

ARTICLE

The Fire Beyond: Non-Ritual Avestan Fires

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(Received 2 February 2026; revised 28 April 2026; accepted 4 May 2026)

Abstract

The Young Avestan text *Widēwdād* 8.81–96 deals with the contamination of fire as a result of its use in daily activities, arguing that the pristine purity of this sacred element be restored by bringing each of the polluted fires to an appropriate place. While listing non-ritual uses of fire, this text also gives precious details about the material culture of the speakers of Young Avestan in southern Central Asia during the first millennium BCE. This information is relevant for not only better understanding the history of the region in that period but also tracing the composition of these passages back to the Achaemenid period.

Keywords: Zoroastrianism; Avesta; *Widēwdād*; Central Asia; material culture

Fire is a pure element with special theological and ritual status in the Zoroastrian religion since its origins. However, the sacred character of fire, as that of other elements, did not hinder its practical use in daily life, thus leaving Zoroastrians with the dilemma of how to deal with its eventual contamination. When dealing therewith, ancient Zoroastrian texts discussed how fire could be stained not only by things believers considered impure but also originally pure things that turned into residues in the process of human activities, such as metallurgy, glass blowing, brick firing, or cooking.

The contamination of fire was a main concern of several passages of the Young Avestan (YAv.) text *Widēwdād* (V), composed in southern Central Asia during the first millennium BCE.¹ Its chapters 8.81–96 delved more particularly into the non-ritual uses of fire in daily life and, in so doing, provided us with valuable information about the material culture linked to the Young Avestan-speaking population of that region and period.² In this contribution, I focus on how certain terms attested in this text and referring to material culture may not only shed more light on the historical context of ancient Central Asia but also trace the passages' composition back to the Achaemenid period.³

¹ For the chronological scope of the Young Avestan language, see Skjærvø, “Hymnic Composition,” 201–02; Skjærvø, “The Antiquity,” 2003–04; Kellens, “Considérations,” 490–513; de Vaan, *The Avestan Vowels*, 11–15; Panaino, “Chronologia Avestica”; and Hintze, “Zarathushtra’s Time.” For its geographical location in southern Central Asia, mainly due to the toponyms listed in V 1, see Grenet, “Zarathushtra’s Time,” 24–29.

² The importance of the Avestan sources to the study of Central Asia in antiquity has already been observed in Belenitskii, *Central Asia*, 52; Masson and Sarianidi, *Central Asia*, 154.

³ Particular aspects of V 8.81–96 have been discussed by several authors, especially by Spiegel, *Avesta*, vol. 1, 154–55; Geiger, *Ostiranische Kultur*, 390; Geiger, “Vaterland,” 353–55, 361–63; Scheftelowitz, “Altiranische,” 156–57; Scheftelowitz, “Review,” 689; Tavadia, “Ein alter Feuerritus, 265–66; Herzfeld, *Zoroaster*, 792–800; Boyce, “On the

In the Young Avestan text V 8.81–96, Zaratuštra asks Ahura Mazda about the spiritual reward for bringing fires stained in a variety of daily practices and professional activities to their right place. Zaratuštra's question is preceded by the Avestan formula *yō. ātrəm. X dāitīm. gātūm. auui. auua.baraiti*, “if one (/whoever) brings to the right place a fire X.” The X is filled in by sixteen different cases of decreasing impurity, starting from the most extreme, caused by the cremation of a corpse (V 8.81), and finishing with the least contaminated, that produced in a hearth (V 8.96).⁴ According to Ahura Mazda's answer, the more damage caused to that fire, the more the religious merit will be for whomever removes this sacred element from the source of impurity.

I reproduce the Avestan texts according to my still unpublished critical edition, based on the manuscripts 4000, 4600 (L4), and 4610 (K1), and I abbreviate the repetitions, only explaining the most relevant terms related to material culture:

A fire for cremation

8.81. |a| dātarə. gaēðanəm. astuuaitinəm. ašāum. yō. ātrəm. nasupākəm. dāitīm. gātūm. auui. auua.baraiti. |b| cuuat. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoðanhasca. vī.uruuīštīm. |c| āaṭ. mraoṭ. ahurō. mazdā. yaða. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. baēuuarə. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| yō. aēsma. ašaiia. baraṭ. spitama. zaratuštra. uruuāsnaiiā. vā. vohu.gaonahe. vā. vohu.kərətōiš. vā. haðānaēpataiia. vā. qamciṭ. vā. hubaoiðita-manəm. uruuaranəm. |e| yaṇāt. kaṇāciṭ. naēmanəm. vātō. āθrō. baoiðim. vibaraiti. aṇāt. kaṇāciṭ. naēmanəm. hazanrayna. paiti.jasaiti. ātarš. mazdā. ahurahe. |f| daēuuanəm. maini-iauanəm. təmasciðranəm. druuatəm. bižuuaṭ. yātunəmca. pairikanəmca.

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire for cremation, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazda said: “as much as if in this material life he brings to the right place ten thousand firebrands.”⁵ |d| If he brings according to Righteousness, Spitama Zaratuštra, firewood of *uruuāsnā*-, or *vohu.gaona*-, or *vohu.kərati*-, or *haðānaēpatā*-,⁶ or of any other of the most aromatic plants, |e| from whatever direction from which the Wind spreads the fragrance of the Fire, from that direction whatsoever the Fire of Mazda Ahura⁷ comes killing a thousand |f| of spiritual demons, of liars of gloomy appearance, twice as much of *yātu*- and *pairikā*-.⁸

YAv. *nasupāka*- (cremation) literally means “(in which a) corpse (is being) cooked.” The corpse represented the highest degree of impurity in ancient Zoroastrianism, and the

Sacred Fires,” 65–68; Yamamoto, “The Zoroastrian Temple (I),” 49; Yamamoto, “The Zoroastrian Temple (II),” 82, 86, 91; Choksy, “Reassessing,” 246; and König, “Zur Frage.”

⁴ The formulaic style and use of decreasing sequences are characteristic features of oral composition, which are frequently found in these and other passages of the *Widēwdād*.

⁵ The Pahlavi translation of V 8.81c adds the following gloss: *kū-š bēwar ādurōg frāz ō ātaxš <ī> warahrān nišāst hē*, which translates to “that is, (as if) one had set up ten thousand *ādurōg* (fires) in a Warahrān fire.” This gloss indicates that Pahlavi commentators did not interpret these passages as merely the purification of fire in a daily life situation but as the Zoroastrian rite of collecting sixteen fires to enthrone a fire in a temple of the highest grade. For a discussion on this rite and the reference to V 8.81–96, see König, “Zur Frage,” 17. On the *ādurōg* fires, see Boyce, “On the Sacred Fires,” 287–89.

⁶ These trees or plants cannot be identified.

⁷ It is noteworthy that this and the following passages in which the formula is repeated attest to Mazda Ahura. This collocation, frequent in Old Avestan, is quite rare in Young Avestan, in which the theonym is generally attested as Ahura Mazda. For the variants Mazda Ahura and Ahura Mazda, see Kellens, “Ahura Mazda.”

⁸ The Avestan *yātu*- and *pairikā*- are male and female evil beings respectively.

Widēwād and later texts based on it abound in prescriptions regarding how to avoid any direct or indirect contact with dead matter. As fire was one of the purest elements and the corpse was a key source of contamination, cremation was considered a sacrilege. As such, it makes perfect sense that a list in decreasing order of fires exposed to impurity begins with the most polluted one, that of cremation.

A fire on which (textiles/fur/hides) have been soaked to be dyed

8.82. |a| dātarə. gaēdhanəm. astuuaitinəm. ašāum. yō. ātrəm. uruzdipākəm. dāitīm. gātūm. auui. auua.baraiti. |b| cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vī.uru-uīštīm. |c| āṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. hazanrəm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...) ⁹

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire on which (textiles/fur/hides) have been soaked to be dyed, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazda said: “as much as if in this material life he brings to the right place one thousand firebrands. |d| (...)”

YAv. *uruzdipāka-*, which translates as “on which (textiles/fur/hides) have been soaked to be dyed,” has no clear etymology. Spiegel translated this as “das Unreinigkeiten kocht” (which cooks impurities), deriving the Avestan (Av.) *uruzdi°* from the verbal root *rudh-* “to flow.”¹⁰ Darmesteter translated *uruzdipāka-* as “où l’on a brûlé les liquides impurs” (in which one has boiled impure liquids) based on a comparison with the Pahlavi explanation *ātaxš ī nasā-pāg* (...) *ātaxš ī hixr-pāg*, “a fire for cremation (...), a fire on which bodily refuse has been cooked,” in *Dēnkard* 8.44.46, which resumes V 8.81–82.¹¹ Bartholomae followed Darmesteter in his translation, producing “Flüssigkeiten kochend” (cooking liquids), which the former mistakenly linked with the verbal root ³*raod-*, “to hinder,” instead of ⁴*raod-*, “to flow.”¹² Herzfeld criticized these above translations, opting to instead follow the Pahlavi translation *rang-pāg*, which he rendered as “fire for color-boiling.”¹³ According to Herzfeld, Av. *uruzdi°* is etymologically related to Av. *raoiḍita-* “red.” Although Herzfeld never mentioned this, Aspandiarji had already proposed this interpretation, as noted by Darmesteter.¹⁴ In my opinion, the Parsi scholars were on the right track.

None of the three Proto-Iranian (PIr.) verbal roots—*(H)*raud-* (to tear, to break), *(H)*raud-* (to grow), and *(H)*raud(H)-* (to moan, to bewail)—reconstructed by Cheung provide a satisfactory explanation of YAv. *uruzdi°*.¹⁵ A fourth option, however, may solve the problem.

YAv. *raoiḍita-*, “red,” cognate of Vedic (Ved.) *róhita-*, “idem,” goes back to the Proto-Indo-European (PIE) **h₁reudʰ-*, “to be red.”¹⁶ From its zero grade plus a suffix **-ti°*, the first element of compound YAv. *uruzdi°* can be formed (PIE **h₁rudʰ-ti°* > Proto-Indo-Iranian (PIIr.) **Hrudʰti°* > PIr. **Hrudʰdi°* > YAv. *uruzdi°*). YAv. *uruzdipāka-*, literally “cooking red,” most likely designates the process of soaking textiles, fur, or hides to be dyed in red color.

⁹ I abbreviate the repetitions in both the Young Avestan text and its English translation.

¹⁰ Spiegel, *Avesta*, vol. 1, 154–55.

¹¹ Darmesteter, *Le Zend-Avesta*, vol. 2, 139. For *Dēnkard* 8.44.46, see West, *Pahlavi Texts*, 160.

¹² Bartholomae, *Altiranisches*, 1533.

¹³ Herzfeld, *Zoroaster*, 793–94.

¹⁴ Aspandiarji et al., *The Vandidād*; Darmesteter, *Le Zend-Avesta*, vol. 2, 139.

¹⁵ Cheung, *Etymological*, 192–94.

¹⁶ Mayrhofer, *Etymologisches*, vol. 2, 471.

Since red, in any of its shades, was one of the most frequently extracted colors from different types of dyes in antiquity, “cooking red” or rather “cooking (textiles/fur/hides) in red (color)” might easily have developed into the general meaning of soaking textiles, fur, or hides in this or any other color to be dyed. If so, the Pahlavi translation *rang-pāg*, “cooking dye,” for YAv. *uruzdipāka*- perfectly matches the original. Not only does the etymology of the Young Avestan compound and its Pahlavi translation point to this interpretation, but the ancient technique behind the process points to it as well. As is well known, dyes did not easily adhere to textiles, fur, or hides without the help of mordants, which often consisted of urine in ancient times.¹⁷ For a Zoroastrian, as such, a fire on which textiles, fur, or hides were dyed was unquestionably a fire exposed to a high degree of impurity in the form of urine, which is a bodily refuse and therefore considered filthy. Moreover, the degree of impurity could increase if the materials to be dyed were fur or hides, which could still have remains of flesh even when dried. This double source of impurity may also explain why YAv. *uruzdipāka* was interpreted as *hixr-pāg*, “cooking bodily refuse,” in *Dēnkard* 8.44.46. Moreover, from a compositional point of view, it makes perfect sense that a fire exposed to urine (and eventually also remains of flesh) was listed immediately after a fire polluted by a corpse in a cremation, the highest degree of contamination. If my interpretation is right, V 8.82 provides relevant information about the material culture of the Young Avestan period, insofar as it may imply the use of urine as mordant in a specific technique for dyeing textiles, fur, or hides.

A fire into which cream has boiled over/curdled

8.83. [a] dātarə. gaēdanəm. astuuaitinəm. aṣāum. yō. ātrəm. +sairiiehiiat. haca. dāitīm. gātūm. auui. auua.baraiti. [b] cuuat. amāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruištim. [c] āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṃi. aṇhuuō. yaṭ. astuuaiṇti. paṇca. sata. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. [d] (...)

[a] “Maker of the material creatures, Righteous one, if one brings to the right place a fire into which cream has boiled over/curdled, [b] how much will the reward be for this man after the separation of his bones and his spirit?” [c] And Ahura Mazdā said: “as much as if in this material life he brings to its right place five hundred firebrands. [d] (...)”

YAv. +*sairiiehiiat*, written *sairehiiat* in most manuscripts, is a *hápax legómenon* of unclear meaning and no satisfactory etymology. The Pahlavi translators did not understand it or consider it a technical term, so they left it untranslated. As a result, most scholars dealing with this passage have resorted to traditional New Persian (NP) translations, which interpreted this term as “dung.” For instance, the Pahlavi *Wīdēwdād* manuscript 4700 renders YAv. *sairiiehiiat* and its Pahlavi (Phl.) translation as NP *az sargin*, “from dung,” in folio (f.) 184r, l. 12, and transcribes Phl. <slhyyc> as NP *sarāgic* “?” in f. 184v, l. 12. Anquetil-Duperron followed these New Persian translations and rendered YAv. *sairiiehiiat* as “dans lequel on a brûlé des excréments” (in which one has boiled excrements); Spiegel and Bartholomae translated it as “Unrath” (debris) and “Vorrichtung zum Dörren von Mist” (setup for drying dung) respectively, the latter translation being followed by Wolff’s “Mistdarre” (kiln for drying dung); Darmesteter rendered it as “wherein cowdung has been burnt” and “où l’on a brûlé du fumier” (idem); Scheftelowitz gave the translation “Misthaufen” (dungheap); Anklesaria and Kapadia read its Pahlavi translation as *sarīyē-icha* and rendered it as “dung” as well,

¹⁷ For the use of urine as mordant in ancient and medieval textiles, see Stasińska, “Before They Dyed.”

while Moazami, following Darmesteter and Scheftelowitz, read it as *sarāsp* and translated as “dung.”¹⁸

Only de Vaan deviated from this traditional interpretation and translated YAv. ⁺*sairiiehiiā-* as “(pile of) reeds” based on its possible Vedic cognate *śárya-*, “arrow.”¹⁹ Moreover, de Vaan transliterated the Pahlavi translation as <sl’s-c>, transcribed it as *sarāh-az*, and considered it a mechanical transcription of YAv. ⁺*sairiiehiiā*. I agree with de Vaan’s interpretation of the Pahlavi translation of YAv. ⁺*sairiiehiiā-* as an attempt to transcribe it in Pahlavi script.²⁰ However, I disagree with his interpretation of YAv. ⁺*sairiiehiiā-* as “(pile of) reeds” and propose a different etymology.

In my opinion, YAv. *sairiehiiā* is a corruption of ⁺*sairiiehiiā*, the ablative singular masculine or neuter of a compound, the first element of which is YAv. *sairi-* and the second element is YAv. **iahiiā-* > **iehiiā-*. The first element of the compound in *-i-* is part of a Caland system together with Ved. *śáras-*, “cream, curdled milk,” which is related to Ved. *śar-*, “to break, to curdle,” and stems from PIE **kerh₂-*, “to break.”²¹ The second element of the compound has as a cognate in Ved. *yas-*, “to boil,” and goes back to PIE **jes-*, “to boil.”²² If my analysis of this Young Avestan compound is correct, YAv. *sairi-iehiiā-* would designate a fire “into which cream has boiled over/curdled,” probably meaning that the cream boiled over from its container during heating. Milk and cream are produced by pure animals, such as cows and goats, so they are not impure themselves; if they boil over from heating, however, milk and cream can be burned to a residue.²³ In such a case, it makes perfect sense for this to be placed on the list after a fire on which textiles have been soaked to be dyed, as the technique implied boiling liquids that could eventually pollute the fire in both instances.

A fire from the potter’s kiln, a fire from a glass kiln

8.84. |a| dātarə. gaēdanqm. astuuaitinqm. ašāum. yō. ātrəm. xumbaṭ. haca. zəmaini.pacikāṭ. dāitīm. gātūm. auui. auua.baraiti. |b| cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vī.uruuištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṇi. aṇhuuṭ. yaṭ. astuuaiṇti. caḍbārō. sata. ātrə.saokanqm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from the potter’s kiln, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life he brings to its right place four hundred firebrands. |d| (...)”

8.85. |a| dātarə. gaēdanqm. astuuaitinqm. ašāum. yō. ātrəm. xumbaṭ. haca. yāmō.pacikāṭ. dāitīm. gātūm. auui. auua.baraiti. |b| cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vī.uruuištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yauuaṭ. aṇāi. yāmanqm. paitinqm. sairinqm. aētauuaṭ. ātrə.saokanqm. ḥqm.bərəta. dāitīm. gātūm. auui. auua.baraiti. |d| (...)

¹⁸ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 344; Spiegel, *Avesta*, vol. 1, 154–5; Bartholomae, *Altiranisches*, 1565; Wolff, *Avesta*, 377; Darmesteter, *The Zend-Avesta*, 113; Darmesteter, *Le Zend-Avesta*, vol. 2, 163, n. 84; Scheftelowitz, “Altiranische,” 156; Anklesaria and Kapadia, *Pahlavi Vendidad*, 220; Moazami, *Wrestling*, 258–59.

¹⁹ de Vaan, *The Avestan Vowels*, 571.

²⁰ Nevertheless, I think the Pahlavi translators were even more accurate in their attempt, because they wrote <slhyt> *sa(i)rehiā*, where final <-t> was wrongly copied as <-c’> (for instance, in the Pahlavi *Widēwdād* manuscript 4610) and later transmitted as <-c> in other manuscripts.

²¹ Mayrhofer, *Etymologisches*, vol. 2, 617–18.

²² *Ibid.*, 406–07.

²³ See *Yasna* 44.6, 47.3, and 50.21.

[a] “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a glass kiln, [b] how much will the reward be for this man after the separation of his bones and his spirit?” [c] And Ahura Mazdā said: “as much for this as if he brings to the right place in a bunch as many firebrands as separate (broken) pieces of glass. [d] (...)”

YAv. *xumba-* “vessel,” attested in both V 8.84 and 85, is probably related to Ved. *kumbhá-*, “idem.”²⁴ YAv. *xumba-* designates a specific type of kiln used for both pottery (YAv. *zəmaini.pacikāt*, literally “baking in clay,” in V 8.84) and glass blowing (YAv. *yāmō.pacikāt*, literally “baking glass,” in V 8.85).²⁵ Despite Harmatta’s important remarks on the possible technique behind this kiln, I do not think the Young Avestan syntagms formed with YAv. *xumba-* provide enough information to precisely match it with a concrete type of kiln from among the archaeological remains of first millennium BCE southern Central Asia.²⁶

A fire from an oven for roasting grain

8.86. [a] *dātarə. gaēθanqm. astuuaitinqm. ašaum. yō. ātrəm. aoniiat. haca. parō.bərəjiiāt. dāitīm. gātūm. auui. auua.baraiti.* [b] *cuuat. aṃāi. naire. miždəm. aṃhaṭ. pasca. astasca. baoḍaṃhasca. vi.uruištim.* [c] *āat. mraot. ahurō. mazdā. yauuat. aṃāi. paitinqm. uruuaranqm. aētauuat. ātrə.saokanqm. ḥqm.bərəta. dāitīm. gātūm. auui. auua.baraiti.* [d] (...)

[a] “Maker of the material creatures, Righteous one, if one brings to its right place a fire from an oven for roasting grain, [b] how much will the reward be for this man after the separation of his bones and his spirit?” [c] And Ahura Mazdā said: “as much for this as if he brings to the right place in a bunch as many firebrands as separate plants. [d] (...)”

Scholars have interpreted YAv. *aoniiat. haca. parō.bərəjiiāt*, “from an oven for roasting grain,” in different ways. Anquetil-Duperron translated the syntagm altogether as “ceux qui travaillent en étain” (those who work with tin) and Spiegel as “Erz(e)” (ore).²⁷ As regards YAv. *aonii-*, the latter was unsure about connecting it with either Ved. *avāni-* “riverbed” or Hebrew (Hebr.) *oni, oniyāh*, “vessel.” Bartholomae rendered YAv. *aonii-* as “Feuerungs- oder Heizverrichtung” (firing equipment or heater), without specifying which one, and did not venture any etymology; Scheftelowitz opted to link it with Ved. *avāni-*, “riverbed,” but rendered the Young Avestan word as “Platz” (place).²⁸ Mayrhofer doubted this connection and de Vaan denied it, translating YAv. *aonii-* as “oven.”²⁹ On the other hand, Herzfeld derived YAv. *aonii-* from YAv. *unā-*, “cavity, hole,” attested in V 17.2 and *Nērangestān* (N) 82.2, and considered it a possible loanword from Semitic, citing Old Babylonian *anā, unūtu* and Hebr. *oni, oniyāh*, “vessel.”³⁰ Although the link with YAv. *unā-*, “cavity, hole,” is likely, I would not rule out the possibility of a Semitic origin for YAv. *aonii-*, as already advanced by Spiegel.³¹

²⁴ Spiegel, *Avesta*, vol. 1, 154; Bartholomae, *Altiranisches*, 532; Harmatta, “Three Iranian,” 269–70; Mayrhofer, *Etymologisches*, vol. 1, 370.

²⁵ cf. Geiger, “Vaterland,” 353–55, who denied that the Avestan-speaking population knew glass.

²⁶ Harmatta, “Three Iranian,” 269–70.

²⁷ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 345–46; Spiegel, *Avesta*, vol. 1, 154–55.

²⁸ Bartholomae, *Altiranisches*, 42; Scheftelowitz, “Review,” 689.

²⁹ Mayrhofer, *Etymologisches*, vol. 1, 131; de Vaan, *The Avestan Vowels*, 113.

³⁰ Herzfeld, *Zoroaster*, 792; Kotwal and Kreyenbroek, *The Hērbedestān*, 70–71; Meissner and von Soden, *Akkadisches*, 1422. On Av. *unā-*, “deficient, empty (dish),” and *unā-*, “cavity, hole,” see also Schmidt, “Avestan *unā-*.”

³¹ Spiegel, *Avesta*, vol. 1, 154–55.

As far as YAv. *parō.bərəjīia-* is concerned, Bartholomae left it untranslated.³² Scheftelowitz understood *‘bərəjīia-* as “grain.”³³ Bailey interpreted the compound as “which roasts the food” and linked the Young Avestan first element of the compound *parō°* with the second element of the Khotanese (Khot.) compound *as-para-*, “horse-fodder, lucerne,” and the second element of the Young Avestan compound *‘bərəjīiāt* with Ved. *bhrāj-*, “to roast.”³⁴

In my opinion, Scheftelowitz and Bailey were on the right track, but perhaps we can go a bit further. The cognates Khot. *as-para-*, “horse-fodder, lucerne,” and Sanskrit (Skr.) *bharuja-*, “roasted barley,” point not to the general meaning of “which roasts the food” but to a more concrete meaning, “roasting grain.” On the one hand, V 8.86c equates the meritorious action with bringing “as many firebrands as separate plants,” making it clear that YAv. *parō.bərəjīiāt* refers to plants. On the other hand, the Pahlavi translation *bē pēš [arzan] brēzān*, “before the [millet] roasters,” of YAv. *parō.bərəjīiāt* also indicates that the translators understood this not as food in general but as plants, and, more concretely, as millet. While the Pahlavi translators correctly identified the Young Avestan second element of compound *‘bərəjīiāt*, “roasting,” and rendered it appropriately with Pahlavi *brēzān*, “roasters,” they mistook the Young Avestan first element of compound *parō°* as the Avestan adverb *parō*, “before,” subsequently rendering it in Pahlavi as *bē pēš*, “before.” However, a Pahlavi commentator noticed the mistake and added the gloss *arzan*, “millet.” As we see, both the Khotanese and Sanskrit cognates as well as the Pahlavi commentary indicate that the Young Avestan compound may refer to roasting grain. If so, YAv. *aoniiāt. haca. parō.bərəjīiāt*, would designate a specific type of vessel or oven for roasting grain. It is pure speculation to think that such a vessel or oven may have been metallic, but then V 8.86 would perfectly serve as a link with the next passages, which deal with forges for smelting different metals.

A fire from a forge for smelting gold, silver, bronze/iron, and iron/steel

8.87. [a] *dātarə. gaēdanəm. astuuaitinəm. ašāum. yō. ātrəm. pisraṭ. haca. zaraniiō.saēpāt. dāitīm. gātūm. auui. auua.baraiti.* [b] *cuuat. aṃāi. naire. miždəm. aṃhaṭ. pasca. astasca. baoḍaṃhasca. vi.uruuištim.* [c] *āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṃi. aṃhuuō. yaṭ. astuuaiṇti. satəm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti.* [d] (...)

[a] “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a forge for smelting gold, [b] how much will the reward be for this man after the separation of his bones and his spirit?” [c] And Ahura Mazda said: “as much as if in this material life he brings to the right place one hundred firebrands. [d] (...).”

8.88. [a] *dātarə. gaēdanəm. astuuaitinəm. ašāum. yō. ātrəm. pisraṭ. haca. ərəzatō.saēpāt. dāitīm. <gātūm.> auui. auua.baraiti.* [b] *cuuat. aṃāi. naire. miždəm. aṃhaṭ. pasca. astasca. baoḍaṃhasca. vi.uruuištim.* [c] *āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṃi. aṃhuuō. yaṭ. astuuaiṇti.* [d] *nauuaitīm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti.* [e] (...)

[a] “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a forge for smelting silver, [b] how much will the reward be for this man after the separation of his bones and his spirit?” [c] And Ahura Mazda said: “as much as if in this material life [d] he brings to the right place ninety firebrands. [e] (...).”

³² Bartholomae, *Altiranisches*, 859–60.

³³ Scheftelowitz, “Review,” 689.

³⁴ Bailey, “Arya IV,” 90; Mayrhofer, *Etymologisches*, vol. 2, 278.

8.89. |a| dātarə. gaēθanəm. astuuaitinəm. ašāum. yō. ātrəm. pisraṭ. haca. aiiō.saēpāt. dāitīm. gātūm. auui. auua.baraiti. |b| cuuat. aṃāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṃi. aṇhuuō. yaṭ. astuuaiṇti. aštāitīm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a forge for smelting bronze/iron, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life he brings to the right place eighty firebrands. |d| (...)”

8.90. |a| dātarə. gaēθanəm. astuuaitinəm. ašāum. yō. ātrəm. pisraṭ. haca. haosafnaēnō.saēpāt. dāitīm. gātūm. auui. auua.baraiti. |b| cuuat. aṃāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṃi. aṇhuuō. yaṭ. astuuaiṇti. haptāitīm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a forge for smelting iron/steel, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life he brings to the right place seventy firebrands. |d| (...)”

These passages list fires used in forges for smelting four different metals in decreasing order of economic value: YAv. *zaraniia*-, “gold”; *ərəzata*-, “silver”; *aiia*h-, “bronze/iron”; and *haosafnaēna*-, “iron/steel.”³⁵ The meaning of the two former Avestan terms is considered established, but that of the two latter remains debated.

YAv. *aiia*h- and *haosafnaēna*- have been interpreted by Anquetil-Duperron as “steel” and “copper” respectively; by Spiegel as “iron” and “stone”; by Darmesteter and Bartholomae as “iron” and “steel”; by Scheftelowitz as “iron” and “copper”; and by Herzfeld as “bronze” and Spanish (sic!) “steel.”³⁶ However, Herzfeld noted that YAv. *aiia*h- can be interpreted as either “bronze” or “iron.”³⁷

Etymology does not help much in clearly identifying the metals intended by the Young Avestan terms *aiia*h- and *haosafnaēna*-. The former has a Vedic cognate in *āyas*-, but the term experienced a semantic shift.³⁸ While the R̥gvedic passages in which the term is attested do not help us establish a clear meaning, the metal was qualified as black and likely designated iron in the Black Yajurveda, as Chakrabarti noted.³⁹ The Pahlavi translators rendered YAv. *aiiō.saēpa*- as Phl. *āhanēn dazīdārān*, “ironsmiths,” and added the explanation *āhangarān ud arzīzkarān*, “ironsmiths and tinsmiths.” However, this Pahlavi translation and commentary alone are not a proof enough to simply transfer the meaning “iron” to YAv. *aiia*h-.

As regards YAv. *haosafnaēna*-, it was rendered into Pahlavi as *pōlāwad dazīdārān*, “steel-smiths,” and glossed as *āhangarān <ud> cēlāngarān*, “ironsmiths and swordsmiths,” but again we cannot uncritically transfer the Pahlavi meaning to the Young Avestan original. Spiegel proposed an etymology for YAv. *haosafnaēna*-, relating it to YAv. *safa*-, “hoof (of horses).”⁴⁰ Ognibene proposed a metathesis from Old Iranian (OIr.) **spana*-, “iron,” to

³⁵ V 7.74–75 attests to a parallel sequence of metals in decreasing order of value.

³⁶ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 347–48; Spiegel, *Avesta*, vol. 1, 154–55; Darmesteter, *Le Zend-Avesta*, vol. 2, 139; Bartholomae, *Altiranisches*, 159, 1737; Scheftelowitz, “Altiranische,” 157; Herzfeld, *Zoroaster*, 797.

³⁷ Herzfeld, *Zoroaster*, 782. cf. Geiger, “Vaterland,” 353, according to whom the Avestan-speaking population did not know iron.

³⁸ Bartholomae, *Altiranisches*, 159; Mayrhofer, *Etymologisches*, vol. 1, 104.

³⁹ Chakrabarti, “Iron,” 22–23. For other relevant studies about the semantics of metals in the Vedic texts, see Rau, *Metalle*; Falk, “Silver”; and Yamada, “On Base Metals.”

⁴⁰ Spiegel, *Avesta*, vol. 1, 155. See also Ved. *śaphā*-, “idem,” in Mayrhofer, *Etymologisches*, vol. 2, 608.

**safna-*, “idem,” in YAv. *haosafnaēna-* and rendered it as “good iron.”⁴¹ More recently, Peyrot, Dragoni, and Bernard, quoting a personal communication by Lubotsky, considered this Young Avestan word to be an inner-Iranian borrowing from a Skythian dialect, eventually going back to a form **ham-tṣuana-* < **ham-ćuana-*, “iron.”⁴² Taking into account that the development of Pir. **ham°* as Av. *hao°* is an *ad hoc* explanation with no parallel in Avestan, to my knowledge, and that Pir. **ćua-* would yield Av. *spa-*, I consider that reconstruction unlikely. In my opinion, the first element of the compound in YAv. *haosafnaēna-* is derived from the full grade of *hu-*, “good” (Av. *hao°*), of which there are several parallels in Avestan, and its second element is an adjectival derivation in *-na-* from YAv. *saf(a)-*, “hoof (of horses),” plus the suffix *-aēna-* with the meaning “characterized by/made of.” If this is correct, YAv. *haosafnaēna-* would designate a kind of metal, perhaps iron, to make horseshoes.

A fire from a baking oven

8.91. |a| dātarə. gaēḍanəm. astuuaitinəm. ašāum. yō. ātrəm. tanūraṭ. haca. dāitīm. gātūm. auui. auua.baraiti. |b| cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baodaṇhasca. vī.uru-
uīštīm. |c| āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. |d| xšuuāštīm.
ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |e| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a baking oven, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life |d| he brings to the right place sixty firebrands. |e| (...)”

As regards YAv. *tanūr(a)-*, “baking oven,” Spiegel was the first to propose that the term may derive from Semitic and be related to Hebr. *tannūr*.⁴³ Geiger, followed by Darmesteter, reproduced a communication by Halévy at the Société de linguistique of Paris, according to whom YAv. *tanūra-* was a loanword from Aramaic and related to the Hebrew and Arabic *tannūr*.⁴⁴ Nevertheless, Geiger argued that both the Young Avestan and Semitic word may go back to a common word inherited from an older “türanische Kultur” (Turanian culture), without ruling out that a word from Mesopotamia might have entered the Avestan language prior to the Median period. Scheftelowitz and Herzfeld also proposed that the Avestan term was a loanword from Semitic.⁴⁵

The Pahlavi translators rendered YAv. *tanūr(a)-* into Phl. *tanūr*, “oven,” and added the gloss *nān-pāg*, “baking bread,” to make it clear that it was a specific type of oven.

A fire from (an oven for firing) bricks

8.92. Av. |a| dātarə. gaēḍanəm. astuuaitinəm. ašāum. yō. ātrəm. dištaṭ. haca. dāitīm. gātūm. auui. auua.baraiti. |b| cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baodaṇhasca. vī.uru-
uīštīm. |c| āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. paṇcāsātəm.
ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from (an oven for firing) bricks, |b| how much will the reward be for this man

⁴¹ Ognibene, “A Matter,” 199.

⁴² Peyrot, Dragoni and Bernard, “The spread.”

⁴³ Spiegel, *Avesta*, vol. 1, 12, and 155, n. 1.

⁴⁴ Geiger, “Vaterland,” 361–63; Darmesteter, *Le Zend-Avesta*, vol. 2, 139.

⁴⁵ Scheftelowitz, “Altiranische,” 167; Herzfeld, *Zoroaster*, 793.

after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life he brings to the right place fifty firebrands. |d| (...)”

YAv. *dišta-*, “(an oven for firing) bricks,” has been differently interpreted by scholars. Anquetil-Duperron understood the term as “deserts”; Spiegel translated the word as “hearth,” derived from the verbal root *daēz-*, “to build, to heap (up)”; Darmesteter, followed by Scheftelowitz, Bartholomae, and de Vaan, interpreted it as “cauldron,” probably guided by the Pahlavi translation *dēg*, “idem,” of this word; and Herzfeld understood it as “funeral pyre” and, later, as “charcoal pile.”⁴⁶

However, while YAv. *dišta-* derives from the verbal root *daēz-*, “to build, to heap (up),” it does not designate a funeral pyre, which was already mentioned at the beginning of the list of fires in V 8.81, but rather the material heaped up (YAv. *dišta-*) to build, i.e., bricks. Therefore, the professional activity referred to in this passage may be the firing of bricks for construction. The same meaning “brick(s)” applies to YAv. *dištā-* in V 8.74 a well: *āaṭ. mraoṭ. ahurō. mazdā. auua. aētām. nasupākām. janaēta. auua. hē. janaiiān. āpa. aētām. dištām. baraiiān.* (And Ahura Mazdā said: “One must extinguish this [fire] in which a corpse is being cooked. They must extinguish it. They must remove these bricks”).

A fire from an oven for preparing buttermilk

8.93. Av. |a| *dātarə. gaēḍanqm. astuuaitinqm. ašāum. yō. ātrəm. aoniiāt. haca. taxriiāt. dāitīm. gātūm. auui. auua.baraiti.* |b| *cuuaṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruuīštīm.* |c| *āaṭ. mraoṭ. ahurō. mazdā. yaḍa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. caḍbarəsātəm. ātrə.saokanqm. dāitīm. gātūm. auui. auua.baraiti.* |d| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from an oven for preparing buttermilk, |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life he brings to the right place forty firebrands. |d| (...)”

The meaning of YAv. *taxriiāt*, written as *taxairiīāt* in most manuscripts, has been debated as well. Anquetil-Duperron translated YAv. *aoniiāt. haca. taxriiāt* as “ceux qui gardent les champs” (those who guard the fields); Spiegel translated the term as “flüssigen Erdarten” (fluid types of soil) and linked it with the verbal root *tax-*, “to flow”; Bartholomae left this word untranslated without proposing any etymology; Scheftelowitz read it as *taxairiia-*, etymologically connected it with the Greek τέφρα “ash,” and translated it as “sandiger platz” (sandy place).⁴⁷ However, the Young Avestan word cannot be related to the Greek one, as the latter goes back to the PIE root **d^heg^{uh}-*, “to burn,” which would yield Ved. *dah-* and Av. *daž-*, “to burn.”⁴⁸ Herzfeld understood this word as a bitter infusion or tisane, and emended it as **saxariia-*, which he interpreted as a Young Avestan mention of sugar.⁴⁹ The Pahlavi translators rendered the Young Avestan word into Phl. *payādagīgān*, “foot-soldiers.”

In a later article, Scheftelowitz related the reading *taxairiia-*, which he interpreted in this instance as an adjective derived from the noun **taxara-*, to Gothic *ḡaho*, “clay,” thus

⁴⁶ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 348; Spiegel, *Avesta*, vol. 1, 154–55; Darmesteter, *Le Zend-Avesta*, vol. 2, 142; Scheftelowitz, “Altiranische,” 157; Bartholomae, *Altiranisches*, 748; de Vaan, *The Avestan Vowels*, 113; Herzfeld, *Altpersische*, 121; Herzfeld, *Zoroaster*, 798. For Ved. *deh-* and Av. *daēz-*, see Mayrhofer, *Etymologisches*, vol. 1, 746–47; Cheung, *Etymological*, 52–53.

⁴⁷ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 349; Spiegel, *Avesta*, vol. 1, 155; Bartholomae, *Altiranisches*, 626; Scheftelowitz, “Review,” 689.

⁴⁸ Beekes, *Etymological*, 1475–76, s. v. τέφρα; Mayrhofer, *Etymologisches*, vol. 1, 712–13, s. v. *dah-*.

⁴⁹ Herzfeld, *Zoroaster*, 798.

translating it as “Lehmboden” (clay soil).⁵⁰ In my opinion, the connection with PIE **tenk-*, “to thicken,” is correct, but it would imply that *-ai-* in the reading of *tax(ai)riia-* in several *Widēwdād Sāde* manuscripts is the result of an anaptyctic *-a-* and an epenthetic *-i-* from YAv. *taxriia-*.⁵¹ If the latter is the original form and is indeed an adjective derived from PIr. **taxra-* (not **taxara-*), it would find its exact Vedic cognate in *takra-*, “buttermilk mixed with water.”⁵² If so, it may be translated as “related to (the preparation of) buttermilk,” a suitable epithet for an oven, and would perfectly connect to the next type of fire, which is linked to a path frequented by cowherds.

A fire from a path frequented by herders

8.94. Av. *|a| dātarə. gaēdanəm. astuuaitinəm. ašāum. yō. ātrəm. paṇtaṭ. haca. staorō.pai-iāt. dāitīm. gātūm. auui. auua.baraiti. |b| cuuṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yaθa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. ǵrisatəm. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)*

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a path frequented by cowherds, *|b|* how much will the reward be for this man after the separation of his bones and his spirit?” *|c|* And Ahura Mazdā said: “as much as if in this material life he brings to the right place thirty firebrands. *|d|* (...).”

YAv. *staorō.paiia-*, “guarding cattle, cowherd,” is a transparent compound with the first element of YAv. *staora-*, “cattle,” and the second element an adjective from the Proto-Indo-European verbal root **peh₂-*, “to guard, to protect,” > PIIr./PIr. **paH-*, “idem.”⁵³

A fire from a charcoal burner

8.95. Av. *|a| dātarə. gaēdanəm. astuuaitinəm. ašāum. yō. ātrəm. skairiiaṭ. haca. dāitīm. gātūm. auui. auua.baraiti. |b| cuuṭ. aṇāi. naire. miždəm. aṇhaṭ. pasca. astasca. baoḍaṇhasca. vi.uruištim. |c| āaṭ. mraoṭ. ahurō. mazdā. yaθa. aētaṇi. aṇhuuō. yaṭ. astuuaiṇti. viṣaiti. ātrə.saokanəm. dāitīm. gātūm. auui. auua.baraiti. |d| (...)*

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from a charcoal burner, *|b|* how much will the reward be for this man after the separation of his bones and his spirit?” *|c|* And Ahura Mazdā said: “as much as if in this material life he brings to the right place twenty firebrands. *|d|* (...).”

The meaning of YAv. *skairiia-* was also problematic. The Pahlavi translators simply copied the Young Avestan word and explained it with the gloss *šubān*, “shepherd.” Anquetil-Duperron understood this term as referring to “night watchmen”; Spiegel, followed by Darmesteter, interpreted the word as “campground,” without proposing any etymology for it; Scheftelowitz referred to it as “dried dung,” but also ascribing to Geldner, without further reference, a connection of the Young Avestan word with NP *sikār*, “charcoal”; Bartholomae left the word untranslated and offered no etymology; and Herzfeld, who translated the term

⁵⁰ Scheftelowitz, “Iranische,” 220. Regarding Gothic *paho*, Scheftelowitz goes back to PIE **tenk-*, “to thicken.” See Kroonen, *Etymological*, 533, s. v. **panhōn-*.

⁵¹ This reading is attested in the *Widēwdād* manuscript 4643.

⁵² Mayrhofer, *Etymologisches*, vol. 1, 611–12.

⁵³ Bartholomae, *Altiranisches*, 1590–91; Mayrhofer, *Etymologisches*, vol. 2, 112–13; Cheung, *Etymological*, 288–89.

as “hunter,” linked it with YAv. *skāraiaṭ.raṭa-*, “hunting in a chariot,” in Yašt 13.108 and NP *šikār*, “hunt.”⁵⁴

Hasandoust retook the connection made by Geldner *apud* Scheftelowitz of YAv. *skairiia-* with NP *sikār*, “charcoal,” and added to it YAv. *garāmō.skarana-*, a *hápax legómenon* of unknown meaning that designates a tool to remove the fire from an oven, according to its Pahlavi commentary in V 14.7b.⁵⁵ I agree with Geldner and Hasandoust, and I consider that YAv. *skairiia-* might designate charcoal or a charcoal burner. In my opinion, it falls almost at the end of the list because producing a charcoal burner would imply a very low degree of potential impurity, for instance, if the logs were not dry enough due to being exposed to open air conditions, or eventually none.

A fire from the nearest (place)

8.96. Av. |a| dātarə. gaēṭanqm. astuuaitinqm. ašāum. yō. ātrəm. nazdištaṭ. haca. dāitīm. gātūm. auui. auua.baraiti. |b| cuuat. aṃāi. naire. miždam. aṃhaṭ. pasca. astasca. baoḍaṃhasca. vī.uruištīm. |c| āaṭ. mraot. ahurō. mazdā. yaṭa. aētaṃi. aṃhuuō. yaṭ. astuuaiṇti. |d| dasa. ātrə.saokanqm. dāitīm. gātūm. auui. auua.baraiti. |e-g| (...)

|a| “Maker of the material creatures, Righteous one, if one brings to the right place a fire from the nearest (place), |b| how much will the reward be for this man after the separation of his bones and his spirit?” |c| And Ahura Mazdā said: “as much as if in this material life |d| he brings to the right place ten firebrands. |e-g| (...).”

The Pahlavi commentators explained YAv. *nazdišta-*, “nearest (place),” with the gloss *šabestān*, “private apartment,” which means that the last fire in the list refers to the one kindled at home, i.e., a domestic hearth.

Conclusion

The Young Avestan text of V 8.81–96 lists the use of fire in the following activities: 1) cremation; 2) dying of textiles, fur, or hides; 3) boiling or curdling cream; 4) a potter’s kiln; 5) a glass kiln; 6) an oven for roasting grain; 7) a forge for smelting gold; 8) a forge for smelting silver; 9) a forge for smelting bronze or iron; 10) a forge for smelting iron or steel; 11) a baking oven; 12) an oven for firing bricks; 13) an oven for preparing buttermilk; 14) a fire used in pastoral activities (path frequented by cowherds); 15) a charcoal burner; and 16) a domestic hearth.

The industries and material culture mentioned in the Young Avestan text of V 8.81–96 are compatible with the archaeological remains of different populations of ancient Central Asia. There is no strong argument to ascribe these remains to a specific region or period, except for the mention of YAv. *tanūr(a)-* in V 8.91, which might help establish a relative

⁵⁴ Anquetil-Duperron, *Zend-Avesta*, vol. 1.2, 350; Spiegel, *Avesta*, vol. 1, 155; Darmesteter, *Le Zend-Avesta*, vol. 2, 142; Scheftelowitz, “Altiranische,” 157; Bartholomae, *Altiranisches*, 1587; Herzfeld, *Zoroaster*, 800. H. Hübschmann, *Persische*, 80 did not link NP *šikār*, “hunt,” to either of the two Young Avestan words, instead deriving it from OIr. **skāra-* < **skar-*. Szemerényi, “Iranica IV,” 512 translated YAv. *skāraiaṭ.raṭa-* as “he who speeds his chariot,” and Kellens, “Ahura Mazdā,” 144 translated the term as “qui fait rouler son char,” but neither connected it with YAv. *skairiia-*. Cheung, *Etymological*, 345–46 included YAv. *skāraiaṭ.raṭa-* under the Plr. root **skar-*, which he translated as “to pursue, to drive, to look (for the cattle),” without mentioning YAv. *skairiia-*.

⁵⁵ Hasandoust, *Farhang-e*, 1746. For V 14.7b, see Andrés-Toledo, *The Zoroastrian Law*, 312.

chronology.⁵⁶ If, by means of this word, the Young Avestan composer(s) of V 8.91 designated the *tanūr* baking oven broadly used in the Near East and Central Asia, a note on its chronology is needed.

In archaeological contexts, the *tanūr* baking oven is found across a broad geographical range, spanning from Turkey to India, such as at the site of Kenan Tepe (in southern Turkey) since the Late Chalcolithic Period (3600–3100 BCE) or the site of Kalibangan I (Rajasthan, India) since the Early Harappan Period (3500–2500 BCE).⁵⁷ This oven is also attested in southern Central Asia, for instance, in the citadel of Dzharkutan in Uzbekistan since the Yaz I culture of the Early Iron Age (1500–1000 BCE).⁵⁸ Because this type of oven is not a distinctive feature of the material culture of southern Central Asia in the first millennium BCE, its archaeological presence does not help to date the composition of V 8.91 to a narrower time frame or ascribe it to a more specific region.

The word *tanūr(a)-* is not exclusive to Young Avestan either. It is firstly attested in the second millennium BCE in Old Babylonian *tinūru(m)*, *tenūru* and was taken on by other Semitic languages of later periods, such as Old Aramaic *tnwr*, Biblical Hebrew and Arabic *tannūr*, and Jewish Aramaic *tannūrā*.⁵⁹ Although contacts between Mesopotamia and Central Asia are evidenced by material culture from the Bronze age, we should propose a likely scenario in which not only the type of oven but also its specific name might have reached southern Central Asian regions.

As the Old Babylonian word predates the first millennium BCE, when Young Avestan was spoken, the latter must have borrowed it from either Old Babylonian, a different Semitic language, or another language that took the word from any of these. If, eventually, that other language was implied in the borrowing, we have no way of knowing, so we must try with those that attest to the word. If the borrowing was from Old Babylonian, apart from the problem of the geographical distance between speakers of the two languages, the Young Avestan word should rather be **tinūr(a)-* or **tenūr(a)-*. If, on the other hand, the word was borrowed from another Semitic language, we should find a likely candidate that fits the chronological and geographical frame of Young Avestan.

It is well known that Aramaic was the main, though not the only, language of the Achaemenid administration, also in the eastern part of the empire.⁶⁰ As a Semitic language with a long tradition and geographically wide use, could Aramaic have been the source of the Young Avestan word in question? In my opinion, this is a likely possibility.

Old Aramaic *tnwr*, “baking oven,” is attested in two Aramaic inscriptions, that of Haddiyīṭ found in Tell Fekherye (Syria) and another found in Bukān (Azerbaijan), dated to the ninth and eighth centuries BCE respectively.⁶¹ Therefore, it is clear that either the Old Babylonian term entered the Old Aramaic lexicon as early as the beginning of the first millennium BCE or was simply inherited from their common Semitic origin but attested for the first time in that early period. Such a chronology is not at odds with the standard dating of Young Avestan texts in the first half of the first millennium BCE, which solves the problem of the chronological gap. However, what about the geographical gap?

Assuming, alongside Grenet, that the Young Avestan-speaking population might have been located mainly in southern Central Asia, a borrowing of YAv. *tanūr(a)-* directly from Old

⁵⁶ It is unclear whether we should interpret YAv. *tanūraṭ* as the ablative singular of an athematic *tanūr-* or of a thematic noun *tanūra-*, in which the shortening of *-āṭ* to *-aṭ* would be due to the following *haca*, as frequent in other cases of postposition with *haca*.

⁵⁷ For Kenan Tepe, see Parker, “Bread Ovens,” 615. For Kalibangan I, see Dani and Masson, *History of Civilizations*, 262–64.

⁵⁸ Lhullier et al., “The Early Iron,” 36–37.

⁵⁹ Salonen, “Die Öfen,” 101–03; Kaufman, *The Akkadian*, 108; Meissner and von Soden, *Akkadisches*, 1360; Lemaire, “Une inscription,” 18, 23; Sokoloff, *A Dictionary*, 1217.

⁶⁰ Tavernier, “Peoples,” 48–50.

⁶¹ Lemaire, “Une inscription,” 16–18, 23; Schwiderski, *Die alt- und*, 838.

Babylonian in the second millennium BCE can hardly be supported due to the geographical distance between speakers of both languages.⁶² Aramaic, on the other hand, was attested in eastern regions during the first millennium BCE, but it did not reach the distant lands of southern Central Asia until the Achaemenid rule, between the sixth and fourth centuries BCE. Apart from some inscriptions, Aramaic is attested in documents from ancient Bactria of the fourth century BCE.⁶³ If this language was the source of the Young Avestan borrowing of the word *tanūr(a)*- in southern Central Asia, that must necessarily have happened during the Achaemenid period.

Summing up, references to the material culture of Central Asia during the first millennium BCE in the examined Young Avestan texts can contribute to dating them. The Young Avestan word *tanūr(a)*-, “baking oven,” of V 8.91, likely borrowed from Aramaic in the Achaemenid period, is an excellent example of how linguistic data put in its historical and archaeological context can help disentangle some of the still unsolved problems of research on ancient Central Asia and the relative chronology of some Young Avestan texts.

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⁶² Grenet, “Zarathushtra’s Time,” 24–29. I emphasize again that the toponyms listed in V 1 belong to southern Central Asia.

⁶³ Ball et al., “The Iron Age,” 317–20; Naveh and Shaked, *The Khalili*, 2006.

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