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Old Persian

Michiel de Vaan & Alexander Lubotsky

1. Introduction

1.1. The language

Old Persian (OP) is an Old Iranian language belonging to the Indo-Iranian branch of the Indo-European language family. Speakers of Proto-Iranian may have migrated southwest around 1000 BCE from Central Asia. In 843, the Persians are mentioned in an Assyrian inscription as *Parsua*, who live in the vicinity of Lake Urmia. After a further southward migration they settled in southwestern Iran, giving their name to the region which still bears it today (OP *Pārsa*, Modern Persian *Fārs*, Greek *Persís*).

The extant OP corpus is rather small, and large parts consist of repetitions. All in all, about 6700 word tokens are attested. Together with Avestan, which continues a more easterly dialect of Iranian, OP is our main source of information for Old Iranian. The OP texts date from the sixth to the fourth century BCE and are written in a unique cuneiform script. The original texts were written or dictated by speakers of OP and did not suffer any later changes at the hands of copyists. The corpus, therefore, mainly consists of primary sources, unlike in the case of many other ancient Indo-European languages.

OP was the native language of the kings of the Achaemenid dynasty, who used it as their representative language from Darius I to Artaxerxes III (522–338). Outside Persis proper we find hardly any linguistic traces of OP in antiquity, except of course for personal names, names of deities, and official terminology. In large parts of the Persian Empire, stretching as far as India, Aramaic was used as the administrative language. It is from the Aramaic script that the later Middle Persian script developed.

In the Persian heartland itself, Elamite and Babylonian also enjoyed high status, as is clear in particular from their use beside OP in the royal inscriptions. Elamite was probably spoken by the inhabitants of Persis before they were subdued by the Iranians; the palace administrative texts

found on clay tablets in Persepolis (known as the "Fortification Tablets" and "Treasury Tablets") are written nearly exclusively in Elamite. The Babylonian variety of Akkadian was the language of the northwestern neighbors of the Persians; its use in inscriptions ties in with the ancient traditions of Babylonian and Assyrian rule in Persis.

In the inscriptions of the later kings (after Xerxes I) we find a number of orthographic and grammatical errors as compared with the older texts. It may be surmised that the spoken language had changed fundamentally, and that the phonology at least had reached a stage which we later find reflected in Middle Persian. In other words, this period witnessed the continued attempt to use OP as a written, ceremonial language, although the text composers were no longer fluent in the language.

1.2. Sources

The most important and longest inscriptions are those carved in stone from the royal palaces of Darius I and Xerxes I in Persepolis and Susa, on Darius's tomb at Naqš-i Rustam (in Persis), on a cliff near Bisutun (Behistun, in Media), and on a small monument found near the Suez Canal. Many of these texts have come down to us in three versions: Old Persian, Elamite, and Babylonian. In addition, some OP inscriptions are preserved on vases, seals, and weights, and in remnants of a clay tablet version of the rock inscriptions from Egypt.

This very incomplete attestation of OP lends more weight to the indirect transmission in other languages – even though this subject is fraught with considerable interpretative difficulties itself. The most important languages which have preserved OP words or names are Elamite, Akkadian, and Aramaic. They often enable us to restore OP forms for which the inscriptions offer us uncertain evidence, or no information at all. More OP names and terms can be found in Hebrew, Egyptian, Lydian, Lycian, Greek, Latin, and (Early) Middle Indic texts.

1.3. Writing

The first cuneiform signs were deciphered in 1802 by Georg Friedrich Grotefend; other scientists contributed toward a solution, bringing about the completed decipherment in 1851. The OP script is regarded as an independent creation on the basis of the then extant cuneiform writing systems of Mesopotamia, with the inclusion of some characteristics of the Aramaic consonant script. The OP script runs from left to right.

The invention of the script was directly motivated by the wish to create an OP version of Darius's inscription in Bisutun, next to the Elamite and Babylonian versions which had been planned from the beginning. It is disputed whether it was indeed Darius who took the first steps toward inventing an OP script, or whether it was his predecessor Cyrus who made the first plans. In any case, it is assumed that the imperfection of the script (see below) resulted from a certain haste in its inauguration: apparently, the OP version of the royal inscription could not be delayed.

The complete inventory of signs includes 36 phonetic signs, 8 logograms (word signs), 23 number signs, and one word divider (which occurs in two different forms). Three of the phonetic signs are used for the vowels *a, i, u.* The remaining signs are for consonants, and they come in three varieties: some indicate either a consonant or a consonant plus *a* (these are transliterated variously in the literature as ⟨C⟩, ⟨Ca⟩ or ⟨Cᵃ⟩; we use ⟨C⟩), some indicate a consonant plus *i,* and some signs indicate a consonant plus *u.* The latter two series are attested incompletely; that is, they were not fully developed by the inventors of the script.

Vowels:　　　　　𒀀 ⟨a⟩, 𒃫 ⟨i⟩, 𒈑 ⟨u⟩
Consonants:　　𒁀 ⟨b⟩, 𒋐 ⟨c⟩, 𒊼 ⟨ç⟩, 𒁕 ⟨d⟩, � ⟨f⟩, � ⟨g⟩, 𒄩 ⟨h⟩, 𒋡 ⟨j⟩,
　　　　　　　　　𒅗 ⟨k⟩, 𒆷 ⟨l⟩, 𒈠 ⟨m⟩, 𒈾 ⟨n⟩, 𒉿 ⟨p⟩, 𒊏 ⟨r⟩, 𒊭 ⟨s⟩, 𒅖 ⟨š⟩,
　　　　　　　　　𒋫 ⟨t⟩, 𒌋 ⟨θ⟩, 𒉿 ⟨v⟩, 𒐀 ⟨x⟩, 𒅀 ⟨y⟩, 𒍝 ⟨z⟩
Consonant + *i:*　� ⟨di⟩, 𒑁 ⟨ji⟩, 𒈨 ⟨mi⟩, 𒃾 ⟨vi⟩
Consonant + *u:*　𒁺 ⟨du⟩, 𒄖 ⟨gu⟩, 𒆪 ⟨ku⟩, 𒈬 ⟨mu⟩, 𒉡 ⟨nu⟩, 𒊒 ⟨ru⟩, 𒌅 ⟨tu⟩

The defective script and the ambiguity of the C-signs render a one-to-one conversion from script to language impossible. In order to get from a transliteration of the signs (here given between ⟨ ⟩) to a transcription of the OP words, one must interpret the ambiguous signs and sign combinations. This interpretation is guided by our knowledge of other old Indo-Iranian languages, the evidence of Middle and Modern Persian, and the writing conventions of Old Persian. A given sequence of OP signs can sometimes allow for several different phonetic interpretations, but one may also encounter two different sign sequences used for the same OP phonetic sequence (Table 1).

2. Phonology

2.1. Vowels

Short:　/a/　　/i/　　/u/　　　　Long:　/ā/　　?/ī/　　?/ū/

Table 1. Old Persian orthography

(Combination of) sign(s)	OP phonetic sequence	Notes
⟨C⟩	C or C*a*	
⟨C-a⟩	C*ā*	
⟨C-C⟩	C*a*C*(a)* or C*an*C*(a)*	[1]
⟨a-⟩	#*a*- or #*ā*-	
⟨C-i⟩ or ⟨Ci-i⟩	C*i*	[2] [3]
⟨C-u⟩ or ⟨Cu-u⟩	C*u*	[2] [3]
⟨C-i⟩	C*i* or C*ai*	[4]
⟨C-u⟩	C*u* or C*au*	[4]
⟨-i-y⟩, ⟨-u-v⟩	-*i*, -*u*	
⟨-C-i-y⟩, ⟨-C-u-v⟩	-C*ai#*, -C*au#*	
⟨a-r-⟩	#*ṛ*- or #*ar*- or #*ār*-	
⟨C-r-C⟩	-C*ṛ*C- or -C*ar*C-	[5]
⟨h-C⟩	h*a*C or h*ạ*C	[6]
⟨u-(v-)⟩	*u*- or h*u*-	

Notes:

1. The nasal consonants *m* and *n* are hardly ever written before another consonant. If on external grounds we must assume a nasal, the transcription uses a superscript *n* or *m*: ⟨a-h-t-a⟩ /āha[n]tā/ 'they were'. In word-final position after a vowel *m* is written, but *n* is not: ⟨a-b-r-m⟩ /abaram/ 'I carried' vs. ⟨a-b-r⟩ /abara[n]/ 'they carried'.
2. The sequences /Ci/ and /Cu/ are written as ⟨Ci-i⟩ and ⟨Cu-u⟩ where separate signs ⟨Ci⟩ and ⟨Cu⟩ exist. If such signs are not available, we find ⟨C-i⟩ and ⟨C-u⟩.
3. It is uncertain whether OP had a phonemic length difference between *i* and *ī*, *u* and *ū*. Regardless, the script does not distinguish length in the case of ⟨i⟩ and ⟨u⟩.
4. We can distinguish /Ci/ and /Cai/, /Cu/ and /Cau/ only with those consonants for which signs ⟨Ci⟩ or ⟨Cu⟩ exist, for instance, ⟨mi-i⟩ *mi* and ⟨m-i⟩ *mai*, whereas the verbal ending ⟨t-i-y⟩ may stand for both -*tiy* and -*taiy*.
5. OP must have had a phonemic difference between Proto-Iranian (PIr.) **ar* and **ṛ* (vocalic *r*), but the script does not show it. Vocalic *r* was probably pronounced [r] or [ər] but is transcribed here as ⟨ṛ⟩. Since it is in complementary distribution with consonantal *r*, *ṛ* is an allophone of /r/.
6. The sign ⟨h⟩ is often used for expected ⟨h-i⟩. In such cases, it is transcribed as *hạ*: gen. sg. ⟨C-h-y-a⟩ -C*ahạyā* instead of ⟨C-h-i-y-a⟩ -C*ahiyā* from **-ahya,* ⟨h-z-a-n-m⟩ *hạzānam* 'tongue'. Probably, **hi* had phonetically become [hə]. Only in ⟨h-i-du-u-⟩ *Hi[n]du*- 'India' do we find the sequence ⟨h-i-⟩ /hi-/.

2.2. Consonants

The Old Persian consonants are shown in Table 2.

The sign ⟨l⟩ only occurs in a few foreign names. It is uncertain whether a phoneme /ž/ existed, as it is not graphically distinguished from /j/. The pronunciation of OP *ç* is equally uncertain; it may have been a sibilant, since it developed into *s* in Middle Persian.

Table 2. Old Persian consonants

Labial	p	b	f				m	v		
Dental	t	d	θ	s	z	ç	n		r	(l)
Palatal	c	j		š	ž?			y		
Velar	k	g	x							
Laryngeal			h							

When two consonants collide (whence one might expect a geminate) a single consonant is written: *ucāram-maiy > ucāramaiy.*

2.3. Phonotactics

Short *-a* which stood in word-final position in Proto-Iranian is reflected as OP long *-ā:* ⟨m-n-a⟩ *manā* 'of me', ⟨u-t-a⟩ *utā* 'and'. If an enclitic word is added, however, the old short vowel is retained: ⟨m-n-c-a⟩ *mana-cā* 'and of me', ⟨u-t-m-i-y⟩ *uta-maiy* 'and my'.

Word-final *-i* and *-u* are written ⟨-i-y⟩ and ⟨-u-v⟩, which are generally interpreted phonetically as *-iy* and *-uv.* If an enclitic follows we only find the vowel: ⟨p-t-i-y⟩ *patiy* 'against' but ⟨p-t-i-m-i-y⟩ *pati-maiy* 'to me'.

Words which ended in *-h* (from earlier *-s*) in Proto-Iranian end in short *-a* in OP: ⟨mi-i-θ⟩ *miθa* 'false' < *miθah.* But if the enclitics *-cā* 'and' or *-ciy* 'even' follow, the result is *-š-cā:* ⟨m-n-š-c-a⟩ *manaš-cā* 'and mind', ⟨k-š-c-i-y⟩ *kaš-ciy* 'whoever'.

If the Proto-Iranian word ended in *-d*, either this undergoes complete assimilation to *c* before the same enclitics (e.g. ⟨y-c-i-y⟩ *yaciy* 'whichever' < *yac cid < *yad cid), or we find the sequence *-šc-* which was generalized from cases with final *-h* (e.g. ⟨a-n-i-y-š-c-i-y⟩ *aniyaš-ciy* 'something else').

Initial *h-* becomes *š* after prefixes ending with *-i* or *-u*, for instance *ni-* + *had-* > *nišad-* in *nišādaya-* 'to set down'. This sandhi form is retained in the imperfect of the same verb: ⟨n-i-y-š-a-d-y-m⟩ *niyašādayam* from *ni-a-hādayam.*

The preverb ⟨h-m-⟩ *ham-* 'together' yields *ha^n-* before *t, k,* and *g*: ⟨h-m-t-x-š-i-y⟩ *ham-ataxšaiy* 'I exerted myself' but ⟨h-t-x-š-t-i-y⟩ *ha^{n}taxšataiy* 'he collaborates'.

The sequence *-iya-* is twice found contracted to *-ī-.* Apart from ⟨n-i-y-š-a-d-y-m⟩ *niyašādayam* (inscr. of Darius) we once find ⟨n-i-š-a-d-y-m⟩ *nīšādayam* (inscr. of Xerxes). The word ⟨m-r-i-k-a⟩ *marīkā* 'young man' (voc.sg.) has developed via *mariyaka* from PIr. *maryaka.*

The sequence *dru-* contains an anaptyctic vowel *u*: ⟨du-u-ru-u-v-a⟩ *duruvā* 'firm' (cf. Skt. *dhruvá-* 'id.'), ⟨a-du-u-ru-u-ji-i-y⟩ *adurujiya* 'he lied'.

3. Morphology

Due to the limited size of the OP corpus, we have only a very imperfect idea of the nominal and – especially – the verbal forms of the language.

3.1. Nouns and adjectives

Nouns can be of masculine, feminine, or neuter gender. The stem classes comprise vowel stems (Table 3A) and consonant stems (Table 3B). Since the vowel stems were the main productive category of nouns, we have a more complete picture of their paradigm than of that of the consonant stems.

Of the eight inherited cases, OP has lost the dative; its function was taken over by the genitive. The abl.pl. *-aibiš* contains what was originally the instrumental ending. In the locative we often find a variant with the postposition *-ā* 'in'. Due to phonetic merger, some endings, such as *-ā* and *-āyā*, can have many different functions.

Besides singular and plural number, there is a dual, mainly used for natural pairs and with *uba-* 'both': *yāumainiš ami utā dastaibiyā utā pādaibiyā* 'I am skilled with my hands and with my feet'.

The comparative and superlative take the inherited suffixes *-iyah-* and *-išta-*, *-tara-* and *-tama-* respectively: *haya tauviyā* 'the stronger one', *Auramazdā . . . haya maθišta bagānām* 'Ahuramazdā, the greatest of the gods'; *apataram* (adv.) 'outside', *fratamā anušiyā āhaⁿtā* 'they were the foremost followers'.

3.2. Pronouns

a. The personal pronouns (Table 4) of the 1st and 2nd person have stressed and enclitic forms. No personal pronoun of the 2pl. is attested. The anaphoric pronoun in *-š-* or *-d-* ('he, she, it') only occurs in enclitic forms.

b. The demonstrative of near deixis 'this (here)' combines the three stems *i-*, *ima-* and *a-*, which form a suppletive paradigm (Table 5A). Equally suppletive is the formation of the pronoun of far deixis *hauv, ava-* 'that (over there)' (Table 5B). Another demonstrative pronoun is *aita-* 'this (just mentioned)'.

c. The relative pronoun (Table 6) has the stem *haya-* in the nominative singular masculine and feminine alongside suppletive *taya-* in all other case forms.

Table 3. Old Persian nominal stems

		Stem				
		A. Vowel stems				
		-a-	*-ā-*	*-i-*	*-u-*	*-au-*
sg.	nom.m.f.	*-a*	*-ā*	*-iš (-iy?)*	*-uš*	*-āuš*
	acc.	*-am*	*-ām*	*-im*	*-um*	*-āvam, -āum*
	nom.acc.n.	*-am*			*-uv*	
	ins.	*-ā*	*-āyā*		*-uvā*	
	abl.	*-ā*	*-āyā*	*-iyā*	*-auv*	
	gen.	*-ahạyā*	*-āyā*	*-aiš, -iyā*	*-auš*	*-auš*
	loc.	*-aiy, -ay-ā*	*-āy-ā*	*-iy-ā*	*-auv, -av-ā*	*-auv-ā*
	voc.	*-ā*				
du.	nom.	*-ā*				
	gen.	*-āyā*				
	ins.	*-aibiyā*				
pl.	nom.	*-ā, -āha*	*-ā*	*-iya*		*-āva*
	acc.	*-ā*	*-ā*	*-iš*		*-āva*
	nom.acc.n.	*-ā*				
	abl.	*-aibiš*				
	gen.	*-ānām*	*-ānām*		*-unām*	*-unām*
	loc.	*-aišuv-ā*	*-āuv-ā*			*-ušuv-ā*
		B. Consonant stems				
		-ant-	*-r-*	*-n-*	*-h-*	*-p-, -t-, -d-, -θ-*
sg.	nom.	*-ā*	*-ā*	*-ā*	*-ā*	Ø [1]
	acc.	*-antam*	*-āram*	*-ānam*	*-āham*	*-am*
	nom.acc.n.				*-a*	
	ins.			*-nā*	*-ahā*	
	gen.	*-antahạyā*	*-(r)a*			*-a*
	loc.			*-niy*	*-ahạy-ā*	*-i, -iy-ā*
pl.	ins.				*-abiš*	*-biš*

Note 1: The only attestation is *napā* 'grandson' from the stem *napāt-*.

Table 4. Old Persian personal pronouns

	1sg.	1pl.	2sg.	3sg.	3pl.
nom.	*adam*	*vayam*	*tuvam*		
acc.	*mām, -mā*		*θuvām*	*-šim, -dim*	*-šiš, -diš*
gen.-dat.	*manā, -maiy*	*amāxam*	*-taiy*	*-šaiy*	*-šām*
abl.	*-ma*			*-šim?*	

Table 5. Old Persian demonstrative pronouns

		A. *i-/ima-/a-* 'this'			B. *hauv, ava-* 'that'		
		masc.	fem.	neut.	masc.	fem.	neut.
sg.	nom.	*iyam*	*iyam*	*ima*	*hauv(am)*	*hauv*	*ava(š-ciy)*
	acc.	*imam*	*imām*	*ima*	*avam*	*avām*	*ava(š-ciy)*
	ins.-abl.	*anā*			*avanā*		*avanā*
	gen.				*avahạyā*		
	loc.		*ahạyāyā*				
pl.	nom.	*imaiy*	*imā*		*avaiy*	*[a]vā*	
	acc.	*imaiy*	*imā*		*avaiy*		
	ins.			*imaibiš*			
	gen.	*imaišām*			*avaišām*		

Table 6. Old Persian relative pronouns

		m.	f.	n.
sg.	nom.	*haya*	*hayā*	*taya*
	acc.	*tayam*	*tayām*	*taya*
	ins.-abl.			*tayanā*
pl.	nom.	*tayaiy*	*tayā*	*tayā*
	acc.	*tayaiy*	*tayā*	*tayā*
	gen.		*tayaišām*	
du.	nom.	*tayā*		

d. The interrogative pronoun PIr. **ka-* 'who, what?' is not attested in-dependently but occurs in the indefinite pronoun: *kaš-ciy* 'whoever' (masc.), *ciš-ciy* 'whatever' (neut.).

e. The pronominal adjectives ⟨a-n-i-y-⟩ *aniya-* 'other', ⟨h-r-u-v-⟩ *ha-ruva-* 'all, whole', and ⟨h-m-⟩ *hama-* 'the same' show partly nominal, partly pronominal case endings.

f. The reflexive pronoun PIr. **hvai-* and the possessive adjective **hva-* 'own' are not attested as such, but they can be inferred on the basis of OP *uvaipašiya-* 'own' (< **hvai-patya-*), *uvāmaršiyu-* 'having his own death' = 'having died a natural death'.

3.3. Numerals

Since the cardinal numbers are written with specific signs (𐏑 𐏒 𐏓 𐏔 𐏕 ... 𐏕 = 1, 2, 3, 4, 5 ... 10), there are only a few numerals of which we know the

phonetic form: OP *aiva-* 'one, only', *uba-* 'both'; *fratama-* 'first, foremost', ⟨du-u-vi-i-t-i-y-⟩ *duvitiya-* 'second', ⟨ç-i-t-i-y-⟩ *çitiya-* 'third', *navama-* 'ninth', *hakaram* 'once'. In addition, the indirect transmission in Elamite allows for the reconstruction of the ordinal **daθama-* 'tenth' and the fractions **çišuva-* 'one third', **caçušuva-* 'one fourth', **pancauva-* 'one fifth', **aštauva-* 'one eighth', and **navauva-* 'one ninth'.

3.4. Prepositions and postpositions

Prepositions are always written as separate words. With genitive-dative: *anuv* 'along', *nipadiy* 'on the track of', *pasā* 'after'. With accusative: *antar* 'within, among', *abiy* 'to, against', *upā* 'under, with', *upariy* 'above, against', *tara* 'through', *paišiyā* 'before', *patiy* 'during', *patiš* 'against', *para* 'beyond', *pariy* 'about', *pasā* 'after'. With instrumental-ablative: *anuv* 'along', *patiy* 'in', *yātā (ā)* 'as far as', *hacā* 'from', *hadā* 'with'.

   Most of the postpositions occur as enclitics, forming a single word together with their head: enclitic locative + *ā* 'in', accusative, instrumental, or locative + *patiy* 'on, in', accusative + *parā* 'along'; genitive + *rādiy* 'on account of'.

3.5. Verbs

Like most older Indo-European languages, OP distinguishes between active and middle verbal endings. The middle expresses actions in the interest of the subject itself, such as reflexive and passive events: *avaθā xšaçam agạrbāyatā* 'thus he took power', *Fravartiš . . . ānayatā abiy mām* 'Fraortes . . . was brought to me'. The moods which are found are the indicative, imperfect, injunctive, subjunctive, optative, and imperative. Of the three aspectual stems inherited from PIE, viz. present, aorist, and perfect, only the present remains in OP. There are three numbers, but the dual is attested only once, in ⟨a-ji-i-v-t-m⟩ *ajivatam* 'the two of us lived'.

   Table 7 provides a survey of the verbal endings. We can distinguish four sets of endings: primary endings (in the present indicative), secondary endings (in the imperfect, injunctive, and optative), subjunctive endings (nearly the same as the primary endings, except for the 1sg. *-niy, -naiy*), and imperative endings.

   The variation in the first syllable of many endings depends on the form of the verbal stem, which can be athematic (e.g. with 3sg. primary *-tiy*, subj. *-atiy*) or thematic (e.g. with 3sg. primary *-atiy*, subj. *-ātiy*). The same goes for the variants in the 2sg.imperative (athematic *-diy, -šuvā,*

Table 7. Old Persian verb endings

		Primary	Secondary	Subjunctive	Imperative
		A. Active			
sg.	1	*-(ā)miy*	*-am*	*-ăniy*	
	2	*-(a)hạy*	*-a*	*-ăhạy*	*-ā, -diy*
	3	*-(a)tiy*	*-a, -Ø, -š*	*-ătiy*	*-(a)tuv*
du.	3		*-tam*		
pl.	1	*-(ā)mahạy*	*-(ā)mā*		
	2			*-tā*	
	3	*-aⁿtiy*		*-aⁿ, -ha, -ša*	*-aⁿtuv*
		B. Middle			
sg.	1	*-aiy*	*-(a)iy*	*-ānaiy*	
	2	*-(a)haiy*	*-šā*	*-āhaiy*	*-auvā, -šuvā*
	3	*-(a)taiy*	*-(a)tā*	*-ātaiy*	*-(a)tām*
pl.	3		*-aⁿtā*		

thematic *-ā, -auvā*), and for the different secondary endings in the 3sg. and 3pl. active (athematic sg. *-Ø, -š*, pl. *-aⁿ*; thematic sg. *-a*, pl. *-aⁿ, -ha, -ša*).

The imperfect describes actions and events in the past and is formed by prefixing the augment *a-* before the verbal stem, e.g. active *akunauš* 'he made', *akuⁿmā* 'we made', middle *akunavaⁿtā* 'they made'. Present forms with secondary endings but without the augment are called injunctives. In OP they are only attested as prohibitives in connection with *mā* 'not': *mā θadaya* 'may it not appear!'.

The subjunctive expresses a general or future possibility, a goal (after *mātaya* 'so that not'), and is used for the 1st person hortative: *haya Auramazdām yadātaiy yānam avahạyā ahatiy* 'who worships Ahuramazdā will have a blessing', *mātaya draugam maniyāhạy* 'so that you do not take it for a lie', *šiyāta ahaniy jiva* 'may I be happy while I live'.

The optative expresses a wish, a command, or a prohibition. It is characterized by the suffixes *-ai-* (with thematic verbs) or *-yā-* (athematic), e.g.: 3sg.act. *vināθayaiš* 'would damage', *biyā* 'may be', *mā ājamiyā* 'may it not come!', 2sg.mid. *yadaišā* 'may you worship'. When the present optative is combined with an augment it indicates a repeated action in the past: *avājaniyā* (< *ava-a-janyāt) 'he used to kill', *akunavayantā* 'they used to do'.

A passive present is formed by adding the suffix *-ya-* to the verbal root: ⟨a-b-r-i-y⟩ *ab(ạ)riya* 'was brought', ⟨θ-h-y-a-m-h-y⟩ *θahạyāmahạy* 'we were called'. The endings are in great part active endings. The agent can

be referred to by the preposition *hacā* 'from', the postposition *rādiy* 'on account of', or an enclitic personal pronoun in the genitive-dative.

The aorist, which in its original PIE function expressed perfective aspect, is attested in five relic singular forms. There is no functional distinction (any more) between the aorist and the imperfect: 3sg.ind.act. *adā* 'he put', 1sg.mid. *adạršiy* 'I took possession'; imv. 2sg. *didiy* 'look!', *pādiy* 'protect!', 3sg. *pātuv* 'he must protect'.

The only remnant of the PIE reduplicated perfect is *caxriyā* 'he would have made', a 3sg. optative of the stem *ca-xr-* from the root *kar-* 'to make'. To express the resultative perfect, OP uses a periphrastic combination of the passive verbal adjective in *-ta-* with the copula 'to be'. Usually, however, the 3sg. verb form 'is' is omitted in the texts: *ava . . . naiy nipištam* 'that . . . is not written', *stūnā aθa^{n}gainiya tayā idā kạrtā* 'the stone pillars which were made here'; with the imperfect: *xšaçam taya . . . parābạrtam āha* 'the empire . . . which was taken away'. When the agent is explicitly mentioned with transitive verbs (de facto: with *kar-*), it takes the genitive-dative: *ima taya manā kạrtam* 'this is what I have done'.

Of the verb *ah-/h-/as-* 'to be' we find the following forms: pres.act. 1sg. *amiy*, 3sg. *astiy*, 1pl. *amahạy*, 3pl. *ha^{n}tiy*; impf. 1sg. *āham*, 3sg. *āha*, 3pl. *āha*, mid. 3pl. *āha^{n}tā*; subj.act. 1sg. *ahaniy*, 2sg. *āhạy*, 3sg. *ahatiy*.

Five infinitives are attested, each of them with the suffix *-tanaiy* and the full grade of the root: *ka^{n}tanaiy* 'to dig', *cartanaiy* 'to make', *bartanaiy* 'to carry', *nipaištanaiy* 'to write down', and *θa^{n}stanaiy* 'to say'. They function as infinitives of goal (after the verbs 'to order', 'to be able', 'to dare'), and they take the form of a dative singular of an action noun in *-tan-*.

The present active participle is formed with the suffix *-nt-* (*tunuvant-* 'powerful'), the present middle participle with *-mna-* (*xšayamna-* 'ruling', *jiyamna-* 'ending'). The perfective passive participle in *-ta-* is usually formed from the zero grade of the root: *kạrta-* 'made', *nipišta-* 'written'. Its form cannot always be predicted on the basis of the present stem: *basta-* 'bound' from *band-* 'to bind'. A few forms have the suffix *-ata-:* *ha^{n}gmata-* 'having come together', *θakata-* 'completed'.

4. Syntax

4.1. Place names and personal names are usually introduced into a narrative by means of "naming phrases." These involve preposed nominal phrases which consist of the name, the word *nāma* (masc.) or *nāmā* (fem.) 'name', and an identifying noun. The main clause often refers back to the naming phrase using *ava-* 'that one': *Kāpišakāniš nāmā didā avadā hamaranam akunava* 'a fortress named Kāpišakāniš – there they fought

a battle', *Dādạršiš nāma Arminiya . . . avam adam frāišayam Arminam* 'an Armenian named Dādạršiš . . . him I sent to Armenia.'

4.2. Relative pronouns usually agree with their antecedent in number and gender: *kāram hamiçiyam haya manā naiy gaubataiy avam jatā* 'the disloyal army, which does not call itself mine: destroy it' = 'destroy the disloyal army which does not call itself mine', *Dārayavaum haya manā pitā avam xšāyaθiyam akunauš* 'he made Darius, (who was) my father, king'. As the examples show, the postposed main clause often uses anaphoric *ava-*. Case attraction may lead to assimilation of the relative clause to the case form of the antecedent, as in *kāra haya manā avam kāram tayam hamiçiyam* (instead of **haya *hamiçiya) aja* 'my army has destroyed the disloyal army'. Conversely, the antecedent can adopt the case of the relative: *martiya* (instead of **martiyam) haya draujana astiy avam . . . pạrsā* 'a man who is deceitful, punish him!'.

Sometimes the identifying nominal phrase is introduced by a relative pronoun. Such constructions may be considered nominal relative clauses without explicit antecedent: *hacā paruviyata hayā amāxam taumā xšāyaθiyā āha* 'of old which (is) our family were kings' = 'our family has been a royal lineage from of old'.

4.3. Most adverbs either are inherited from PIE or continue specific case forms of nouns. In addition, a verbal adjective with the prefixes *u-* 'good' or *duš-* 'bad', if formed from the same root as the main verb of the clause, has a function very similar to that of an adverb: *avam ubrtam abaram* 'him I have treated well-treated' = 'him I have treated well'.

4.4. Direct speech can be introduced by the conjunction *taya* (lit. 'that'): *yadipatiy maniyāhạiy taya ciyakaram āha avā dahạyāva* 'if furthermore you will think, "How many were those countries?"' Alternatively, the direct speech may follow the governing verb directly, without conjunction: *taya amaniyaiy kunavāniy avamaiy visam ucāram āha* 'of which I thought "I will do it," all that was successful for me' (where *taya* is a relative pronoun).

4.5. Clauses or phrases can be coordinated asyndetically, by enclitic *-cā* 'and', or by the conjunction *utā*. For instance: *iyam Gaumāta haya maguš adurujiya avaθā aθaⁿha* 'this is the Magian Gaumāta; he lied (and) spoke thus'; *duvitiyāmcā çitāmcā θardam* 'in the 2nd and 3rd year', *vašnā Auramazdāhā manacā* 'through the will of Ahuramazdā and me'; *vašnā Auramazdāhā utamaiy* 'id.', *manā Auramazdā upastām baratuv . . . utā imām dahạyāum Auramazdā pātuv* 'may Ahuramazdā bear me aid . . . and may A. protect this country'.

Disjunction is indicated by suffixed *-vā: yadiy imām dipim vaināhạy imaivā patikarā* 'when you see this inscription or these images', *xšapavā raucapativā* 'either by night or by day'.

4.6. Conjunctions

The main conjunctions for introducing subordinate clauses are:

taya 'that': *naiy azdā abava taya Bạrdiya avajata* 'it did not become known that Smerdis had been killed'; *draugadiš hamiçiyā akunauš taya imaiy kāram adurujiyaša* 'the Lie made them disloyal, so that they lied to the people'.

yaθā 'as': *yaθā paruvamciy avaθā adam akunavam āyadanā* 'as (they had been) before, thus I made the sanctuaries'.

yaθā 'when': *yaθā Mādam parārsa . . . avadā hamaranam akunauš hadā Mādaibiš* 'when he arrived in Media . . . he fought a battle there with the Medians'.

pasāva yaθā 'after': *ima taya adam akunavam pasāva yaθā xšāyaθiya abavam* 'this is what I did after I became king'.

yadā 'where': *utā aⁿtar aitā dahạyāva āha yadātaya paruvam daivā ayadiyaⁿ* 'and among these countries there was (one) where previously bad gods were worshiped'.

yaniy 'where(in)': *ima stānam . . . yaniy dipim naiy nipištām akunauš* 'this niche . . . in which he had not written an inscription'.

yātā 'during, until': *dādạršiš citā mām amānaya arminiyaiy yātā adam arsam mādam* 'Dādạršiš waited for me in Armenia until I reached Media'.

yāvā 'as long as': *yadiy . . . naiy-diš vikanāhạy utā-taiy yāvā taumā ahatiy paribarāhạdiš* 'if you . . . do not destroy them and, as long as you have the power, look after them'.

Commands can be expressed by a coordinate clause which is not introduced by a conjunction: *niyaštāyam hauv Arxa utā martiyā . . . Bābirauv uzmayāpatiy akạriyatā* 'I ordered (that) this Arxa and the men . . . would be impaled in Babylon'.

5. Linguistic Variation

5.1. Medisms

Part of the OP vocabulary has divergent phonological characteristics which betray its origin in a different dialect. These characteristics are

Table 8. Old Persian vs. Median consonantism

PIr.	OP	"Median"	OP examples
*t^s	θ	s	*aθa^{n}gam* vs. *asā* 'stone'
*d^z	d	z	*adam* 'I' vs. *vazạrka* 'great'
*t^sw	s	sp	*uvasam* vs. *uvaspā* 'with good horses'
*d^zw	z	zb	*hạzānam* 'tongue' vs. *patiyazbayam* 'I proclaimed'
*θr	ç	θr	*xšaçam* 'kingdom' vs. *Xšaθrita* (pseudonym of the Mede Fraortes)

usually regarded as Median – Median was spoken in the northwest of present-day Iran – but Median characteristics can also be found in Avestan and other Iranian languages. Among the consonants the differences shown in Table 8 are involved.

5.2. Late Old Persian

In the inscriptions of the successors of Xerxes I, the language differs considerably in all its elements from the texts of the preceding period. It is generally assumed that OP had ceased to be a living language and was only preserved as a written language which the authors did not fully command. This stage may be referred to as Late Old Persian. Some of the more striking characteristics of this phase are:

- voicing of *t* to *d*: *Ardaxcašca* instead of *Artaxšaçā*;
- loss of word-final consonants and probably also vowels, as is demonstrated by the many anomalous nominal endings, such as acc.sg. *imām bumām* for *imām bumīm*, gen.sg. *puça* instead of *puçahạya*;
- restriction of the relative pronoun to the forms *haya* and *taya*;
- loss of the imperfect, as shown by the many anomalous variants of the 1sg.: *akunavām, akunā, akunām, akunai, akuvanašāša*, all for earlier *akunavam*.

Other deviations from Darius's norm may be due to decreasing familiarity with the original spelling conventions:

- final /-a/ written as ⟨-a⟩: ⟨p-u-ç-a⟩ *puça*;
- /Ciy/ written as ⟨C-y-⟩: ⟨n-y-k-⟩ for *niyāka-*;
- defective spelling after ⟨Ci⟩: ⟨mi-t-r⟩ *Mitra* instead of ⟨mi-i-t-r⟩.

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