, for instance, are renowned for their strong scent reminiscent of cloves, while roses exude a fragrance that is both unique and unparalleled. The secret behind these captivating aromas lies not only in the flowers themselves but in the deeply ingrained agricultural practices that have been perfected over centuries. Central to these practices is the harmonious interaction between humans, animals, and the soil—a relationship that has shaped the region's ecology and its cultural identity.

The Roman lettuce, or *khaas* as it is known in Arabic, serves as a poignant example of this tradition. Far from being just another vegetable, *khaas* represented a sensory experience characterised by its distinctive oily texture and rich flavour.<sup>7</sup> As I later learned from my mother, this exceptional quality was attributed to the organic compost used in its cultivation – a compost derived from human excrement. The systematic collection and repurposing of household waste into nutrient-rich compost exemplified an ancient, sustainable practice that significantly enhanced the soil's fertility and, consequently, the quality of the crops.

This symbiotic relationship is particularly evident in the traditional agricultural practices that made use of natural resources in a sustainable manner. In Iraq, as in many parts of the Arab East, the use of organic compost derived from human and animal waste played a crucial role in enhancing the fertility of the soil and the richness of the crops. This practice exemplifies the ancient understanding that waste, when properly managed, can be transformed into a valuable resource, fostering a cycle of renewal and growth.

This sustainable cycle extended beyond agriculture into the very hearth of the household—the traditional mud oven. Constructed from earth, these ovens were a cornerstone of Middle Eastern culinary traditions, used for baking bread and grilling a variety of foods. The fuel that powered these ovens was cow dung, an organic byproduct that, once dried, provided a steady and sustainable source of energy. The use of cow dung not only minimised waste but also imparted a distinctive authenticity to the food, linking the culinary experience directly to the natural world.

However, with the advent of globalisation and the rise of exploitative corporate practices, these age-old traditions have increasingly been cast aside in favour of convenience and profit-driven methods. The harmony that once defined the relationship between humans

and nature has been disrupted, leading to environmental degradation and a departure from a holistic, health-conscious lifestyle.

### Globalisation and the disruption of traditional practices

The US invasion of Iraq in 2003 marked a particularly devastating turning point. The once-vibrant gardens of Baghdad, known for their floral fragrances, began to lose their vitality as chemical fertilisers became the dominant method promoted by capital-driven corporations. In an act of what can only be described as agricultural genocide, the occupation authorities dismantled the Iraqi Seed Bank—a repository of over 5,000 ancient seeds, some dating back to the prehistoric Sumerian and Babylonian eras. These were replaced with hybrid varieties designed for single-use cultivation, disrupting the natural relationship between humans, agriculture, and the environment, prioritising profit over sustainability (International Seed Saving Institute, 2007).

### Conclusion

Reflecting on the historical and cultural legacy of sanitation practices in the Middle East reveals a narrative that starkly contrasts with the “barbaric” characterisation used by Netanyahu. The region's contributions to public health and hygiene, from ancient Mesopotamian innovations to Islamic advancements, illustrate a long-standing tradition of civilised discipline and ecological awareness. As we confront contemporary challenges, it is crucial to acknowledge and learn from this rich history, which continues to offer valuable lessons for modern society.

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### NOTES

1. “Do you know the meaning of the word ‘*al-gha’it*’?”: <https://youtu.be/9jgfauQJb14> [in Arabic]
2. Abū Mūsā Jābir ibn Ḥayyān, also known as al-Šūfī, al-Azdī, al-Kūfī, or al-Tūsī, lived between 806–816 CE and is credited with a wide range of Arabic works. Alchemy, magic, and Shi’ite theology dominate the extant works, but he is also credited with the first systematic classification of chemicals and detailed processes for producing inorganic compounds from organic materials
3. Abū al-Ḥusayn Aḥmad ibn Fāris ibn Zakariyyā ibn Muḥammad ibn Ḥabīb al-Rāzī, d. 395/1004 (Ray, Iran), was a Persian linguist, scribe, scholar, philologist, and lexicographer.
4. Sa’id al-Kamali: <https://youtu.be/9jgfauQJb14> [in Arabic]
5. Zuhayr bin Abi Sulma (520–609 CE, Najd, Saudi Arabia) was a pre-Islamic Arab poet. He is regarded as one of the pre-eminent writers of Arabic poetry in the pre-Islamic era.
6. Lal, R. (2020). Soil and its role in sustainable agriculture and the environment. *Agriculture*, 10(10), 417. DOI:10.3390/agriculture10100417.
- 7 The origins of *khaas* can be traced back to the Mediterranean region, where it was cultivated by the Egyptians, Greeks, and Romans. Roman lettuce is characterised by its crisp texture and mild flavour, making it a preferred choice for salads and various dishes. Over centuries, cultivation practices spread throughout Europe and the Middle East, leading to the diverse varieties we enjoy today. The historical significance of *khaas* in both culinary and cultural contexts underscores its role in bridging tradition with contemporary agricultural practices. Royal Horticultural Society. (2019). *Lactuca sativa* (Lettuce). Retrieved from <https://www.rhs.org.uk/plants/details/lactuca-sativa>.

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