

2.2 The phonology of Old Persian

The Old Persian orthography does not express all the phonemic features of the language, as evidenced by transcriptions into other languages of the time and by comparison with Avestan and Middle and Modern Persian.

2.2.1 The vowels \bar{a} , \bar{i} , \bar{u}

In Old Persian, vowel length is expressed explicitly only in the case of non-initial \bar{a} < Ca-a >; in initial position, <a> spells *a-* and \bar{a} -. In final position, the distribution of *-a* and \bar{a} is historically based; OPers. *-a* < Ir. *-aC* (*-ah*, *-at*, *-an*); OPers. \bar{a} < Ir. *-a*, \bar{a} , $\bar{a}C$. The quantity of final \bar{i} and \bar{u} cannot be determined (see section 1.1.6).

The Iranian diphthongs *ai* and *au* were probably monophthongised to \bar{e} and \bar{o} sometime during the Achaemenid period. Thus, the Akkadian, Elamite, and Greek transcriptions show little if any trace of diphthongs (e.g. *haumavarga-*, Elam. <u-mu-mar-ka>, Akk. <ú-mu-ur-ga-?>, Greek *amúrgioi*, a tribe of Sakas/Scythians).

2.2.2 Consonants

The OPers. consonant system is set out in Table 3.2.3.

TABLE 3.2.3: OLD PERSIAN CONSONANTS

	Stops/Affric.	Fricat.	Contin.	Nasals	Sibilants
Labials	<i>p b</i>	<i>f</i>	<i>v(u)</i>	<i>m</i>	
Dentals	<i>t d</i>	<i>θ</i>	<i>r, l</i>	<i>n</i>	<i>s, ʃ z</i>
Palatals	<i>č ĵ</i>	<i>y</i>	<i>(i)</i>		<i>š (ž?)</i>
Velars	<i>k g</i>	<i>x</i>			
Pharyngeal	<i>h</i>				

2.2.2.1 Notes on the consonants

On ς < Ir. *θr*, *čr*, see section 1.4.

Old Persian may have had a phoneme \check{z} , judging from *nijāyam* [nižāyam?] < **niš-āyam* ‘I went out’, though it may be simpler to assign [ž] to the phoneme /j/ and assume that it was pronounced [dž] as written. Alternatively, OPers. <j> was actually pronounced [ž], and there may have been no phoneme /j/.

Elamite, Akkadian, and other transcriptions attest to etymological, but unwritten sounds, e.g. preconsonantic *n*: < ba-da-ka- > for *ba^hdaka* ‘bondsman’, cf. MPers. *bandag*; *ciça^htaxma-*, proper name, Elam. <zi-iš-šá-an-tak-ma>, Akk. <ši-it-ra-an-tah-ma> (for Median *ciθrantaxma*); sequence ^h*u*: ^h*uwaipašiya* ‘self’, Av. *x^haēpa^hθiia-*, MPers. *xwēbaš*. In some cases, the various transcriptions are inconclusive, e.g. *a^huramazdā*, Av. *ahura-mazdā-* (YH.), Elam. <u-ra-maš-da>, Akk. <ú-ra-ma-az-da, a-hu-ru-ma-az-da-?>, Greek *ōromasdēs*, MPers. *Ohrmazd*, *Hormezd*. Before *m*, *h* could be written or omitted (e.g. *a^hmiy* and *ahmiy* ‘I am’). Note also morphophonological variation such as pres. *ha^h-taxša-* ‘be diligent’, imperf. *ham-a-taxša-*.

In final position, the only allowed (written) consonants (other than *y* and *v*) are *m* and *š*, perhaps also *s*. The spread of \bar{s} as the ending of the 3s and 3p in *akunau-š* ‘he

did/made' (Av. *akər'nao-t*) and similar forms, however, indicates that the corresponding forms of *a*-stems in fact had no consonantal ending (see Allegri and Panaino 1995).

There appear to be the same kind of restrictions on initial and internal consonants as in Avestan, and the same kind of groups are found (e.g. *xšn*: initial and intervocalic). There are no examples of two-consonant groups in final position, and forms such as Av. *āfš* 'water' nom. sing. may have been transferred to the *ī*-declension (*āpš[š]-šim* (?) 'the water . . . him', beside athematic inst.-abl. plur. *abiš* < *ap-biš*).

2.2.3 Late Old Persian

The inscriptions from Artaxerxes II (404–359) on are written in what is clearly a post-Old Persian/proto-Middle-Persian stage of the language (see Schmitt 1999: 59–118; Skjærvø 1999b [2002]: 158–61). Those from Artaxerxes I and Darius II are less clear; they are written in a late-Old Persian form, as seen from the thematic forms such as *dārayavaušahayā* and some grammatical constructions, but they are too short and formulaic to tell us much.

Among the (orthographic-)phonetic peculiarities of the post-Old Persian stage note (see Schmitt 1999): <Cy> for <Ciy>: *nayāka*-, *abayapara*; use of *y* or *iy* to write long *ē*: *paradaydām* for *pardēd* (?) (MPers. *pālēz*); contraction of *iya* > *ī* in *martihayā* (A³?); *st* for *št* in *nistāya*; loss of final consonants and their preceding vowels in endings, as evidenced by the indiscriminate use of short and long vowels and omission of final *m*.

2.3 The morphophonology of Avestan and Old Persian

There are several kinds of synchronic alternations in Old Iranian: those inherited from earlier stages of the languages; those due to historical developments; those due to analogy; and, for Old Persian, those due to the existence of Median beside Old Persian forms.

2.3.1 Vowels

Most of the alternations in the vowels derive from the conditioned variants of *a* and *ā* before *h* and nasals and *ī*/*i* and *u*/*u*. For details, see de Vaan 2003, Chapter 6.

2.3.1.1 Centralising of *a*, *ā* > *ə* (*ē*)

ah > *ə* (*ē*). Ir. *h* caused centralising of a preceding *a*: OAv. *amēhmaidī* 'we have thought'; *vacē* 'speech' (but mostly *-ō* reintroduced from YAv.?).

In Young Avestan, the *a* remained in initial and medial position (reintroduced into the OAv. text: *ahmaṭ* 'us'), and final *-ah* became *-ō* (occasionally *ē*: *nəmē* 'homage'); in sandhi, the *a* reappears: *-a-s*^o.

aN > *əN*. Short *a* was centralised before nasal, in more positions in Old than in Young Avestan; – initial: OAv. *ēnə'tī* 'no going', *ēmauuant-* 'powerful' (YAv., *a'niti*, *amauuant-*); in final: OYAv. *-ām*, *-ān*.

Final *-an-h* > Ir. *-aṇh*: In Old Avestan, this became *-ēṇg*, notably in the thematic acc. plur. *daēuu-ēṇg* 'old gods' and the *n*-stem gen. sing. *x^s-ēṇg* 'sun' (< *huu-aṇh*). In Young Avestan, it probably became nasalised *-ē̃* which developed variously to *-ē* and *-q*: acc. pl. *yazat-ē* 'gods', *aēsm-q* 'firewood', gen. sing. *bar^ssm-q* 'barsom'; final *-uē* in turn