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Hittite cultural conventions on hygiene

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Abstract
Several anthropological and historical studies based on comparative research show that there is no universal concept of 'cleanliness' or 'hygiene' common to all cultures in all historical periods. Ideas about what is considered clean, the means used to keep persons, objects and places clean, and the frequency or appropriate timing of cleaning actions differ between cultures, and even within a given culture. The latter implies that, sometimes, these differences depend on social position, mainly because this position allows or prevents certain cleansing practices. In addition, the concept of 'cleanliness' may sometimes be intertwined with the idea of 'purity', and thus be related to religious beliefs and practices. The present article examines the concept of 'hygiene' for the case of the Hittites, and aims to do so from an historical perspective by reflecting on modern vocabulary related to hygiene, investigating Hittite terminology related to cleanliness and analysing textual sources. Archaeological evidence will be examined alongside the textual sources to establish correlations regarding locations and objects used for hygienic practices. The objectives are to investigate who practiced cleanliness and when in Hittite culture, how and where these practices occurred, and what objects were used, as well as how the Hittites understood hygiene and whether perceptions and practices varied by social group.

Özet
Karşılaştırmalı araştırmalara dayanan çeşitli antropolojik ve tarihsel çalışmalar, tüm kültürler ve tarihî dönemler için ortak ve evrensel bir 'temizlik' veya 'hijyen' anlayışının bulunmadığını ortaya koymaktadır. Hangi unsurların temiz kabul edildiği, kişileri, nesneleri ve mekânları temiz tutmak için hangi yöntemlerin kullanıldığı ve temizlik eylemlerinin ne sıklıkla ya da hangi zamanlarda gerçekleştirildiği kültürden kültüre, hatta aynı kültür içinde bile değişiklik gösterebilir. Toplumsal konum farklılıkları bazen belirli temizlik uygulamalarını teşvik edebilir ya da bunları sınırlayabilir. Bunun yanı sıra, 'temizlik' kavramı zaman zaman 'saflık' anlayışıyla iç içe geçebilir ve bu bağlamda dinî inançlar ve ritüellerle bağlantılı olabilir. Bu makale, Hititler bağlamında 'hijyen' kavramını incelemekte ve bunu tarihî bir perspektifle ele almayı amaçlamaktadır. Bu çerçevede, modern hijyenle ilgili terimlerin değerlendirilmesi, temizlikle ilgili Hititçe kelimelerin incelenmesi ve yazılı kaynakların analiz edilmesi hedeflenmektedir. Ayrıca, hijyen uygulamalarının gerçekleştiği mekânlar ve kullanılan nesneler arasındaki bağlantıları belirlemek amacıyla arkeolojik bulgular da metinlerle birlikte ele alınacaktır. Araştırmanın temel hedefleri, Hitit toplumunda kimlerin ve ne zaman temizlik uygulamalarını gerçekleştirdiğini, bu uygulamaların nasıl ve nerede yapıldığını, hangi araç ve malzemelerin kullanıldığını ortaya koymak; ayrıca Hititlerin hijyeni nasıl algıladığını ve bu algının toplumsal gruplara göre farklılaşıp farklılaşmadığını irdelemektir.

Concepts of hygiene, cleanliness and purity are important elements in virtually all cultures, yet they can vary significantly from one culture to another. Although our knowledge on some aspects of Hittite daily life, such as magical rituals and medicine, has benefited from both new data and new theoretical approaches, significant questions remain surrounding an important theme linking these topics – that of hygiene. This article seeks to shed new light on this theme.

What is considered clean or dirty in one culture or society, and the procedures that are used both to clean, and to keep people, animals, objects and places clean, may be different in another culture or society (Cless, Hahn 2012: 21; see also the reflections of Mitchell 2015:

2–3). Beyond canonical anthropological positions such as Structuralism, Functionalism, Cultural or Symbolic Anthropology, historical comparisons between different societies illustrate this point. (However, and despite focusing on purity and not always making a clear distinction between the profane and religious uses of the pair dirt-cleanliness and their related concepts, see Douglas (2010: esp. 2–3). Mary Douglas defines 'hygiene' in opposition to 'dirt' and equates the latter with 'disorder', thus defining in pp. 44, 50 'uncleanliness'/'dirt' as a 'matter out of place'. She distinguishes between our conception of dirt and that of 'primitive cultures' in pp. 8, 44).

The list of examples is long, sometimes related to both concepts and prescriptions around purity, sometimes to social status. Two well-known examples in past European societies are perhaps the most representative. The first one is related to the connection between purity and hygiene: the contrast between the Muslim and Christian populations in the AD 8th- to 15th-century Iberian Peninsula, wherein the former regularly bathed while the latter did not (Mays 2002: 65; Antoniou et al. 2016: 32–34. See further similar examples in Douglas 2010: esp. 11–13). The second one is related to social status: the poor sanitary conditions of working people in Victorian Britain in contrast not only to our current standards, but also to those of the wealthy people of the time (Smith 1999: xxi. See additional examples in Smith 1999: xiii; Hanley 1999: 231).[1] Other examples of differences in the conception of hygiene are related to neither religion nor social status but are basically historical and cultural, such as the difference between the standards of modern-era and contemporary Europe (Hanley 1999: 228–29; Antoniou et al. 2016: 32–34. See further analogous examples in Smith 1999: xxi; Hanley 1999: 213, 224, 229, 235; Jiménez, Birrichaga 2012: 525; Antoniou et al. 2016: 26–27). Also, comparisons between different social groups or cultural layers within the same society show differences in the conception of hygiene. One example will suffice to illustrate this: in Spanish society, non-Roma (*payos*) can use the same basin for washing clothes and dishes, as long as both types of objects are not washed together and the basin is cleaned after use. But Roma (*gitanos*) would never use the same basin for both purposes, but always use one to wash clothes – the 'bad one' – and another to wash the dishes and even prepare food in – the 'good one' (San Román 2010: 127–28). Going one step down to the level of the individual, similar differences can be found in contemporary societies: people who shower daily vs those who consider it excessive or unnecessary, or people who consider it dirty not to rinse the dishes after washing them with soap vs those who consider it acceptable (see also the examples given by Douglas 2010: 2, 8).

However, there is one thing that seems to be common to most populations, if not to all of them: when available, water is the main element used for hygiene (Cless, Hahn 2012: 11; Hahn 2012: 23, 29–30; Jiménez, Birrichaga 2012: 534; Mays, Angelakis 2012: 1; Mays et al. 2012: 31. For two examples of particular social groups with restricted access to water in a context of scarcity, see Achterberg-Boness 2012; Weiz 2012). This was also true in the case of the Hittites (see below and [**2**]).

The cultural differences in what is deemed clean within a society, and the actions taken and methods used to achieve an acceptable level of cleanliness, highlight the pertinence of investigating the Hittite concept of hygiene. This study seeks to determine whether, and to what extent, Hittite notions of cleanliness might align with our own. These are the objectives of the present article. Despite the difficulty of drawing a clear distinction between 'purity' and 'cleanliness', this article also aims to explore the Hittite concept of 'hygiene' and the procedures associated with it. Therefore, any discussion around 'purity' alone is beyond the scope of this article and will not be considered. (Curious readers can find valuable information on this subject in Ünal 1993; de Martino 2004; Mouton 2007; Christiansen 2013; Hutter 2013; 2015; Bawanypeck 2016, all with references). 'Purity' will only be considered here when it intersects with 'hygiene'.

To achieve its objectives, this article begins by examining and clarifying the terminology for the three key concepts of 'hygiene', 'purity' and 'cleanliness', along with their antonyms – first in English and second in Hittite, to ensure a comparative understanding of the Hittite context. Since, as observed, water is the main element used for cleanliness, the third section, on Hittite terminology, also explores Hittite words related to substances used to increase the cleansing properties of water; that is, different types of detergents or soaps whose function prevents them from being considered to pollute water or make it impure. The subsequent section investigates the materiality of hygiene through textual and archaeological sources, including objects and places used for personal hygiene. The final section offers a discussion synthesising those of the previous sections, and sheds light on Hittite cultural conventions on hygiene, including social codes around good manners, and how and to what extent these were related to social hierarchies.

Key terms: 'hygiene', 'purity' and 'cleanliness'

When dealing with cultural conventions around hygiene it is useful to reflect on key terms and try to define them in our modern languages, in order to demarcate the range of meanings that these terms can have and the contexts in which they are used (Christiansen 2013: 131), as some of

1 Perhaps the most famous work on this subject, also from a historiographical point of view, is Engels 2010[1892], esp. viii, 35, 37–41, 43, 61–64, 97.

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these may overlap. These key terms are 'hygiene', 'purity' and 'cleanliness', together with other lexemes in their respective semantic fields, such as the adjectives 'hygienic', 'pure' and 'clean'.

According to the Cambridge dictionary, '**hygiene**' is 'the degree to which people keep themselves or their environment clean, especially to prevent disease' (Cambridge Dictionary, s.v.). It thus has a connotation related to health through cleanliness. In fact, 'cleanliness' is its closest synonym, and it is worth noting that 'clean' belongs to the definition of 'hygiene'. The terms in the semantic field of 'hygiene' refer primarily to the physical realm and are related to sanitation. But they can also be used figuratively, as in the modern expression used in politics 'sanitary cordon' (*cordon sanitaire*) to refer to the limits imposed on certain political ideas to prevent their spread.

For its part, '**purity**' and other terms in its semantic field have two ranges of meaning, one related to the physical or profane realm, the other to the moral or religious one. Both depend on the primary meaning of the term as 'the state of not being mixed with anything else' (Cambridge Dictionary, s.v.), as in the context of metallurgy, where a 'pure metal' means an unadulterated metal. In the first case linked to the profane sphere, 'purity' means 'the fact of being clean or free from harmful substances' (Cambridge Dictionary, s.v.). Note that here too, 'clean' is part of the definition. In the second case related to morality and religion, 'purity' means 'the quality of being morally good or the state of not having sex' (Cambridge Dictionary, s.v.). In this sense, it refers to the absence of sin, defined as: 'the offence of breaking, or the breaking of, a religious or moral law' (Cambridge Dictionary, s.v.); that is, a transgression or a religious fault (for the Hittite case, see Mouton 2007: 299: '*absence de faute*', and below the semantic field of *waštai-*/*waštul-*), albeit not necessarily related to conceptions associated with monotheistic religions. In this second meaning, 'purity' is a quality that a person or object either already has or could have, that can be lost, and that can be regained through certain religious procedures or rituals (see the paradigmatic example of [**1**] below). In sum, 'purity' and its derivatives can be used in both secular and religious situations. The same can be said of two of its main antonyms, 'contamination' and 'pollution', as well as their derivatives (Cambridge Dictionary, s.v.; for 'pollution' in Hittite culture, see Hutter 2013: 159–60, and below, *papratar*).

Finally, '**cleanliness**', 'the state of being clean, or the act of keeping things clean' (Cambridge Dictionary, s.v.), and its derivatives are situated between the semantic fields of 'hygiene' and 'purity' (Christiansen 2013: 131). On the one hand, they are synonymous with 'hygiene' in its main meaning related to the physical realm: the absence or removal of dirt. As noted, 'clean' is part of the definition of 'hygiene'. But insofar as dirt is an addition that negatively affects both objects and beings, that can be removed and that is also related to 'pollution' in its physical and religious senses, the terms of the semantic field of 'cleanliness' can also be used in religious contexts. A chain of meanings links the concept of 'hygiene' to that of 'purity' through 'cleanliness'; that is, the state of being free of dirt or pollution, or the actions taken to remove dirt or pollution (see also Christiansen 2013: 131; Hutter 2013: 160). In this sense, the concepts of 'hygiene' and 'purity' are symbolically associated. This association rests on the idea that both are concerned with eliminating or having nothing that could damage or adulterate the properties or components of an object or being (Christiansen 2013: 131–32). This explains why nothing can be pure if it is not clean (see the example of [**3**] below), and why the reverse is not necessarily true: Something clean – that is, without dirt – is not automatically pure, either because the prescriptive religious actions or rituals have not been performed to restore it to a state of religious purity (see the paradigmatic example of [**1**] below), or because it contains elements that adulterate its composition.

To avoid confusion between the three key concepts, this article will use 'purity' and its related terms exclusively in their religious sense, while 'cleanliness' and its associated words will be used to refer to physical hygiene. Therefore, 'cleanliness' and 'hygiene' will be treated as synonyms in this discussion.

Hittite terminology related to purity and hygiene

As discussed, the concepts of 'purity' and 'hygiene' are intertwined. This is also the case for the Hittite culture, where it is not always easy to separate the ideas of purity and cleanliness (Ünal 1993: 122; Christiansen 2013; see also Mouton 2015: 62), nor is it always advisable to do so, since sometimes there does not seem to have been any distinction between them. In most cases, this is due to the nature of the preserved texts, which can broadly be classified as religious, such as magical rituals or festivals. On other occasions, it is not possible to make a sharp distinction between the two ideas because both the profane and religious meanings overlap, as purity cannot be achieved without cleanliness. A paradigmatic example of this overlapping of meanings among the Hittites is water, the main element used for hygiene, which seems to have been both intrinsically pure and clean, at least in itself, or when it is found in nature (Arroyo 2014: 239–47, with references; see also Christiansen 2013: 133. See, in general, Hahn 2012: 32: 'attraction of water as a pure substance'. For the different meanings that water can have according to a specific culture and its different layers, see Hahn et al. 2012). There is, however, at least one case among the Hittites in which the water of a river is considered

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unsuitable because it is the product of mixing the waters of two rivers, the Red River and the Maraššanta (KBo 23.27+ (CTH 776.1, 'Mythological tales') ii 28–35; CHD, P, 332, s.v.: *peda-*, CHD, Š, 251, s.v.: *šarazziyaz* 2). This overlapping of meanings can be seen in some of the Hittite verbs that indicate the act of removing impurities or dirt, and in how they were used.

Hittite verbs that refer only to physical cleanliness – that is, hygiene – are ***anš-***, 'to wipe' (HW², A, 95–96, s.v.; HED, A, 74–76, s.v.: *an(a)š-*, *an(aš)šiya-*); ***arra-***, 'to wash' (HW², A, 224–34, s.v.; HED, A, 111–16, s.v.: *arr-*, *ar(r)a-*, *arriya-*(, *arrui-*); Bawanypeck 2016: esp. 3); and ***warp-***, 'to bathe' (HW¹, 264, s.v.; EDHIL, 965–66, s.v.; Bawanypeck 2016: 3). These three verbs refer to the removal of dirt with water, mixed or not with some elements used as detergents (see below), but *warp-* also includes the notion of immersion in water, 'to bathe'. These basic meanings do not preclude that all three verbs were used in a ritual context in which cleansing was an important step in making the person pure again. In fact, some of these verbs were used in naming a festival or a ritual, such as the 'Festival of the Washing', EZEN$_4$ *arrumaš*, mentioned in KBo 41.129 (CTH 568) l.e. 7' ('Oracles for celebrating different festivals'; Steitler 2021 sub *arruma-*) and the 'Festival of the Bathing', EZEN$_4$ *warpuwaš* (HW², A, 224, s.v.: *arra-*; HHW, 196, s.v.: EZEN$_4$ ŠE.NAGA-*uwaš*; Steitler 2021 sub *warpuwar*. For ŠE.NAGA with the meaning 'soapwort', see below), which is mentioned in the *nuntarriyašḫaš* Festival (KBo 49.20 (CTH 626) obv. 2'–3') and in a cult inventory (KUB 17.35 (CTH 526) rev. iv 3, 16), or the 'Ritual of the Bathing', SÍSKUR *warpuwaš*, mentioned in the 'Ritual from Kizzuwatna' (KUB 30.31+ (CTH 479.2.1) obv. i 52; Bawanypeck 2016: 3).

The verb ***parkunu-***, 'to cleanse, clean, purify' (CHD, P, 169–74, s.v.; HED, PA, 139–45, s.v.: *parkui-*) contains both the notions of hygiene and purity. This verb and its related terms such as the adjective ***parkui-***, 'clean, pure', are used interchangeably for physical cleansing and ritual or religious purification (CHD, P, 161–74, s.v.: *parkuwa-*, *parkuwantariya-*, *parkue-*, *parkui-* A, *parkuyatar*, *parkuešš-* A, *parkunu-*; HED, PA, 133–46, s.v.: *parkui-*; EDHIL, 637–39, s.v.: *parkui-*/*parkuwai-*; de Martino 2004: 348–49; Christiansen 2013: 132–33; Hutter 2013: 160–61 and n. 5, does not make the distinction between 'clean' and 'pure'). In its secular meaning, and in the context of metallurgy, *parkui-* can be used as 'pure' in English to refer to an unadulterated metal (CHD, P, 164, s.v.: *parkui-*; Christiansen 2013: 132). Texts passages [**2**, **4**] clearly show the use of *parkunu-* and *parkui-* at the intersection between the profane and religious.

Finally, ***šuppiyaḫḫ-***, 'to make holy or sacred, to ritually purify, clean' (CHD, Š, 626–32, s.v.), as well as its related terms such as the adjective ***šuppi-*** (CHD, Š, 618–39, s.v.: *šuppi-* A, *šuppiyaḫḫ-*/*šuppaḫḫ-*, *šuppiyant-*, *šuppiyatar-*, *šuppiešš-*, **šuppieššar*/*šuppiyaššar*, *šuppiš(š)ar(a)-*/*šuppeššar(a)-*, *šuppiššarant-*; HED, ŠE, ŠI, ŠU, 162–73, s.v.: *šupp-*, *šap(p)-*, *išp-*; EDHIL, 789–90, s.v.: *šuppi-*/*šuppay-*; Christiansen 2013: 132–33), seem to have been used for 'the perfect condition that renders a person or object fit to be in divine presence' (CHD, Š, 626, s.v.: *šuppi-* A; see also Hutter 2013: 161, 164–66, 168, 171). That 'purity' is a state that a being or a thing can have, lose and regain through specific ritual procedures, and that being clean does not imply being pure, is clearly shown in the 'Ritual of Ammitḫana from Kizzuwatna against impurity' [**1**] (KBo 5.2 (CTH 471.A) i 3–9; Strauß 2010; Mouton 2015: 50; CHD, Š, 620, s.v.: *šuppi-*):

> (3)*ma-a-an an-tu-wa-aḫ-ḫa-aš šu-up-pí-iš nu-uš-ši* NINDA-*an* (4)*mar-ša-an ku-iš-ki a-da-an-na pa-a-i na-aš-ma-aš-ši* UZUÌ (5)*mar-ša-an a-da-an-na pa-a-i na-ʾašʾ-ma-aš-ši* NINDA-*an* UZUÌ (6)*al-wa-an-za-aḫ-ḫa-ʾanʾ ku-iš-ki a-ʾda-anʾ-na pa-a-i* (7)*na-aš-ma-aš-ši ŠA* É.NA$_4$ NINDA-*an* ʾUZUʾÌ *ku-iš-ki* (8)*a-da-an-na pa-a-i na-aš-ma-aš-ši ŠA* MUNUS *tu-e-ek-ki-iš-ši* (9)*e-eš-ḫar a-ku-wa-an-na pa-a-i nu ki-i* SÍSKUR *ši-pa-an-da-aḫ-ḫi*
>
> '(3–6)If a man (is) pure, and someone gives him an impure bread to eat, or (someone) gives him impure fat to eat, or someone gives him bewitched bread (or) fat to eat, (7–9)or someone gives him bread (or) fat from a Stone House to eat, or (someone) gives him blood from (lit. on/in) the body of a woman (menstrual blood?) to drink, then I perform (lit. offer) this ritual.'[2]

The circle of lexemes related to hygiene and purity can be closed by looking at their antonyms; that is, the terms used to express dirtiness or impurity.

Words in the semantic field of ***šakkar-***, which means 'filth, excrement' (CHD, Š, 41, 47–49, s.v.: *šakkar*/*zakkar*, *šaknešš-*, *šaknuwant-* A, *šaknumar*; HED, SA, 42–43, s.v.: *šakkar*, *zakkar*, *zašgar-*, *išga(n)-*) are used to indicate both dirtiness and impurity (de Martino 2004: 252, 362; see also Hutter 2013: 161, n. 10) through the same process of association of ideas as the pair of purity and cleanliness.

The verb ***papraḫḫ-*** means 'to defile, make impure' (CHD, P, 102–03, s.v.; HED, PA, 104–05, s.v.: *papri(e)-*, *paprai-*), and together with other terms of its semantic field, such as ***papratar***, 'impurity, defilement, impropriety, dirt' (CHD, P, 103–08, s.v.: *paprant-*, *papratar-*, *papre-*, *paprešš-*/*paprišš-*/*papraššš-*, *papreššar-*; HED, PA, 100–06, s.v.: *papri(e)-*, *paprai-*), is on the other side of the semantic spectrum from the verb *parkunu-*, 'to cleanse,

2 For *marša-*, see below; for the É.NA$_4$, see recently Cognetti 2021: 314–405, esp. 314–15 and n. 941, with references.

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clean, purify'; that is, it refers to both the physical and religious realms (de Martino 2004: 362; Christiansen 2013: 134; CHD, P, 103, s.v.: *papratar*; HED, PA, 105–06, s.v.: *papri(e)-*, *paprai-*, 138, s.v.: *parkui-*).

The words strictly opposed to the concept of purity are ***(ḫ)marša-*** and ***waštai-*/*waštul-***, including all other terms in their respective semantic fields. The adjective ***(ḫ)marša-*** means 'unholy, unfit for sacred use' (CHD, L–N, 195, s.v.; HED, M, 86, s.v.: *marsant-*; see also CHD, Š, 626, s.v.: *šuppi-*; Hutter 2013: 161), and one of its related verbs is ***maršanu-***, 'to desecrate, to profane' (de Martino 2004: 351, 361; Christiansen 2013: 134). Other terms in its semantic field are *maršaḫḫ-*, *maršant-*, *marša(š)tarri-*/*maršaštarra(a?)-*, *marza(š)tarri-*, *maršatar-*, *marše-* and *maršešš-* (CHD, L–N, 195–200, s.v.; HED, M, 82–87, s.v.: *maršant-*). For its part, ***waštai-*/*waštul-*** means 'sin, sacrilege, transgression' (HW[1], 249, s.v.; EDHIL, 931, s.v.: *uštul-*, *waštul-*, 985, s.v.: *wašta-*/*wašt-*) and one of its related verbs is ***wašta-***, 'to sin, to offend' (HW[1], 248–49, s.v.; EDHIL, 931, s.v.: *uštul-*, *waštul-*, 985, s.v.: *wašta-*/*wašt-*). Other related terms are *waštanu-*, *wašdulae-*, *wašdulaš*, *wašdulawant-* and *wašdumar* (HW[1], 249, s.v.; EDHIL, 985, s.v.: *wašta-*/*wašt-*).

As discussed above, when available, water is the main element used for cleansing purposes. This was also the case among the Hittites. Although in some Hittite rituals, such as the 'Rituals of Tunnawiya' (KUB 7.53+ (CTH 409.I.A) ii 21–22; Goetze, Sturtevant 1938: 12–13), wine is used to wash hands, this is a symbolic use of 'washing' related to the properties of wine (Haas 2003: 251–54) in the particular context of this ritual rather than a hygienic action intended to achieve cleanliness. This characteristic of water as the main element for hygiene – with its aforementioned trait as intrinsically pure and clean, and given the relation between hygiene and purity – is clearly exemplified in a 'Purification ritual' [**2**] (KUB 43.58+ (CTH 491.2.1) obv. i 40–45; Torri 2003: 161–62; Strauß 2006: 332, 343; HED, PA, 141, s.v.: *parkui-*; Hutter 2013: 160):

(40)[*na-aš*]-⌜*ta*⌝ *an-da ki-iš-ša-an me-ma-i ki-i wa-a-tar* (41)⌜*ma-aḫ*⌝*-ḫa-an pár-ku-i* TÚGNÍG.LÁM^{MEŠ}*-kán ke-e-ez-za ar-ra-an-zi* (42)*na-at pár-ku-nu-wa-an-zi Ú-NU-TE*^{MEŠ} *ke-e-ez a-ar-ra-an-*⌜*zi*⌝ (43)*na-at pár-ku-nu-wa-an-zi nu ka-a-aš ma-aḫ-ḫa-an ú-i-te-na-*⌜*an*⌝-[*za*] (44)⌜*ḫu-u*⌝*-ma-an pár-ku-nu-uš-ki-iz-zi šu-up-pí-ya-aḫ-ḫi-iš-ki-iz-zi* (45)⌜*ki*⌝*-nu-na šu-ma-a-aš* DINGIR^{MEŠ} *QA-TAM-MA pár-ku-nu-ud-du*

'(40)(He) speaks as follows: "As this water (41)(is) clean, one washes fine garments with it (42)and makes them clean, (as) one washes utensils with it (43)and makes them clean, as this water (44)cleans (and) purifies everything, (45)so shall it make you gods clean!"'

This passage is particularly illustrative because it connects the notion of hygiene using the verb *arra-*, 'to wash', with the notion of purity using the verb *šuppiyaḫḫ-*, 'to make holy or sacred, to ritually purify', through the use of the adjective *parkui-* and the verb *parkunu-*, 'to cleanse, clean, purify', which encompass both meanings – the one linked to the religious sphere and the one related to physical cleanliness, thus showing how these concepts are intertwined.

Other terms related to hygiene refer to elements that are used to enhance the cleansing properties of water; that is, **detergents** or different types of soaps. These elements are ^{NA4}***nitri-***, 'natron' (CHD, L–N, 455, s.v.; HED, N, 121–22, s.v.), ***ḫaš***, Sum. SAḪAR, 'ash', which mixed with oil is used to make soap (HW[2], Ḫ, 388, s.v.; HED, H, 211, s.v.; see also HED, PA, 142, s.v.: *parkui-*); ^{GIŠ}***karšani-*/^{GIŠ}*karaššani-***, a plant used as soap (HW[2], K, 197–98, s.v.; HED, K, 106–07, s.v.; Haas 2003: 304) and ***ḫašuwai-***$^{(SAR)}$, probably 'soapwort' or maybe 'ivy', which can also be used to make soap (Haas 2003: 304, 322–23; HW[2], Ḫ, 469, s.v.; HED, H, 211, s.v.: *ḫaš(š)-*. See also the remarks by Beal 1998: 85) but seems to be documented only in one text (KUB 29.7 + KBo 21.41 (CTH 480.1) rev. 14–26; Görke, Melzer 2016). The term **ŠE.NAGA** also refers to soapwort (HHW, 255, s.v.; HZL, 265 sub no. 345; Haas 2003: 306. For ŠE.NAGA with the meaning 'to bathe', see above). In the 'Akkadian Incantation *ana pišerti kišpī*' (KUB 37.44 (CTH 804.B) rev. iv 4; Abusch, Schwemer 2011: 31, 34), the plant ^{Ú}**IN.NU.UŠ**, Akk. ***maštakal***, a kind of soapwort (CAD, M[1], 391–92, s.v.: *maštakal*; Haas 2003: 304), is used together with other elements mixed in cypress oil, which the healer rubs on the patient to undo witchcraft.

Some rituals provide information about these substances that were mixed in the water and used to wash or clean objects. As these rituals are framed in a religious context, cleansing is again related to purification as a necessary step towards purity. The 'Ritual of Kizzuwatna', which mentions the 'Ritual of the Bathing' (SÍSKUR *warpuwaš*), reports the cleaning of utensils and gods' images with natron mixed in the water [**3**] (KUB 30.31 (CTH 479.2.1) obv. 45–47; CHD, L–N, 455, s.v.: $^{(NA4)}$*nitri-*; Ünal 2017):

(45)*I-NA* UD.18.KAM-*ma-*⌜*aš-ša*⌝*-an* DINGIR^{MEŠ} *PA-NI* ÍD ^{NA4}*ni-it-ri-az* (46)*wa-ar-pa-an-*⌜*zi*⌝ *a-pé-e-ya-az wa-ar-pa-an-zi Ú-NU-TE*^{MEŠ}*-ya* (47)*a-ar-ra-an-zi* UD.18.KAM *QA-TI* (…)

'(45–47)On the 18th day one bathes the gods by the river with natron, those (other participants) bathe themselves and one washes the utensils. 18th day: finished (…).'

In the 'Ritual of the Augur Ḫuwarlu', *ḫaš-* is used to clean linen [**4**] (KBo 4.2 (CTH 398.A) obv. i 44–46; Bawanypeck

2005: 26–27; id. 2016b; HED, H, 210, s.v.: *ḫaš(š)-*; HW², Ḫ, 388, s.v.: *ḫaš(š)-*[1]):

> [44](…) *ka-a-aš-wa* GIM-*an* [45]*ḫa-a-aš* GAD$^{ḪI.A}$ *iš-ku-na-an-ta*[!] *pár-ku-nu-uz-zi nu-wa-ra-at ḫar-ke-e-eš-zi* [46]*ŠA* LUGAL MUNUS.LUGAL DUMU^{MEŠ}.LUGAL NÍ.TE-*aš-ši-is* É$^{ḪI.A}$ LUGAL *QA-TAM-MA pár-ku-nu-ud-du*
>
> '[44](…) as this [45]soap cleanses dirty linen clothes and makes them white, [46]so let it purify the body of the king, the queen, the king's sons and the king's houses.'

A similar passage can be found in the 'Ritual of Ambazzi against Calumny' (KBo 10.37 (CTH 429.1.A) obv. i 45'–47'; Christiansen 2006: 188–89), where a black sheet is cleaned (*parkunu-*, see above) and turned white using *ḫaš(š)*, and this action is used in the magic spell to cleanse the patient, a boy.

The materiality of Hittite hygiene: Objects and places in textual and archaeological sources

The vocabulary around hygiene and detergents raises the question of what objects were used for cleaning, where hygienic practices took place, and whether all or some of these objects and places have a correlate in archaeological finds.

The term **ŠE.NAGA** discussed above is also connected to one item used for hygiene, [(URUDU/DUG)]ŠE.NAGA, 'bathtub', whose Hittite equivalent seems to have been ***warpuwaš*** (HHW, 196, s.v.: *warp-*, 255, s.v.: ŠE.NAGA; EDHIL, 965, s.v.: *warp-*), as ŠE.NAGA-*a* stands for the verb *warp-*, 'to bathe'. This verb is attested, among other passages, in the 'Ritual of Alli from Arzawa' (KUB 41.1 (CTH 402) rev. iv 9'; Mouton 2014): (…) *nu-uš-ma-aš* ŠE.NAGA-*an-zi*, '(…) and they bathe themselves.' A *warpuwaš* could be made of copper, URUDU (HW², A, 233, s.v.: *arra*[1]-; Burgin 2022b: 47),[3] and they are documented in, for example, various inventories such as IBoT 1.31 rev. 4, KBo 18.181 obv. 16, rev. 30' and KBo 9.91 rev. B 7' (Burgin 2022b: 42–43, 241–43, 246–47, 286–87).[4] There is a possible attestation of a *warpuwaš* made of ceramic in a cult inventory (KBo 2.8 (CTH 526.3) obv. i 42; Hazenbos 2003: 133, 138 and nn. 38, 67; HW², A, 233, s.v.: *arra*[1]-), but the sign DUG is difficult to read. Related to this term, there are [GIŠ]DÍLIM *warpaši-*, which is attested in a cult inventory and translated as 'washbasin' (KUB 30.37+ (CTH 527.45.B) obv. i 7; Hazenbos 2003: 142–43; EDHIL, 965, s.v.: *warp-*), and *warpuzi* ZABAR, made of bronze and attested in the 'Festival of Tuḫumiyara' (KUB 12.8 (CTH 739.C) obv. i 17; HED, E, 415, s.v.: *išgapuzzi-*; EDHIL, 965, s.v.: *warp-*).

In a passage of the 'Instructions and Oath Imposition for Royal Servants concerning the Purity of the King' (CTH 265; see below [**5**]), another type of utensil for washing is mentioned, an [URUDU]**ÁBxA**, 'washbasin', made of copper. As the ŠE.NAGA/*warpuwaš*, this item could be made of ceramic too (HHW, 212, s.v.; HZL, 232 sub no. 284).

Another term used to refer to a container used for washing is **NÍG.ŠU.LUḪ(.ḪA)**, a washbasin or a hand-basin (HHW, 249, s.v.; HZL, 278 sub no. 369). Among other texts, it is attested in the *itkalzi*-ritual (KUB 29.8 (CTH 777.Tf10.2.A) obv. ii 18–20; Haas 1984: 91). In this ritual, the NÍG.ŠU.LUḪ(.ḪA), which is said to have been made of copper or bronze, is used by the 'lord of the ritual' to pour the water with which he had washed himself. Other attestations of this object can be found in economic or administrative texts, where it is usually made of copper (Burgin 2022: 517), but also of silver (KUB 42.10+ obv. 5; KBo 71.46 obv. 2; KUB 42.57 obv. 10'; Burgin 2022b: 152–53, 157, 534–35), which seems to support the translation as a relatively small, but not miniature, vessel for washing. The texts KUB 42.10+ obv. 5–6 and KBo 71.46 obv. 2–4 list between four and six objects, including one or two NÍG.ŠU.LUḪ(.ḪA)s, made from a total of 20 minas of silver. Considering that the weight of a mina in Ḫatti was ca 470g (Floreano 2001: 209, n. 1), this means that each object weighed between 1.1 and 1.5kg approximately, too heavy for a miniature. Therefore, the NÍG.ŠU.LUḪ(.ḪA) in all these three texts was intended for practical use, even if it was made of silver. The third and last attestation, KUB 42.57 obv. 10', confirms this assertion since this text is most probably a list of utilitarian items belonging to a bedroom (Burgin 2022b: 534). In these cases, the NÍG.ŠU.LUḪ(.ḪA) was a luxury object, precious and related to social rank (see a cultural parallel in Hahn 2012: 32–33).

To my knowledge, no metal specimens of these types of vessels have been found in the Hittite archaeological record, or at least none has been identified as such. This includes even the most extensively excavated site, the capital Ḫattuša, as noted by Bittel and Güterbock (1935: 32). There, no Hittite metal vessels have been found, either in the '*Tempelviertel*' of the Upper City (Herbordt, von Wickede 2023: esp. 37, 389; id. 2023b), or in Yenicekale (Schachner, Seeher 2016: 54–61), or in the Lower Town (Boehmer 1972: 127, 130; id. 1979: 6–7, 31–41; Strupler 2022: 123, 142–44).

However, there are several specimens of ceramic bath-tubs from multiple sites (Müller-Karpe 1988: 146, pl. 48Ba;

3 Burgin 2022b: 542 indicates that a *warpuwaš* could also be made of ivory, and points to Bo 6158 5', but in his transliteration of this line in p. 240 he reads '*š*]*al*[!]*-u-wa-aš* ZU_9 A[M.SI.' The author kindly confirmed to me that the statement on p. 542 is an erratum, and that the reading of Bo 6158 5' on p. 240 stands, since it is based on KUB 42.61 obv. 13'; see ibid.: 413 (James Burgin, pers. comm. July 2023).

4 For other attestations of this object without the specification of its material in economic or administrative texts, see Burgin 2022: 466.

Parzinger, Sanz 1992: 22; Mielke 2006: 142–44, pl. 75 and n. 564; Strupler 2022: 157; see also Schachner 2013: 164–66), even dating back to the *kārum* period (Kulakoğlu, Kangal 2010: cat. 128, 130). They can be quadrangular and deep (60–80cm width, and up to 1m in depth), or they can be rectangular and less deep. Some of them have small seats inside, two handles for emptying after use, a polished interior and in some cases also traces of white paint. They are sometimes sunk into the ground and connected to drainage pipes.

At the Hittite capital Ḫattuša, bathtubs and fragments of bathtubs dating from different periods have been found in houses in the Lower City (Bittel, Naumann 1952: 100, 102, pl. 48; Strupler 2022: 64, fig. 29, pl. 57 [Building 29, Room 1c], 66, pl. 58 [Building 36, Room 6]), in the Upper City (Seeher 2004: 68–69, figs 2, 15–18; id. 2005: 71, fig. 11, id. 2008: 6–7) and in the Büyükkale (Bittel 1937: 8–10, figs 1, 5; Neve 1982: 49, suppl. 27–29 [House A, v–w/8–11]). When they have been found *in situ*, they were located in rooms which are interpreted as washrooms/bathrooms, mainly because they have impermeable floors and/or a drainage system. An exception would be Room 6 of Building 36 in the Lower City, because, according to its description, its floor does not seem to have been paved or waterproofed (Bittel et al. 1958: 17. For washrooms in Mesopotamia, see Müller 1928; Pappi 2016: 2). At least one of these bathtubs, the one found in Room 1c of Building 29 (see above), was associated with several jars, which may support the function of the room as a washroom/bathroom (Strupler 2022: 64), as they could have been used either to pour water or to contain oil (see below).

At Kuşaklı/Šarišša, three bathtubs have been found in Rooms 27 and 28 of Temple 1, one of which was connected to a drainage pipe, while another one had a spindle bottle which most probably contained body oil or fine oil (Schoop 2011: 254). Remains of the third one were found under one of the bathtubs. The rooms have been interpreted as washrooms/bathrooms, not only because of the presence of bathtubs and drainage, but also because they had an impervious floor (Müller-Karpe 1995: 19–21, figs 4, 16–18; id. 2017: 119–20, figs 104a–b, 106–107, 111a–b, 115a–b, 116). According to the plan of this Temple 1, Rooms 27–28 protrude from the outer line of the southern wall as a kind of annex, and were accessible from the courtyard without approaching the cella, thus matching, although only partially, the prescriptions for temple personnel which forbid entering the temple without being clean (see below [**7**, **8**]). Another bathtub was found in a house in this same city, in what most probably was also a washroom/bathroom (Müller-Karpe 2017: 49). The finds of complete and fragmented bathtubs in the 'Westhang' of this Hittite city led D. Mielke to affirm that '*(h)ier können nur die allgemeinen Äußerungen von Bittel für die Unterstadt von Boğazköy und Özgüç für Kültepe angeführt werden, dass fast jedes Haus mit einer Wanne ausgestattet war*' (Mielke 2006: 144 and n. 566).[5]

At Oymaağaç/Nerik, a big bathtub (ca 200l) was found in the southwest room of the North Tower, with a pottery bottle and two pottery bowls for pouring liquid (*Schwapprandschalen*) inside. The bottle may have contained oil for the body, and the bowls may have been used to pour water for washing (Czichon et al. 2009; Czichon 2010: 27–28, fig. 6).

Another bathtub was found at Tarsus, to the south of Room O, in a fill composed of wood and burnt bricks. As the bathtub did not lie directly on the floor, it seems that its original place was on the upper floor (Goldman 1956: 47–48, no. 1054, pl. 310, 381). Also at Tarsus, a possible bathroom has been found in a building interpreted as a temple: Room T1 has a foundation of pebbles covered with 'lime cement', while its southern wall has a hole at the bottom to connect the room to the external stone water conduit that functioned as a drainage (Goldman 1935: 534–35; id. 1956: 49–50, plan 22, fig. 177).[6]

As noted, many of these bathtubs have been found in rooms that are interpreted as washrooms/bathrooms. The term used in Hittite textual sources to refer to these spaces is **É.DU$_{10}$.ÚS.SA**, literally 'house of washing' (Weeden 2011: 472; Bawanypeck 2016; Cognetti 2021: 146–49, 316). It is mentioned in the 'Instructions to the Frontier Post Governors' dating from the reign of Arnuwanda I, as one of the infrastructures that a city had, and whose maintenance was the responsibility of these officials (KUB 13.2 (CTH 261.I.B) ii 21'–22'; Miller 2013: 226–27). It is also mentioned in an oracular inquiry in connection with the deceased, in three rituals, in four festivals in which the king took part (Weeden 2011: 472–73; Cognetti 2021: 146–47, with references) and in the Ḫedammu Myth (see below [**14**]). The use of Sum. É could indicate that these structures were independent buildings, but this cannot be deduced from all the sources in which the term is attested (Cognetti 2021: 148). In the 'Monthly Festival' (KUB 2.13 (CTH 591.IV.A) obv. 1–6; Klinger 1996: 544–45), it seems that the É.DU$_{10}$.ÚS.SA could be a separate building, because it is said that the king enters it, takes the regalia, exits the structure and goes to the *ḫalentuwa-*; thus, it seems that the É.DU$_{10}$.ÚS.SA does not belong to this latter building. On the contrary, in a 'Fragment of a festival celebrated by the queen' (KUB 25.15 (CTH 646) rev. 6–7; Yoshida 1996: 196) it is clear that the É.DU$_{10}$.ÚS.SA could be part of the *ḫalentuwa-*, because the king enters the É.DU$_{10}$.ÚS.SA but does not leave the building. It may seem a contradiction

5 '(h)ere can only be quoted the general statements of Bittel for the Lower Town of Boğazköy and Özgüç for Kültepe that almost every house was equipped with a bathtub.'

6 I am grateful to one of the anonymous reviewers for this indication.

but other cultures, such as the Romans or the Arabs, have washrooms/bathrooms integrated in buildings, as well as separate from them (Antoniou et al. 2016: esp. 3, 19–21, 32–33) and the Hittite case seems to have been the same. Therefore, there is a possibility that the É.DU$_{10}$.ÚS.SA can be identified in the archaeological record with the aforementioned rooms with impermeable floors in which bathtubs were found; that is, with spaces intended for personal hygiene.

The É.DU$_{10}$.ÚS.SA cannot be equated with the ***É tarnu-***, although the term has been translated as 'bath house' (CHD, L–N, 159, s.v.: *mān*). The *É tarnu-* was a type of building in which there was probably a bathroom/washroom used for cultic purposes (HW[1], 216, s.v.; HHW, 169, s.v.). In any case, the translation of the term is not clear (see Haas 1994: 32, 391, 773; CHD, L–N, 117, s.v.: *(LÚ) mayant-*: '*t.*-building'. See discussion in HEG, T–D, 199–201, s.v.).

Another place where Hittites washed themselves were tents, Akk. ***É zaratu*** (CAD, Z, 66, s.v.; Weeden 2011: 649), although in cuneiform sources in Akkadian the determinative is never É. It is attested in what may be a court record (see below [**13**]) for washing, and it is said to be located in the capital Ḫattuša. As discussed, there are several examples of houses with washrooms at Boğazköy/Ḫattuša, but not all of the excavated dwellings seem to have had this facility (Strupler 2022: 53–79, pls 49–73). As in the previous case, if the use of the determinative É was not intended to denote 'architectural structure', but only 'structure', the Akk. *É zaratu* might indicate that washrooms could be temporary constructions located outside the houses, but adjacent to them or even inside them in those which had a courtyard. Among the advantages of a similar structure are that it does not require any architectural element (such as foundations or walls) and can therefore be placed anywhere, that its construction materials are not expensive, and that it does not require a complex drainage system or waterproofing infrastructure. To drain off water that cannot be absorbed by the ground in those cases where there they may be located in a courtyard, it is sufficient to dig a drainage channel to the outside, or to locate the tent directly over the drain of the courtyard. However, the possibility cannot be ruled out that the term was used erroneously, or that it had a wider meaning to denote a structure separated from but adjacent to a dwelling.

A different word used in Hittite texts to refer to 'tent' is **(GIŠ)ZA.LAM.GAR** (HHW, 266, s.v.; HZL, 276 sub no. 366; Weeden 2011: 560 sub LÚ^{MEŠ} ZA.LAM.GAR), which is attested in the KI.LAM (KBo 20.33+ (CTH 627.3.a) rev. 67 and KBo 38.12+ (CTH 627.A) obv. i 9'; Singer 1983: 100 and n. 38; Burgin 2019: 36–37, 80–81), when the *šalli aššešar* took place inside this type of structure; however, it was not for washing or bathing. This 'tent' is further documented in a festival fragment as the place where the king washes himself, *arra-* (KUB 57.76 obv. i 5'), but in l. 2' the term used to refer to that same place is ***É mazkiya-***, which is also repeated in l. 11' (Tischler 2016: 207; HED, M, 18, s.v.: *mak(kiz)zi-*, *mazki-*). Both places, therefore, could be used for the same function. From the attestations of *É mazkiya-* it can be said that it was a building, even with windows, and that the royal pair dressed and washed themselves there in the course of some religious ceremonies (HHW, 97, s.v.; CHD, L–N, 123, s.v.: *É makzi(ya)-*, *É mākkizzi(ya)-*, *É mazki(ya)-*; HED, M, 18–19, s.v.: *mak(kiz)zi-*, *mazki-*). None of its attestations indicate whether the royal couple washed themselves completely or only a part of their body, such as the hands (see below [**6**]; see also Bawanypeck 2016: 3), and the same can be said for the *(GIŠ)*ZA.LAM.GAR. Thus, both terms, *É mazkiya-* and *(GIŠ)*ZA.LAM.GAR, denote a type of ceremonial structure, and although it was possible to wash inside, it seems that its primary function was not that of a bathroom *senso stricto*, but that of a ceremonial structure devoted to some of the preparations of the royal pair for ritual celebrations, including dressing. However, as in the previous case of *É zaratu*, since one can wash oneself inside it, both terms could refer to a – perhaps temporary – structure that was partly intended for cleaning purposes, probably using one of the abovementioned vessels for washing.

The last term relating to a place where cleaning activities were carried out is ***É taštuppa-***. As in the case of the *É tarnu-*, the meaning of *É taštuppa-* is far from clear (HEG, T–D, 258–59, s.v.; HHW, 172, s.v.). It was a building where the king washed his hands during religious ceremonies, but this is not sufficient to interpret it as a washroom/bathroom.

Hittite textual sources on hygiene

Although Hittite written sources dealing exclusively with hygiene are scarce, it is nevertheless possible to draw some information on the topic from the extant documentation. In fact, some Hittite passages have been discussed in the previous sections to illustrate the interrelationship between cleanliness and purity, and to contextualize the use of detergents [**2**, **3**, **4**]. While the 'Purification Ritual' [**2**] and the 'Ritual of Kizzuwatna' [**3**] deal with both the cleaning and purification of objects and gods, other texts also deal with the same two ideas, hygiene and purity, but in relation to persons. One of them is the 'Instructions for Royal Servants' (CTH 265) dated in the so-called Old Kingdom and mentioned above. In it, the different palace servants are told what kind of actions they are allowed or forbidden to do in order not to defile the king. The passage which interests us here deals with water carriers and the washbasin *URUDU* ÁBxA [**5**] (KUB 13.3 rev. iii 21–27; Miller 2013: 82–83):

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(21)*an-da-ma-aš-ma-aš šu-me-eš ku-i-e-eš* LÚ.MEŠA *ŠA* KUŠ.LÁ (22)*nu-uš-ma-aš ú-wi*$_5$*-te-na-aš na-aḫ-ḫa-an-te-eš e-eš-tén* (23)*nu ú-wi*$_5$*-ta-ar* GIŠ*še-ša-ru-li-it še-ša-ri-iš-ke-tén* (24)*ka-ru-ú-ša-an* LUGAL*-uš I-NA* URU*ŠA.NA.ḪU.IT.TA* (25)ŠÀ URUDUÁBxA *te-e-da-na-an ú-e-mi-ya-nu-un* (26)*nu* LUGAL*-aš* ZI*-an-za iš-ḫi-iz-zi-ta nu-kán A-NA* LÚ.MEŠA *ŠA* KUŠ.LÁ (27)*kar-tim-mi-ya-nu-un* (…)

‘(21)Furthermore, you who are the water carriers, (22)you must be very careful concerning the water, (23)and you must always filter the water with a sieve. (24)One time I, the king, in the city of Šanaḫuita, (25)found a hair in the washbasin, (26–27)and (my), the king’s, ire was raised, and I became enraged at the water carriers. (…).’

After an anecdote, the text continues (KUB 13.3 rev. iii 36–43) with an insistence on filtering the water before giving it to the king, and extends the recommendation to preserve the cleanliness of the liquid against any kind of impurity, *papratar* (Miller 2013: 84–85). Two main ideas stand out here, one relating to purity and the other to hygiene, and both relating to the idea that water can be ‘polluted’ simply by dropping – accidentally or not – a hair into it. The idea concerning purity is that the king, as the intermediary between gods and humans, and chief priest in the country, cannot be exposed to impure elements (Haas 1994: 195–96; Mouton 2007: 299; Hutter 2013: 168). Birgit Christiansen (2013: 137) notes that according to Law §200 (KBo 6.26 iv 23–25; Hoffner 1997: 157–58) it is not punishable to have sex with a horse or a donkey, but that a man who wants to become a SANGA-priest and be in the presence of the king cannot have this type of intercourse because it is considered a sin, *waštai-*/*waštul-* (for this term, see above; for sex considered as a cause of impurity, see below and text [**11**]). The Hittite term used to refer to sexual taboos is *ḫurke*/*il-* (HW^2, Ḫ, 754–56, s.v.; HED, Ḫ, 401–02, s.v.), which, as a forbidden act, could be a cause of impurity. So in this case, as in that of a hair in the water for the king, the monarch cannot be exposed to potentially impure elements. The second idea of the passage, related to hygiene, shows that a hair, which in itself is not dirty, is nonetheless associated with dirtiness and can therefore render water unfit for use (de Martino 2004: 349; see also [**7**]). Water filtration is one of the several water purification (in the sense of ‘potability’) processes aimed at ensuring water is suitable for human consumption and use (see also Hahn 2012: 30).

The king and queen must not be exposed to impure elements, and even they must be careful about their hygiene, ensuring that they are clean when they deal with the gods. This is stated, among other passages, in the AN.TAḪ.SUM(SAR) Festival [**6**] (KBo 4.9 (CTH 612.b.A) obv. ii 15–19; HW^2, A, 225, s.v.: *arra-*[1]; Klinger 2008: 199. For other examples see Bawanypeck 2016: 3):

(15)(…) *nu* 2 DUMU.É.GAL (16)*A-NA* LUGAL MUNUS.ˀLUGALˀ *ME-E QA-TI* ˀ*pe-e*ˀ*-da-an-zi* (17)LUGAL MUNUS.LUGAL ˀŠUˀMEŠ*-ŠU-NU ar-ra-an-zi* (18)GAL DUMUMEŠ.É.ˀGALˀ GAD*-an pa-a-i* (19)ŠUMEŠ*-ŠU-NU a-an-ša-an-zi*

‘(15)(…) 2 palace servants (16)give to the king (and) the queen water (for their) hands. (17)The king (and) the queen wash their hands. (18)The Chief of the palace servants gives (them) a cloth. (19)They wipe their hands.’

This relation between personal hygiene and the state of purity before the gods is best exemplified in the well-known text the ‘Instructions for Priests and Temple Personnel’ (CTH 264), written either in the reign of Tudḫaliya I or Arnuwanda I (de Martino 2004: 348–49; Mouton 2007: 299; Miller 2013: 244). One of its passages is addressed to the temple personnel responsible for preparing the daily bread for the deity [**7**] (KUB 13.4 (CTH 264.A) obv. i 14’–16’; Klinger 2001: 74; Miller 2013: 248–49; Christiansen 2013: 135; Hutter 2013: 160):

(14’)ˀ*nam*ˀ*-ma* NINDA.[GUR$_4$].RAḪI.A UD*-MI ku-i-e-eš e-eš-ša-an-zi na-at pár-*ˀ*ku*ˀ*-wa-iš a-ša-an-du* (15’)*wa-ar-*[*pa*]*-an-ti-ša-at kar-ta-an-te-eš a-ša-an-du iš-*ˀ*ḫi-i*ˀ*-ni-uš-ma-aš-kán* (16’)UM[BIN-*y*]*a da-a-an e-eš-du pár-ku-wa-ya* TÚGḪI.A *wa-*ˀ*aš-ša-an*ˀ *ḫar-kán-du*

‘(14’)Further, those who prepare the daily bread [lo]aves should be cle[a]n. (15’)They should be ba[t]hed and *groomed*. Their hair (16’)and na[ils] should be *trimmed*. They should wear clean clothes.’[7]

Linked to the ‘Instructions for the Royal Servants’ [**5**] referenced above in the mention of hair, this passage also extends the concept of hygiene to food and personal care. In fact, the cult inventory KBo 2.8 also reflects the need of the temple personnel to be clean before being in front of the gods [**8**] (KBo 2.8 (CTH 526) obv. i 20–21; Hazenbos 2003: 133, 137; Cammarosano 2021: 113, 117):

(20)UD.KAM *MA-AḪ-RU* LÚSANGA MUNUSAMA.DINGIR*-LIM* MUNUS*pal-wa-tal-*ˀ*la*ˀ*-aš* (21)*wa-ar-pa-zi na-at INA* É.DINGIR*-LIM* UGU *pa-a-an-zi*

‘(20)First day. The LÚSANGA, the mother of the deity priestess, (and) the *palwatalla*-woman (21)bathe (themselves) and go up to the temple.’[8]

7 For *parkuwai-* as ‘clean’ instead of ‘pure’ as in Miller 2013: 249, see above; Klinger 2001: 74; HW^2, K, 205–06, s.v.: *kartai-*.

8 The omission of LÚSANGA in Cammarosano 2021: 117 is clearly an erratum.

Turning back to the 'Instructions for Priests and Temple Personnel' [**7**], a few lines later it is required that the place where the god's bread is prepared must be clean and protected from the entry of pigs and dogs. Pigs and dogs were generally considered impure animals (Arroyo 2014: 261, with references), but more than that, from a purely hygienic point of view, these animals are potentially unclean. Even today, these are common standards in many cultures to ensure that a kitchen, and therefore also the food prepared in it, remains clean [**9**] (KUB 13.4 (CTH 264.A) obv. i 18'–20'; Christiansen 2013: 135–36; Klinger 2001: 74; Miller 2013: 248–49):

(18')(…) *I-NA* É ˹LÚ˺NINDA.DÙ.DÙ-*ma-aš-˹kán˺* (19')*ku-e-˹da˺-aš an-da-an e-eš-ša-an-zi na-at-kán ˹ša˺-*[*an*]*-ḫa-an ḫar-nu-wa-an* (20')*e-eš-du nam-ma-kán pár-šu-u-ra-aš pé-di ˹*ŠAḪ˺*-aš* UR.GI$_7$[*-aš*] KÁ-*aš le-e ti-ya-zi*

'(18')(…) The bakeries (19'–20')where they are made (that is, the bread loaves mentioned in l: 14) must be swept (and) scrubbed. Further, no pig (or) dog is allowed to cross the kitchen threshold.'

A long passage in this text (KUB 13.4 (CTH 264.A) rev. iii 55–83; Klinger 2001: 79; Miller 2013: 259–61) deals with cleanliness of persons, objects and places. It insists on the idea of being clean before the gods, and repeats the same indications concerning personal hygiene seen above in text [**7**]: being washed, having trimmed hair and nails, and wearing clean clothes, although in a different order. Again, it demands that the kitchen must be swept and scrubbed, and forbids the entry of pigs and dogs into the kitchen, as well as the use of dirty dishes and utensils for the god's food as in text [**9**]. Another passage that prescribes similar hygienic measures in places where food is kept is 'Fragments Which Mention Pimpira' [**10**] (KBo 3.23 (CTH 24.I.A) obv. 10–11; HW^2, A, 480, s.v.: *-asta*; Cammarosano 2006: 19, 26), in which it is required that the cellar must be swept:

(10)É LÚ.MEŠZABAR.DAB *an-da-an i-it na-at-kán ša-an-ḫa*[*-an*] (11)*e-eš-du* (…)

'(10–11)Go inside the cellar, it must be swept (…).'[9]

This passage belongs to the same type of prescriptions analysed here that have shown different means and procedures of cleaning objects, such as clothes [**2**, **4**], utensils and gods' images [**3**], as well as spaces, especially those where food was prepared [**9**] or stored.

Two other passages of the 'Instructions for Priests and Temple Personnel' (KUB 13.4 (CTH 264.A) obv. ii 77''-rev. iii 1, rev. iii 68–83; Klinger 2001: 77, 79; Miller 2013: 256–57, 260–61) prescribe bathing after having sex, which refers to both hygiene and purity (de Martino 2004: 352–53; Mouton 2015: 54, 60). This is also the theme of a question addressed in an oracle regarding the anger of the gods [**11**] (KUB 16.16 (CTH 570) obv. 26–30) concerning the *dammara*-women, who had sex with 'the men of Arzauwa' and went to the temple 'without, however, washing themselves, and without cleaning their clothes' (van den Hout 1998: 140–41; Cognetti 2021: 180–81).

Another passage of the 'Instructions for Priests and Temple Personnel' [**12**] (KUB 13.4 (CTH 264.A) obv. i 22'–23'; Klinger 2001: 74; Miller 2013: 248–49) compares the relationship of the temple personnel to the gods with that of a servant to his master:

(22')(…) ÌR-*ŠU ˹ku˺-wa-pí A-NA* EN-*ŠU pé-ra-˹an˺ ša-ra-a ar-ta-ri* (23')*na-aš wa-ar-pa-an-za nu pár-ku-wa-ia wa-aš-ša-an ḫar-˹zi˺*

'(22')(…) When a servant stands up before his master, (23')he is bathed and has dressed clean (clothes).'

Birgit Christiansen (2013: 136) interprets this passage as an indirect reference to the hygienic practices of ordinary people. In my opinion, however, this passage deals with social prescriptions related to the different hierarchical positions of the persons involved in the situation, thus indicating that personal hygiene was a requirement in the relationship with a *superior* (in terms of social relations). In this sense, this passage echoes the text addressed to the king's servants seen earlier (CTH 265 [**5**]). As an exemplary and instructive comparison, this passage illustrates the need to wear clean clothes and be appropriately clean before being in the presence of a *superior*. This same need is also documented when the *superior* is a god and the *inferior* is a human, as in the passages of the AN.TAḪ.SUM$^{(SAR)}$ Festival [**6**], the 'Instructions for Priests and Temple Personnel' [**7**] and the cult inventory [**8**], which show again the intertwining of hygiene and purity.

Hygienic practices do not seem to have been restricted to hierarchical relations, but to have been a (relatively) common practice related to personal care, as shown in the 'Instructions for Priests and Temple Personnel' [**7**]. A text mentioned above reinforces this idea of personal care, and refers to one of the places where people washed themselves [**13**] (KUB 31.68 (CTH 297.8) rev. 47'–48'; Stefanini 1962: 28–29; Tani 2001: 159):

9 For É LÚ.MEŠZABAR.DAB, see HHW, 267, s.v.: ZABAR: '*Weinkeller*'; Weeden 2011: 647, with references. The LÚKISAL.LUḪ (Akk. *kisalluḫḫu*-) was in charge of keeping the temple's courtyard clean, see Del Monte 1995: 102, with references; CAD, K, 419, s.v.; HHW, 238, s.v.: KISAL.

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(47')*Ḫi-eš-ni-i-in-wa ku-wa-pí* URUKÚ.BABBAR-*ši* IGI-*zi* BAL-*zi* INIM-*ni e-ip-p*[*u-un*] (48')*nu-wa-aš-ši I-NA* É*ZA-RA-TI-*˹*ŠU*˺ *pa-a-un nu-wa-za ar-ri-eš-*[*ki-*]*iz-*[*zi*]

'(47')When in Ḫattuša, for the first time, [I] caught Ḫešni in the matter, (48')I went inside into his tent, he was wa[s]h[ing] himself.'

This passage shows that washing seems to have been a common practice among the Hittites, and it thus supports the hypothesis that hygiene was culturally important, at least for the upper classes, who demanded cleanliness in their relations with their subordinates (for Mesopotamia, see Pappi 2016: 1) because the Ḫešni of this passage is the brother of the king Tudḫaliya IV who attempted to overthrow the monarch.

Other texts add to this notion of personal care the idea of what was considered pleasing to the senses. This is the case of a passage in the Ḫedammu Myth, in which the goddess Ištar washes and anoints herself before meeting Ḫedammu. The concrete passage is also related to washrooms and some of the objects that have been found in these spaces [**14**] (KUB 33.88 (CTH 348.I.9.A) 8'–10'; Siegelová 1971: 54–55; Rieken et al. 2009; Bawanypeck 2016: 4; CHD, Š, 176, s.v.: *šanezzi-*/*šanizzi-*; HED, SA, 110, s.v.: *šanezzi-*, *šanizzi-*):

(8')[… DIŠTAR-i*š-ma-ká*]*n I-NA* É.DU$_{10}$.ÚS.SA *an-da pa-i*[*t*] (9')[… *an-da ar-ru-ma*]*-an-zi pa-it nu-za a-ar*<*-ra*>*-aš-ta*[ ] (10')[… Ì.DÙG.G]A-*ma-za ša-ni-iz-zi-it iš-ki-it*[ ]

'(8')[… the goddess Ištar] wen[t] inside the washroom[ ] (9')[…] she went [inside to wash (herself)] and she washed herself[ ] (10')she anointed herself with perfumed [fine oi]l [ ].'

This passage is consistent with the archaeological finds of washrooms/bathrooms, and with vessels used to contain (perfumed) oil, and with the main function of a washroom/bathroom, which in this case includes personal care through the use of perfumed oil. The same practice, also related to Ištar/Inanna, is attested in Mesopotamia (Pappi 2016: 1). In Ḫatti, this type of oil might have been contained in spindle bottles, such as those found at Kuşaklı/Šarišša, or in other types of pottery bottles, such as those found in Oymağaaç/Nerik or Boğazköy/Ḫattuša, all of them mentioned above. The passage also indicates that body cleanliness was linked to pleasurable physical sensations, and to what was considered attractive, which is in line with a conception of hygiene as a cultural trait related to politeness and good manners. However, according to the attestations of *šanezzi-*/*šanizzi-* (CHD, Š, 175–78, s.v.; HED, SA, 108–11, s.v.), which basically means 'pleasant, tasty, fragrant, excellent', this adjective was applied to various types of objects, such as oil or food, to rituals, and also to speeches and dreams, but not to persons, not even after they had washed and perfumed themselves. Still, in RS 25.421: 54–55, a woman who is compared with the *akītu* is considered 'pleasant to watch' (CHD, Š, 175–76), and the ritual KUB 15.34 (CTH 483.I.A) ii 29–30 intends to make the royal couple and Ḫatti itself pleasant to the gods by comparing them to perfumed oil (CHD, Š, 175–76). This passage [**14**] also shows that the É.DU$_{10}$.ÚS.SA could be used not only for cleansing actions intended to purify a statue or a ritual patient, but also for hygienic purposes (*pace* Cognetti 2021: 147–49, esp. 147).

But none of these texts provide information on the hygienic practices of the common people because they are either issued by an authority, as is the case of the 'Instructions for the Royal Servants' [**5**], the 'Instructions for Priests and Temple Personnel' [**7**, **9**, **12**] and the 'Fragments Which Mention Pimpira' [**10**], or they focus on the so-called higher levels of society, such as members of the royal family (the Festival AN.TAḪ.SUM(SAR) [**6**], the 'Ritual of Ḫuwarlu' [**4**] or the possible court record [**13**]) or temple personnel ('Oracle' [**11**]) or even to gods ('Ḫedammu Myth' [**14**]). These texts reflect one of the major problems of the Hittite textual corpus preserved to date, namely the great absence of documents produced by or referring to the common people or their customs (Christiansen 2013: 135; Weeden 2022: 534). Fortunately, at least one ritual seems to provide this kind of information. The 'Ritual of Ayatarša, Wattiti and Šuššumaniga' deals with the hygiene of a boy as part of his healing process and mentions the detergent ŠE.NAGA [**15**] (KUB 7.1 (CTH 390.A) obv. i 32–33; Bawanypeck 2016: 4; Fuscagni 2017; HW^2, A, 228, s.v.: *arra-*; HW^2 Ḫ, 389, s.v.: *ḫaš(š)-*[1]; HED, A, 112, s.v.: *arr-*, *ar(r)a-*, *arriya-*(, *arrui-*). For ŠE.NAGA with the meaning 'soapwort', see above):

(32)(…) *nu-za* DUMU-*aš a-ar-ri IŠ-TU* ŠE.NAGA-*ma-za* (33)*pé-eš-zi*

'(32–33)(…) the child washes himself, (and) rubs himself with soapwort.'

It is risky to draw a firm conclusion from a single passage, but on the basis of what has been shown about hygienic practices, it seems reasonable to assume that for the common people too, cleanliness was at least closely linked to health, and that it may have been conceived as a positive habit.

Discussion

The passages discussed above allow some inferences to be drawn about Hittite conceptions of hygiene; however, some details still need to be discussed.

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Although in relation to cleanliness the line of division between the profane and religious spheres was blurred, in secular contexts the concept of 'hygiene' encompassed personal care [**7**, **8**, **12**, **13**], which also included clothing [**2**, **4**] and some practices aimed at making oneself pleasant through the use of (perfumed) oil [**14**]. It also includes the cleaning of objects and spaces related to food and drink [**5**, **7**, **9**, **10**]. The washing of utensils and places related to food and drink, and the use of detergents mixed in water for bodily hygiene and cleaning clothes and gods' images [**3**, **4**, **15**] also show that hygienic practices were aimed at preventing diseases too, and were therefore related to health. In sum, the Hittite concept of 'hygiene' encompassed personal, clothing and food hygiene, including the place and utensils where meals were cooked, and the water for drinking or for any other personal use. This was in all likelihood related to avoiding unpleasant sensations, such as bad smells, to social norms of good manners and politeness, and to preventing diseases. As such, this is a concept of 'hygiene' very similar to our modern standards.

Hygiene was also a requirement in hierarchical relationships from the *inferior* to the *superior*, where cleanliness was only required of the *inferior*. This might show a characteristic of inequality. The nature of the texts of the 'Instructions for the Royal Servants' [**5**], the 'Instructions for Temple Personnel' [**7**, **9**, **12**] and the 'Fragments Which Mention Pimpira' [**10**] provide a clue for understanding to some extent this inequality: They are prescriptions issued by the authority and addressed to their subordinates, and this explains why cleanliness is stipulated only for the latter.

Since the texts do not explicitly state why *inferior* people were required to be clean, and to maintain cleanliness in their relations with their *superiors* – as might be expected – it is appropriate to raise and attempt to answer another set of questions directly related to the social position of these individuals. Was it assumed that *inferior* people were inherently dirty, or at least that their cleaning standards were lower? Or was it simply a preventive measure, since working in domestic service and preparing food obviously increase both the likelihood and frequency of getting dirty? As far as we know, many streets were not paved, which suggests that the public space may not have been (very) clean. There is also no clear textual or archaeological evidence for the existence of toilets. Although Peter Neve has suggested that Room 1 of a building in the Büyükkale (bb/17) – which he dated to BK IVc – could have been a latrine because it had a floor paved with pebbles (Neve 1982: 38 and n. 27, suppl. 23–24; see also Ünal 1993: 139 and n. 138), this room has none of the characteristics of a latrine (no drainage, no channel, not even a simple hole in the ground. For latrines in Mesopotamia see George 2015; McMahon 2015: 20–31), and the type of floor, paved with pebbles, is not enough to prove this assumption. Most likely, people used dry toilets (composting toilets) and/or chamber pots that were emptied outside the walls, or whose content was used as manure. This solution does not exclude that some individuals relieved themselves in the open air. Should the prescriptions contained in the texts be understood as a logical consequence of these living conditions, and thus related to preventing diseases? Are they just related to good manners and appropriate behaviour in a specific context, such as rules of etiquette? Most probably these prescriptions were a combination of the two, and were connected to the concept of 'hygiene' already shown; that is, as a cultural trait within what was considered polite and healthy, at least from the point of view of the elite. This is illustrated in the Ḫedammu Myth [**14**], in which the goddess Ištar, on her own initiative and because she was sure that it would be considered pleasant, bathes and perfumes herself before meeting the monster.

However, this does not answer the first questions; that is, whether *inferior* people were considered dirty, or whether workers had a slightly different concept of how to keep water, places, utensils and themselves clean, and therefore whether their standards of hygiene were different (maybe lower) than those of high-ranking people. The 'Instructions for the Royal Servants' [**5**] can shed light on this particular issue, since it is also a prescription issued by the authority, the king, to his subordinates. However, in this specific case, the emphasis is not on the obligation of the royal servants to be clean, but on maintaining cleanliness around or for the authority. This might be connected to two main ideas. One is that *superior* people were more accustomed to carrying out cleansing practices for themselves and, consequently, that they considered personal hygiene important in itself, as well as a social practice. As has been noted, the fragment of the Ḫedammu Myth [**14**] can support this argument. But so too does the text which mentions Ḫešni bathing [**13**] when he received a visit, as it could be deduced that among high-ranking people bathing was such a relatively frequent habit, and could be carried out at any time as to coincide with other activities and be interrupted. Some utensils used for washing give force to this idea, in particular the attestation of a NÍG.ŠU.LUḪ(.ḪA) made of silver, which undoubtedly was a luxury object, in a list of items belonging to a bedroom. The second idea is that it was considered that *inferior* people could not keep the standards, or were not accustomed to keeping the standards, of cleanliness of *superior* people, or at least that they could not pay due attention to these matters, or could follow other procedures that they considered appropriate to keep

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the water clean, such as simply removing the hair from the vessel, procedures that were not sufficient for *superior* people to maintain their standards of hygiene. This idea might indicate that there was a general and shared concept of 'hygiene' among the Hittites (dressing in clean clothes, cooking in a clean kitchen, etc.), but that it was not homogeneous in all its details, nor in the specific practices for maintaining it. As Susan B. Hanley has stated, '[a]lthough the sanitary conditions and the customs regarding personal hygiene of the elite cannot be considered representative of a society as a whole, they are indicative of what one would expect the highest standard to be' (Hanley 1999: 228).

However, this idea of cleanliness shared by the elites was not completely strange for common people. Archaeological finds of bathtubs and washrooms/bathrooms in some houses suggest that common people could have access to hygienic facilities in their dwellings, and that the disposition to be clean and to wear clean clothes – that is, the concept of 'cleanliness' shown in the texts – was somehow widespread in Hittite culture. If the Akk. term ^{É}*zaratu* does indeed denote a perishable structure adjacent to a house, or to be placed in the courtyard that served as a washroom, then the number of people who might have daily cleaning habits could increase. It is also possible that people washed themselves without the need of a washroom and a bathtub, simply using any of the washbasins attested in the texts to clean their bodies bit by bit, in the same way that washstands were used before the spread of plumbing. However, since not every house had a washroom/bathroom, and no metal washbasin has been found, it is difficult to determine whether a pottery bowl without any connection to a bathtub or a washroom/bathroom was used for washing or for other purposes. And since texts do not deal with common people, it cannot be confirmed that the entire Hittite population had daily hygienic habits. Nor can it be demonstrated that the concept of hygiene was uniform across the population. Some people, especially workers, could have adapted the general idea of cleanliness to the context of their daily lives. Since domestic and other manual work (farming, animal husbandry, etc.) entail a high probability of getting dirty, and since these works were carried out for a large part of the day, it seems logical to suppose that these workers could neither keep themselves clean throughout the day nor clean themselves every time they got dirty, but that they would wash or bathe at the end of their working day, or when they had to present themselves in front of an authority, as described above. And that is why, precisely because of their frequent contact with dirt, their cleanliness standards and practices would have differed slightly. For example, if a hair fell into the water, it would probably have been removed, and so long as the hair itself no longer polluted the water and there was no sensible trace of dirt remaining in the liquid, that would probably have been enough for them. In short, these workers would have adapted the general concept of 'hygiene' to their circumstances, again demonstrating the basic premise that the idea of hygiene is culturally dependent.

As noted above, in the religious sphere the concepts of 'hygiene' and 'purity' were interwoven. In the case of the AN.TAḪ.SUM$^{(SAR)}$ Festival [**6**], the cult inventory [**8**] and the oracle question about *dammara*-women [**11**], which show that the royal couple and the temple personnel had to be clean before approaching the gods, the reason for these requirements was most probably a combination of the aforementioned notions of good manners and the idea of purity as related to cleanliness. In this sense, in a religious context – such as the daily care of the gods in their temples [**7**, **8**, **11**], the washing of their statues as part of a magical ritual [**2**, **3**], the celebration of a festival [**6**] or any other ritual intended to purify someone or something [**4**, **15**] – cleanliness was a prerequisite not only for hierarchical relationships, but also for ensuring religious purity.

Conclusion

The textual sources analysed indicate that the Hittite concept of 'cleanliness' encompassed personal, clothing and food hygiene, including the place where, and utensils with which, meals and water were prepared for human consumption. They also indicate that in terms of personal hygiene, cleanliness could also include the use of perfumed oil. This idea of cleanliness was related to health, as well as to social norms of good manners, including the avoidance of bad smells. Cleanliness was achieved by bathing, washing, wiping and scrubbing, sometimes also using detergents. The finding of bathtubs, their placement in washrooms within both houses and temples, and their widespread distribution throughout Ḫatti support the textual references regarding hygienic prescriptions for temple personnel, the royal couple and the servant before his master. These findings indicate that both elites and commoners shared the same understanding of 'hygiene', and that this concept was a cultural trait. However, it cannot be said with certainty that the entire population had access to the same hygienic conditions, and that their way of life – for example, manual or agricultural work – allowed them to follow this concept of 'hygiene' on a daily basis; that is, there is no certainty that the entire population perceived this concept of 'hygiene' as a practice they could follow in their daily lives. Moreover, even if there was a shared idea of what was considered clean among the Hittites, some part of the population, especially workers, might have adapted this idea to the characteristics of their daily lives, which implies that their standards of cleanliness were slightly different than those of the elites.

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