# Black and White: A Tale of Two Gates in the Hittite Ritual of Tunnawi for Curing Genital Disorders

Ilan Peled Leiden University, Netherlands

**Abstract** This article focuses on one episode in the Hittite magical ritual CTH 409.1, authored by the female practitioner Tunnawi and meant to treat several possible genital disorders. In this episode, the ritual beneficiary passes through two makeshift gates, each made of different materials and characterized by a different color: black and white. The article investigates the medical aspects of this episode and their relation to the black and white gates.

**Keywords** Tunnawi's ritual. Hittite magical rituals. Folk medicine. Makeshift gates.

**Summary** 1 Introduction. – 2 Tunnawi's Ritual for Curing Genital Disorders. – 3 The Extracting Hawthorn and the Purifying Oak. – 4 Black and White: A Tale of Two Gates. – 5 Conclusions.

## 1 Introduction

One of the better-known Hittite magical rituals, authored by the Old Woman Tunnawi – CTH 409.1 – was intended to be therapeutic, and assist in several possible cases involving genital disorders: in case a woman suffers repeated miscarriages or premature births, or in case a man's or a woman's genitals are somehow dysfunctional. Whatever the case, it was assumed to derive from a certain defilement maliciously caused to the ritual beneficiary by another person. Many scholars have studied this ritual in the past, but the present article aims to discuss certain aspects of the ritual that have hitherto been ignored, involving an episode in which two makeshift gates are constructed to allow the beneficiary to pass through them. One of these gates was made of hawthorn, and associated with the white color. The other gate was probably made of oak, and associated with the black color. Each gate was supposed to influence the beneficiary who passed through it differently. This article explores the different ways each gate might affect the beneficiary and their relation to the 'black' and 'white' characteristics of the gates.¹

1 Abbreviations used in this article follow *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* U/W, vii-xxixx, supplemented following *The Hittite Dictionary of the Oriental Institute of the University of Chicago* Š, ix-xl.



## Peer review

Submitted 2025-06-28 Accepted 2025-09-11 Published 2025-10-10



# Open access

© 2025 Peled | © 4.0



#### 2 **Tunnawi's Ritual for Curing Genital Disorders**

We should begin our discussion with an illustration of the ritual outline.<sup>2</sup> As was customary in Hittite magical rituals, the text opens with an introductory paragraph that presents its authoress - an Old Woman<sup>3</sup> named Tunnawi<sup>4</sup> - and explains the ritual aim: it was to be performed in case certain defilement was maliciously cast upon a man or a woman, which caused the victim genital disorders. These disorders could be miscarriage, premature birth, or unspecified dysfunctionality of the genital organs. 5 Next, the text details the items prepared by the practitioner for the ritual: animals for sacrifice, certain clothes, wool and several utensils; all these items were black. In addition, she prepares several food products, among which cheese, beer, cake and wine. At nightfall, the practitioner goes to a river, offers food and drink to the goddess DINGIR.MAH of-the-riverbank (wappuwaš DINGIR.MAH), and requests the goddess to purify the body of the ritual beneficiary. Next, she goes to a spring, offers it food and drink, and requests it to wash the beneficiary from the defilement. At the same time, a tent is built in an uninhabited place by the riverbank. The Old Woman prepares additional items for the ritual: figurines and tongues of clay she took from the riverbank, blue and red wool, meat parts, bread and figurines of dough, wax and tallow. The ritual resumes the following morning when the beneficiary enters the tent and wears the black clothes. The Old Woman wraps the blue and red wool over him/her, and then waves over him/her some of the animals, objects and figurines she prepared the day before, while uttering recitations in Hittite and Luwian. At this point the Old Woman performs a sequence of analogic magic procedures: she squashes the figurines and declares that the evil that threatens the beneficiary will be squashed just the same; she removes the colored wool strings and declares that by doing so she removes negative qualities from the beneficiary's body; she removes the beneficiary's black clothes and declares that by doing so she removes the defilement because of which the beneficiary became dark and stiff; she waves an empty vessel over him/her and declares that by doing so she takes away the negative qualities mentioned before. Once this sequence of procedures ends, the beneficiary bathes, and the Old Woman performs a symbolic act of combing the negative qualities from him/her. She throws the materials used in the ritual so far into the river and burns a piglet and a puppy. This marks the end of the first phase of the ritual. The present article focuses on the next phase, in which two makeshift gates are constructed:

# KUB 12.58+KUB 7.53 rev. iii 19-576

- 19 ... MUNUS ŠU.GI-ma GIŠZA.LAM.GAR-aš
- <sup>20</sup> [pé-ra-an ša-ra]-az-zi-ia-az <sup>GIŠ</sup>ha-at-tal-ke-eš-na-aš
- <sup>21</sup> [KÁ.GAL-aš i-ia-zi] na-at še-er an-da IŠ-TU SÍG BABBAR
- <sup>22</sup> [iš-ha-a]-i

<sup>&</sup>lt;sup>23</sup> [na-aš-ta ha-an-te-ez-z]i-ia-az 3 NINDA.GUR<sub>s</sub>.RA me-ma-al-la-aš

<sup>&</sup>lt;sup>24</sup> [ke-e-ez iš-hu]-u-wa-i ke-e-ez-zi-ia

<sup>&</sup>lt;sup>25</sup> [iš-hu-u-wa-i kat-ta-an-ma] <sup>GIŠ</sup>a-la-an-za-na-aš KÁ.GAL-aš i-ia-zi</sup>

<sup>&</sup>lt;sup>26</sup> [na-at še-er an-da ɪ] š-< τυ> síg ge [iš-ha-a-i

<sup>&</sup>lt;sup>27</sup> [...] х-аš-šа QА-ТАМ-МА dа-а-і

<sup>&</sup>lt;sup>28</sup> [ma-ah-ha-an-ma ki-i hu-ma-an] ha-an-da-an-zi

<sup>2</sup> The editio princeps of this text is Goetze, Sturtevant 1938; old as it is, it is still mostly accurate and relevant. An updated online edition, which includes duplicates and joins identified since Goetze and Sturtevant's publication, is found in HPM (available at http://hethiter.net/): TLHdig KUB 7.53 (2021-12-31). Previous literature on this ritual can be found in HPM's "Konkordanz" (available at https://www.hethport.uni-wuerzburg.de/hetkonk/hetkonk\_abfrageF.php) and Groddek's list (available at https://www.hethport.uni-wuerzburg.de/grodlist/), under KUB 7.53. Especially relevant are Mouton's (2014) study of several of the Hittite rituals in which the beneficiary crossed through a makeshift gate (for the discussion of CTH 409.1, see pp. 443, 449) and Peled's (2026) study of using makeshift gates in Hittite magical rituals (for the discussion of CTH 409.1, see pp. 74-8).

<sup>3</sup> MUNIUS ŠU.GI; this is the most frequently-attested title of a female practitioner of Hittite magical rituals; see Beckman 1993, 37; Bryce 2002, 201-3; Haas 2007, 101-2; Marcuson 2016, with previous literature.

<sup>4</sup> For an overview of this woman and the rituals she authored, see Mouton 2015.

<sup>5</sup> vzvýn\*\*\*.-\*\*sa ar-ha šar-ra-an (KUB 7.53 obv. i 6) "the genital-organs are separated off"; while the literal meaning of this phrase is clear, it does not explain what is actually wrong with the genitals, and why they were considered to be "separated off".

Editions: Goetze, Sturtevant 1938, 16, 18, 20; Haas 2003, 696-7; online (available at http://hethiter.net/): TLHdig KUB 7.53 (2021-12-31).

```
<sup>29</sup> [...-w]a-a-ša-an pé-e-di ú-wa-an-zi
```

<sup>19</sup> [...] But the Old Woman <sup>21</sup> [makes a gate] <sup>20</sup> of hawthorn [before] <sup>19</sup> the tent <sup>20</sup> on the [upper]-part. <sup>22</sup> [She wrap]s 21 it with white wool. / 23 [Then, befor]e (the gate), three coarse thick-breads 24 she [sca]tters [on this side], and <sup>25</sup> [she scatters] <sup>24</sup> on that side. <sup>25</sup> [But on the lower-part] she makes a gate of *alanza*wood. <sup>26</sup> She wraps [it wi]th black wool. <sup>27</sup> She places [...] just the same. <sup>28</sup> [But when] they arrange [all this], <sup>29</sup> [...] they come to the place. <sup>30</sup> [The Old Woman announ]ces? repeatedly [to the beneficiary]. / <sup>31</sup> [...] the pure tent. <sup>32</sup> [The ritual beneficiary, whether man or] woman, <sup>33</sup> [(s)he] <sup>34</sup> [passes beneath] <sup>33</sup> the gate of hawthorn. <sup>34</sup> [And thus she r]ecites: / <sup>35</sup> ["...] white <sup>36</sup> [...] you dress. <sup>8</sup> <sup>37</sup> The [shee]p passes beneath you, 38 and you pull its pūttar. The ox 39 passes beneath 38 [you], 40 and you pull its šūkšūka. The ox 39 passes beneath 38 [you], 40 and you pull its šūkšūka. 44 May you pull just the same 41 for this ritual beneficiary evil, 42 impurity, sorcery, sin, 43 anger of the gods, oath of the gods (= perjury), slander of the masses 44 (and) short years!" 45 Then she hurls back a thin-bread, and the Old Woman  $^{46}$  recites:  $^{47}$  "Let the grain send  $^{46}$  away from behind him the evil impurity!" /  $^{48}$  But (s)he (= the beneficiary)  $^{49}$  passes  $^{48}$  out beneath the gate of alanza-wood  $^{49}$  and she (= the Old Woman) recites: "As this alanza-wood 50 repeatedly purifies a thousand and ten thousand

<sup>&</sup>lt;sup>30</sup> [nu MUNUS ŠU.GI A-NA EN SISKUR tar-kum]-mi-i-e-eš-ki-iz-zi<sup>7</sup>

<sup>31 [...]</sup> x pár-ku-i GIŠZA.LAM.GAR

<sup>32 [</sup>EN SISKUR na-aš-šu LÚ-aš na-aš-m]a MUNUS-za

<sup>&</sup>lt;sup>33</sup> [na-aš-kán <sup>G</sup>]⁵ha-tal-kiš-na-aš KÁ.GAL

<sup>&</sup>lt;sup>34</sup> [kat-ta-an ar-ha pa-iz-zi nu ki-iš-ša-an m]e-ma-i

<sup>35 [...]</sup> FBABBAR?1

<sup>&</sup>lt;sup>36</sup> [...] x wa-aš-ša-a-ši

<sup>&</sup>lt;sup>37</sup> [UD]U-<sup>r</sup>uš¹-ták-kán <sup>r</sup>kat-ta-an ar-ha¹ pa-iz-zi

³³ nu-uš-<ši>-kán 「sía¹pu-「ut¹-tar hu-it-<ti>-ia-ši GU₄-u[š-ták-kán]

<sup>&</sup>lt;sup>39</sup> kat-ta-an ar-ha pa-iz-zi

<sup>40</sup> nu-uš-ši-kán šu-uk-šu-ka¸-an hu-it-ti-ia-š[i]

<sup>41</sup> ke-e-da-ni-ia-kán A-NA EN SISKUR i-da-lu

<sup>&</sup>lt;sup>42</sup> pa-ap-ra-tar al-wa-za-tar a-aš-ta-ia-ra-tar

<sup>&</sup>lt;sup>43</sup> DINGIR<sup>MEŠ</sup>-*aš kar-pí-in NI-IŠ* DINGIR-*LIM pa-an-ga-u-wa-aš* EME-*an* 

<sup>&</sup>lt;sup>44</sup> ma-ni-in-ku-u-wa-an-da-an мu-an ar-ha QA-ТАМ-мА hu-it-ti-ia

<sup>45</sup> nam-ma-za-kán NINDA.SIG EGIR-pa ši-i-e-ez-zi nu MUNUS ŠU.GI

<sup>&</sup>lt;sup>46</sup> me-ma-i i-da-lu-uš-ši pa-ap-ra-<tar> EGIR-an ar-ha

<sup>&</sup>lt;sup>47</sup> hal-ki-iš na-a-ú

<sup>&</sup>lt;sup>48</sup> pa-ra-a-ma-aš-kán <sup>GIŠ</sup>a-la-an-za-aš KÁ.GAL kat-ta-an ar-ha

<sup>&</sup>lt;sup>49</sup> pa-iz-zi nu me-ma-i ka-a-aš <sup>GIŠ</sup>a-la-an-za ma-ah-ha-an

<sup>50</sup> LI-IM 10,000 LÚSIPA.UDU LÚSIPA.GU, pár-ku-nu-uš-ki-iz-zi

<sup>&</sup>lt;sup>51</sup> ke-e-da-ni-ia-kán A-NA EN SISKUR *IŠ-TU* 12 <sup>UZU</sup>ÚR

<sup>&</sup>lt;sup>52</sup> i-da-lu pa-ap-ra-tar al-wa-<sup>r</sup>an<sup>!1</sup>(<sup>r</sup>e<sup>?1</sup>)-za-tar a-aš-ta-ia-ra-tar

<sup>53</sup> NI-<IŠ> DINGIR-LIM i-da-la-mu-uš za-aš-hi-mu-uš DINGIR<sup>MEŠ</sup>-aš

<sup>54</sup> kar-pí-in ag-ga-an-ta-aš ha-tu-ga-tar a-wa-an

<sup>&</sup>lt;sup>55</sup> ar-ha QA-тАМ-мА pár-ku-nu-ut nam-ma-za-kán NINDA.SIG

<sup>56</sup> EGIR-pa ši-i-ia-iz-zi MUNUS ŠU.GI

<sup>&</sup>lt;sup>57</sup> QA-TAM-MA-pát me-ma-i

<sup>7</sup> Restoration suggested by Gary Beckman (pers. comm.).

<sup>8</sup> Otten (1952-53, 70), followed by Haas (2003, 696), restored: "[Du bist ein Weißdorn. Im Frühling kleidest du dich weiß; [zur Erntezeit aber] kleidest du dich [rot]" on the basis of similar wording in KUB 33.54 ii 13-17+KUB 33.47 1-5 (and duplicates). Consulting the photos of these fragments on HPM (available at https://www.hethport.uni-wuerzburg.de/HPM/index.php) confirms the high probability of this restoration of Bo 2589 = KUB 12.58 rev. iii 35-6: [zi-ga-az asha-tal-ki-iš-na-az ha-mi-eš-hi-ia-a] z Babbar[-tim wa-aš-ša-a-ši buru<sub>14</sub>-ma-az iš-har-wa-an-d]a wa-aš-ša-a-ši.

<sup>9</sup> A hairy part of the animal's body; cf. CHD P, 402 s.v. "(SIG) pūttar".

<sup>10</sup> Hair or type of hair of oxen and horses; cf. CHD Š, 567 s.v. "šukšuk(k)a-/šukšukki-".

shepherds and cowherds, 55 may you purify just the same 51 for this ritual beneficiary, from the twelve body-parts, 52 evil, impurity, sorcery, sin, 53 oath of the gods (= perjury), evil dreams, 54 anger 53 of the gods 54 (and) terror of the dead!" 55 Then 56 she hurls back 55 a thin-bread, 56 and the Old Woman 57 recites just the same.

The Old Woman constructs a gate from hawthorn in front of the tent that was used before, and ties to it strings of white wool. She then puts three bread loaves at each side of the gate. Next, she constructs a gate from alanza-wood, ties to it strings of black wool, and probably puts again bread loaves at its two sides. 11 The ritual beneficiary passes through the two gates, and each time the practitioner pronounces a symbolic analogy that accompanies the passage. The analogy reflects how the gate through which the beneficiary passes will affect the beneficiary and contribute to his/her healing. The first analogy concerns the hawthorn gate. The Old Woman declares that just as the hawthorn thorns pluck hair from the animals that pass near it, so will the hawthorn-made gate pluck negative qualities from the beneficiary. The second analogy concerns the alanza gate. The Old Woman declares that just as the alanza tree purifies shepherds and cowherds, so will the alanza-made gate purify the beneficiary from the negative qualities 'plucked' by the hawthorn gate. In both cases, she also uses the bread as part of a magical procedure in which she declares that the grain will send the evil away from the beneficiary.

It is now assumed that the ritual has achieved its aim. The Old Woman returns to the river and offers DINGIR.MAH of-the-riverbank food and drink again, as gratitude for the deity's assistance in curing the beneficiary. Similar offerings of gratitude are made to the spring and the Sun-god. In the final phase of the ritual, the practitioner requests the Sun-god to make the beneficiary fertile, by comparing his/ her hoped situation to that of a fertile bovine (GU, ušantari-) and a fruit tree. The ritual concludes with sacrifices made by the Old Woman to the two deities, the Sun-god and DINGIR.MAH of-the-riverbank.

#### The Extracting Hawthorn and the Purifying Oak 3

I shall now concentrate on the episode highlighted above, in which the beneficiary passed through two makeshift gates. The purpose of the ritual was to heal its patient from genital problems. Passing through the two gates was one of the main techniques employed to this end. Combined, they reflect a two-phase healing process: the first gate was meant to extract evil from the beneficiary, and the second was meant to purify the beneficiary after the evil had been removed. We can roughly compare this two-phase process to a medical treatment of infection: first, the infectious element is removed from the body; next, the wound is sterilized. We should pay attention to the fact that in both cases, the exact functionality of the gate was related to the material from which it was made. The idea that the thorny hawthorn can symbolically 'pluck' defilement from people makes the analogy understandable. But the analogy which involves the *alanza* wood merits an investigation: what makes this gate suitable for symbolically purifying people?

While the identification of Hittite hat(t)alke/išna as 'hawthorn' has already been satisfactorily established, 12 the case of alanza is different. The first step in clarifying the analogy involving the alanza-wood, therefore, is to understand what 'was' the alanza-wood: from which tree did it originate? A quick review of the pertinent dictionaries reveals that only HED suggests a concrete identification of the tree - alder - mainly on account of etymological similarities with Latin Alnus, Lithuanian alksnis and East Lithuanian alìksnis, all meaning 'alder'. 13 Other dictionaries either skip the entry or do not offer a decisive identification of the term. 14 However, the identification of alanza with oak was suggested long ago by leading Hittitologists, 15 and was accepted by Haas in his authoritative survey of Hittite materia magica. 16 One of the main reasons for preferring this suggestion, as originally noted by Hoffner and

<sup>11</sup> The beginning of the pertinent line - 27 - is broken, and the verb that governs this sentence is dai- 'to place', while the verb that governs the earlier attestation of the placement of bread is išhuwa-'to scatter'. This makes the placement of bread at the sides of the alanza gate probable, but not certain.

<sup>12</sup> See, inter alia, HED H, 256-7 s.v. "hat(t)alkesna-"; HEG H, 218-19 s.v. "(as) hat(t)alkešna-"; Rieken 1999, 397-8; Zinko 2001, 751-4; Haas 2003, 297-300 with previous literature.

**<sup>13</sup>** HED A, 30 s.v. "alanza(n)-".

<sup>14</sup> HEG and HW<sup>2</sup>, for example, offer generally "(ein) Baum und dessen Holz" (HEG A, 15 s.v. "as alanzan-"; HW<sup>2</sup> A, 56 s.v. "as alanzan-").

**<sup>15</sup>** Hoffner 1966, 390-1; 1978, 243; accepted by Goetze 1968, 17.

<sup>16</sup> Haas 2003, 292-3 with previous literature.

accepted by Haas and others, lies in the similarity of alanza to the Semitic lexemes of Akkadian allānu, Ugaritic 'aln and Hebrew allôn, all meaning 'oak'. IT Goetze, followed by Hoffner, suggested that the term was "Mediterranean", thus emphasizing its geographical distribution rather than its Semitic origin. 18 Indeed, the concurrence of Hittite and Akkadian, and the cultural coexistence of the Hittites and their Mesopotamian neighbors, probably present a stronger case than the shared Indo-European origin of Hittite and Latin, and the identification *alanza* = 'oak' seems highly plausible.

It should be noted that the bark of both alder and oak is known to contain antiseptic substances: salicin (alder) $^{19}$  and tannic acid (oak), $^{20}$  which may explain the purificatory qualities ascribed to the alanza, whatever exact tree it was. However, if we accept the identification of alanza with oak, further investigation yields interesting results. To begin with, the bark of different oak species can be used for a large variety of medicinal purposes, mainly as an antiseptic and astringent. As such, it can be used for gastropathy-related disorders.<sup>21</sup> But we can refine our investigation by focusing on Quercus cerris 'Turky/Austrian oak', an oak species native to Asia Minor, 22 which makes it a good candidate for the identity of the Hittite alanza tree. Several studies that were conducted in recent years demonstrate its use in folk medicine by people who live in areas that correspond to the Hittite heartland, 23 the land of Arzawa<sup>24</sup> and what was probably the border area between the two.<sup>25</sup>

We should distinguish between two interrelated types of research: studies of folk medicine practiced in rural communities throughout present-day Turkey, which are usually based on ethnographic observations and interviews, and scientific analyses of the medicinal qualities of Quercus cerris. Such analyses derive from awareness of folk medicine and attempt to assess its validity by collecting tree samples and analyzing them in the laboratory. Both types of research reveal fascinating results.

Studies of folk medicine among rural communities across present-day Turkey point to recurring patterns in the use of Quercus cerris for therapeutic purposes. Tea made of branches of Quercus cerris is used in Maden county, Eastern Anatolia, to treat diarrhea and hemorrhoids.26 Decoction of Quercus cerris acorns is used in the Afyonkarahisar region, West Turkey, to treat hemorrhoids.<sup>27</sup> In Savaştepe, West Turkey, the root of Quercus cerris is crushed and mixed with milk or other liquids and then used to treat abscesses; the cortex of the stem is consumed in decoction to treat diarrhea.<sup>28</sup> In Eğirdir, Isparta, Southwest Turkey, the root bark of Quercus cerris is used in multiherbal decoction to treat hemorrhoids.<sup>29</sup> Last but not least, tea made of fresh leaves of Quercus cerris is used in the villages of the Vize district in Northwest Turkey to treat prostatitis (prostate diseases).30 To sum up, it seems that the different parts of Quercus cerris - branches, acorns, roots, stem cortex, leaves and bark - are used in folk medicine throughout various regions of present-day Turkey for treating several specific internal ailments, mostly diarrhea, hemorrhoids and prostate diseases.

How scientifically valid are these treatments? What can modern science tell us in this regard? Indeed, scientific studies investigating the medicinal qualities of Quercus cerris seem to supply an empirical framework to confirm the validity of the folk medicine practices described above. For example, a recent study demonstrated that a coffee-like beverage made of Quercus cerris seeds has high antioxidant values, and the researchers regarded the beverage as "potentially health-promoting". 31 Other research projects conducted outside of Turkey demonstrated that water extracts of the bark of Quercus cerris

- 17 CAD A/1, 354 s.v. "allānu" A; RlA 9, 634 s.v. "Nuss und Verwandtes".
- Goetze 1968, 17, repeated and clarified in Hoffner 1978, 243.
- Henkel 1909, 18. 19
- Henkel 1909, 19-20. 20
- 21 Khennouf et al. 2010, 1145, 1148.
- Kürschner, Parolly 2012, 150, 164; Najib et al. 2021, 1. 22
- See, inter alia, Cakilcioglu et al. 2011 (Maden county, East Anatolia); Tetik et al. 2013 (Malatya province, East Anatolia); Sen et al. 2024 (Kahramanmaras, South-central Turkey).
- See, inter alia, Karqıoğlu et al. 2010 (the region of Honaz mountain, Denizli, Southwest Turkey); Erbay, Sarı 2018 (Afyonkarahisar region, West Turkey); Özdemir Nath, Kültür 2022 (Savaştepe, West Turkey).
- See, inter alia, Tuzlacı, Erol 1999 (Eğirdir, Isparta, Southwest Turkey); Şöhretoğlu et al. 2012 (same region). 25
- Cakilcioglu et al. 2011, 476. 26
- Erbay, Sarı 2018, 122.
- Özdemir Nath, Kültür 2022, 966. 28
- Tuzlacı, Erol 1999, 600, 608. 29
- Kültür 2007, 349.
- 31 Pinto et al. 2019, esp. 2058-9.

show cytotoxic and anticancer activity,32 and that extracts based on seeds and leaves of Quercus cerris exhibit antioxidant activity.33 Such findings were explained as the potential reason for using Quercus cerris in folk medicine for treating ailments such as hemorrhages, dysentery and chronic diarrhea.34 It has also been pointed out that Quercus cerris extracts are found to be effective against some pathogenic microorganisms, and that the abundance of bioactive phenolic compounds such as tannins and flavonoids can explain the antioxidant and antimicrobial qualities of organic extracts of Quercus cerris acorns.35

Most relevant, however, are researches performed on Quercus cerris that grow in Turkey itself. For example, in research on water extracts of barks from Quercus cerris that grow in Eğirdir, Isparta, Southwest Turkey, the extracts showed antioxidative and cytotoxic activities, and the researchers concluded that the trees examined - among which Quercus cerris - are "very important for the antioxidative protection".36 A recent research that examined cork extracts from the barks of Quercus cerris that grow in Kahramanmaras, South-central Turkey, assessed their antioxidant, antiproliferative and antimicrobial properties. This research concluded that these extracts showed "significant antioxidant, antimicrobial, and anti-proliferative properties", and suggested that they "appear to be effective against gastric-, lung-, colon- and breast-cancer cell lines". 37

### Black and White: A Tale of Two Gates

Now that we have clarified the extracting qualities of the hatalkešna 'hawthorn' and the purificatory qualities of the alanza 'oak', we may proceed to several additional considerations concerning the two gates used in our ritual. CTH 409.1 presents the sole example in the corpus of Hittite magical rituals for using two makeshift gates simultaneously, each gate fulfilling a different purpose. This fact merits further discussion. The hawthorn gate was wrapped with white wool, while the oak gate was wrapped with black wool. These colors seem to correspond to the plants used in the construction of the gates. Hawthorn has white flowers, 38 to which the Old Woman probably alludes by stating, "You dress [...] white [...]", 39 while the oak's bark and acorns have a dark brown-black color.

I would like to add one final consideration concerning the gates and their respective colors. Two deities were invoked throughout the ritual by the practitioner, who requested them to assist in healing the beneficiary: the celestial Sun-qod and the potentially chthonic<sup>40</sup> DINGIR, MAH of-the-riverbank. It can be hypothesized that the 'bright' Sun-god was associated with the white hawthorn gate, while the 'dark' DINGIR. MAH was associated with the black oak gate. The combined efforts of the 'black' and 'white' deities extracted the defilement from the beneficiary and subsequently purified him/her. By this, it is suggested, the beneficiary's healing treatment was complete.

- **32** Taib et al. 2020, 14.
- 33 Burlacu et al. 2020, 8.
- **34** Najib et al. 2021, 4.
- **35** Vinha et al. 2016, 975-6; Najib et al. 2021, 4.
- **36** Şöhretoğlu et al. 2012, 145.
- **37** Sen et al. 2024, 9.
- 38 And at times red depending on species and season.
- 39 [...] BABBAR<sup>71</sup> [...] x wa-aš-ša-a-ši (KUB 12.58 rev. iii 35-6). See supra, for Otten's (1952-53, 70) and Haas's (2003, 696) restoration of these two lines, which portrays the hawthorn as "wearing white" in springtime.
- 40 Though quite speculative, since actual chthonic characteristics of this deity are not explicitly mentioned in the text. DINGIR.MAH-deities were usually associated with birth, a trait Haas (1994, 133) associated with death and the Netherworld. DINGIR.MAH of-the-riverbank was primarily associated with the river and its banks; rivers, in turn, were sometimes associated with chthonic qualities because they frequently originate from springs, hence their water stems from the underworld (see general discussion in Haas 2003, 144-5). See also in this respect Collins 2013, 108: "The remains of ancient waterworks (pools and wells, for example) and the religious structures built in and around natural water sources, such as springs and rivers, are vivid reminders of the role of water as a conduit to the world below the earth and to the beings that inhabited that world".

#### 5 **Conclusions**

This article focused on one of the procedures practiced in the Hittite magical ritual of Tunnawi CTH 409.1, which was meant to cure its beneficiaries of genital disorders: recurring miscarriages, premature births, or dysfunctional genitalia. The procedure in question involved the beneficiary's passage through two makeshift gates constructed by the ritual performer. The first gate was made of hawthorn, wrapped with white wool, and its purpose was to extract evil qualities from the beneficiary. The second gate was made of oak, wrapped with black wool, and its purpose was to purify the beneficiary.

The approach this article assumes is not necessarily based on an alleged continuity of medicinal practices from the Bronze Age into the present. The social sciences, as well as comparative historical research, are based on the understanding that human societies possess certain common denominators across space and time, and hence occasionally reach similar conclusions and solutions to similar situations and challenges independently from one another. Writing itself was invented by different cultures entirely independently from one another, and the realm of medicinal practice does not differ in this respect. The properties of the tree discussed in the article - Quercus cerris - are the same as they were during the Hittites' time, and so is the tree's potential use for medicinal purposes.

Scientific examinations of the properties of Quercus cerris 'Turkey/Austrian oak', reveal that this oak species possesses medicinal qualities that make it suitable to treat certain medical conditions. These can explain the use of this particular oak as a remedy in folk medicine throughout present-day Turkey, mostly for treating diarrhea, hemorrhoids and prostate diseases. These internal ailments bring us back to the disorders Tunnawi's ritual was meant to cure: recurring miscarriages, premature births, and women's or men's dysfunctional genitalia. Both men and women can suffer from hemorrhoids. One of the background circumstances within which hemorrhoids can develop among women is during pregnancy and childbirth; this certainly clarifies the connection between some of the aims of Tunnawi's ritual and the use of Quercus cerris. As to intense diarrhea, it can lead to the development of hemorrhoids. The third internal ailment mentioned was prostate illness. Extreme situations, such as prostate cancer, may lead to recurring diarrhea. In addition, prostate dysfunction impairs male productivity; such a situation could reflect the meaning of male genitals being "separated off", a phrase whose exact meaning remains obscure. All the threads considered in this article are tied here: Tunnawi's ritual, folk medicine and scientific medicinal studies, all told through a tale of two gates.

As we know, most things in life are hardly a matter of black or white. Some, however, seem to be exactly this.

## **Bibliography**

Beckman, G.M. (1993). "From Cradle to Grave: Women's Role in Hittite Medicine and Magic". Journal of Ancient Civilizations, 8,

Bryce, T.R. (2002). Life and Society in the Hittite World. Oxford: Oxford University Press.

Burlacu, E.; Nisca, A.; Tanase, C. (2020). "A Comprehensive Review of Phytochemistry and Biological Activities of Quercus Species". Forests, 11, 1-24. https://doi.org/10.3390/f11090904.

Cakilcioglu, U.; Khatunb, S.; Turkogluc, I.; Haytad, S. (2011). "Ethnopharmacological Survey of Medicinal Plants in Maden (Elazig-Turkey)". Journal of Ethnopharmacology, 137, 469-86.

Collins, B.J. (2013). "Anatolia". Spaeth, B.S. (ed.), The Cambridge Companion to Ancient Mediterranean Religions. New York: Cambridge University Press, 95-115.

Erbay, M.Ş.; Sarı, A. (2018). "Plants Used in Traditional Treatment against Hemorrhoids in Turkey". Marmara Pharmaceutical Journal, 22(2), 110-32. https://doi.org/10.12991/mpj.2018.49.

Goetze, A. (1968). "Hethitisches Wörterbuch. 3. Ergänzungsheft by Johannes Friedrich". Journal of Cuneiform Studies, 22(1), 16-24. Goetze, A.; Sturtevant, E.H. (1938). The Hittite Ritual of Tunnawi. New Haven (CT): American Oriental Society. American Oriental Series 14.

Haas, V. (1994). Geschichte der hethitische Religion. Leiden: Brill. Handbook of Oriental Studies. Section 1: The Near and Middle East 15. Haas, V. (2003). Materia magica et medica hethitica. Ein Beitrag zur Heilkunde im Alten Orient. Berlin: De Gruyter.

Haas, V. (2007). "Hittite Rituals against Threats and Other Diseases and Their Relationship to the Mesopotamian Traditions". Geller, M.J.; Finkel, I.L. (eds), Disease in Babylonia. Leiden; Boston: Brill, 100-19. Cuneiform Monographs 36.

Henkel, A. (1909). American Medicinal Barks. Washington: US Government Printing Office.

Hoffner, H.A. Jr. (1966). "Composite Nouns, Verbs and Adjectives in Hittite". Orientalia, 35(4), 377-402.

Hoffner, H.A. Jr. (1978). "Johannes Friedrich - Annelies Kammenhuber, Hethitisches Wörterbuch. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte. Lieferung 1". Bibliotheca Orientalis, 35, 242-6.

Kargıoğlu, M.; Cenkci, S.; Serteser, A.; Konuk, M.; Vural, G. (2010). "Traditional Uses of Wild Plants in the Middle Aegean Region of Turkey". Human Ecology, 38(3), 429-50. https://doi.org/10.1007/s10745-010-9318-2.

- Khennouf, S.; Amira, S.; Arrar, L.; Baghiani, A. (2010). "Effect of Some Phenolic Compounds and Ouercus Tannins on Lipid Peroxidation". World Applied Sciences Journal, 8(9), 1144-9.
- Kültür, Ş. (2007). "Medicinal Plants Used in Kırklareli Province (Turkey)". Journal of Ethnopharmacology, 111, 341-64. https:// doi.org/10.1016/j.jep.2006.11.035.
- Kürschner, H.; Parolly, G. (2012). "The Central Anatolian Steppe". Werger, M.J.A.; van Staalduinen, M.A. (eds), Eurasian Steppes: Ecological Problems and Livelihoods in a Changing World. Dordrecht: Springer, 149-71. Plant and Vegetation 6.
- Marcuson, H. (2016). "Word of the Old Woman": Studies in Female Ritual Practice in Hittite Anatolia [PhD Thesis]. University of
- Mouton, A. (2014). "Liminalité, impureté et franchissements rituels en Anatolie Hittite". Mouton, A.; Patrier, J. (eds), Life, Death and Coming of Age in Antiquity: Individual Rites of Passage in the Ancient Near East and Adjacent Regions. Leiden: Nederlands Instituut voor het Nabiie Oosten, 441-52, Publications de l'Institut historique-archéologique néerlandais de Stamboul 124,
- Mouton, A. (2015), "Les rituels de la Vieille Femme Tunnawiya, Témoignages du Bas Pays hittite?". Beyer, D.; Henry, O.; Tibet, A. (éds), La Cappadoce Méridionale de la Préhistoire à la Période Byzantine = 3èmes Rencontres d'archéologie de l'IFEA. Istanbul: Institut Français d'Études Anatoliennes Georges Dumézil, 79-89.
- Najib, R.; Houri, T.; Khairallah, Y.; Khalil, M. (2021). "Quercus cerris L.: An Overview". Forestry Studies / Metsanduslikud Uurimused. The Journal of Estonian University of Life Sciences, 74, 1-9. https://doi.org/10.2478/fsmu-2021-0001.
- Naiib, R.: Mezher, M.: Houri, T.: Kairallah, Y.: Khalil, M. (2023). "Ouercus cerris L.: Antibacterial and Antibiofilm Potential". Journal of Microbiology, Biotechnology and Food Sciences, 13(3), 1-11. https://doi.org/10.55251/jmbfs.9843.
- Otten, H. (1952-53). "Ein Reinigungsritual im Hethitischen: Gishatalkišna-". Archiv für Orientforschung, 16, 69-71.
- Özdemir Nath, E.; Kültür, Ş. (2022). "An Ethnobotanical Study of Medicinal Plants in Savaştepe (Balıkesir-Turkey)". Clinical and Experimental Health Sciences, 12, 954-80. https://doi.org/10.33808/clinexphealthsci.1026438.
- Peled, I. (2026). Magical Passages in Ancient Near Eastern Rituals: Liminality, Transformation and Separation. London; New York:
- Pinto, D.; Diaz Franco, S.; Silva, A.M.; Cupara, S.; Koskovac, M.; Kojicic, K.; Soares, S.; Rodrigues, F.; Sut, S.; Dall'Acqua, S.; Oliveira, M.B.P.P. (2019). "Chemical Characterization and Bioactive Properties of a Coffee-Like Beverage Prepared from Quercus cerris Kernels". Food & Function, 10(4), 2050-60. https://doi.org/10.1039/c8fo02536c.
- Rieken, E. (1999). Untersuchungen zur nominalen Stammbildung des Hethitischen. Wiesbaden: Harrassowitz. Studien zu den Bogazköy-Texten 44.
- Sen, U.; Almeida, D.; da Silveira, T.F.F.; Pires, T.S.P.; Anibarro-Ortega, M.; Mandim, F.; Barros, L.; Ferreira, I.C.F.R.; Pereira, H.; Fernandes, Â. (2024). "Exploring the Bioactive Properties of Hydroethanolic Cork Extracts of Quercus cerris and Quercus suber". Processes, 12(8), 1-11. https://doi.org/10.3390/pr12081579.
- Şöhretoğlu, D.; Sabuncuoğlu, S.; Şebnem Harput, Ü. (2012). "Evaluation of Antioxidative, Protective Effect against H<sub>2</sub>O<sub>2</sub> Induced Cytotoxicity, and Cytotoxic Activities of Three Different Quercus Species". Food and Chemical Toxicology, 50, 141-6. https:// doi.org/10.1016/j.fct.2011.10.061.
- Taib, M.; Rezzak, Y.; Bouyazza, L.; Lyoussi, B. (2020). "Medicinal Uses, Phytochemistry, and Pharmacological Activities of Quercus Species". Evidence-Based Complementary and Alternative Medicine, 31 July, 1-20. https://doi. org/10.1155/2020/1920683.
- Tetik, F.; Civelek, S.; Cakilcioglu, U. (2013). "Traditional Uses of Some Medicinal Plants in Malatya (Turkey)". Journal of Ethnopharmacology, 146, 331-46. https://doi.org/10.1016/j.jep.2012.12.054.
- Tuzlacı, E.; Erol, M.K. (1999). "Turkish Folk Medicinal Plants. Part II: Eğirdir (Isparta)". Fitoterapia, 70(6), 593-610. https://doi. org/10.1016/S0367-326X(99)00074-X.
- Vinha, A.F.; Barreira, J.C.M.; Costa, A.S.G.; Oliveira, M.B.P.P. (2016). "A New Age for Quercus spp. Fruits: Review on Nutritional and Phytochemical Composition and Related Biological Activities of Acorns". Comprehensive Reviews in Food Science and Food Safety, 15(6), 947-81. https://doi.org/10.1111/1541-4337.12220.
- Zinko, C. (2001). "Bemerkungen zu einigen hethitischen Pflanzen und Pflanzennamen". Wilhelm, G. (Hrsg.), Akten des IV. Internationalen Kongresses für Hethitologie (Würzburg, 4.-8. Oktober 1999). Wiesbaden: Harrassowitz, 739-59.