CHAPTER THREE

OLD IRANIAN

Prods Oktor Skjærvø

1 INTRODUCTION *

1.1 The Old Iranian languages

The Old Iranian languages known from texts are Old and Young Avestan and Old Persian. Comparative study of these three languages permits the reconstruction of proto-Iranian as a branch of the Indo-Iranian languages, an eastern branch of the Indo-European languages that may have been spoken in the area south and south-east of the Aral sea in the third millennium BCE, splitting into Iranian and Indo-Aryan some time before 2000 BCE. Geographical names contained in the Young Avesta confirm this location and also show that, by the time of the Achaemenids, the Avestan speakers had moved farther south as far as the Helmand valley in modern south Afghanistan (Skjærvø 1995: 163–66). See also section 1.4.

The Avestan texts contain no historical allusions, so they cannot be dated on such grounds, but Old Avestan (see below) is closely similar in grammar and vocabulary to the oldest Indic language as seen in the oldest parts of the Rigveda and should therefore probably be dated to about the same time. Similarly, Young Avestan must have been quite similar to Old Persian, which suggests it was spoken in the first half of the first millennium BCE.

Iranian tribes calling themselves Parswa and Mada are found in (north)western Iran from the ninth century BCE onward (see Waters 1999), but the extant Old Persian texts, written in a cuneiform script, are from the Achaemenid period (ca. 558–330 BCE; the texts date from between 522 and ca. 350 BCE). Thus, while the language of the Avesta probably belonged to tribes from north-eastern Iran, both history and linguistics indicate that Old Persian was the language spoken in southern (south-western) Iran.

Other Iranian languages, beside Old Persian and Avestan, were spoken in the first millennium before our era, about two of which we have some information:

Median was spoken in Western and Central Iran by the Medes, who ruled Western Iran ca. 700-ca. 558 BCE, and presumably used their language in official proclamations. Numerous non-Perside words in the Old Persian inscriptions are from a dialect that shared important phonological isoglosses with Avestan, rather than Old Persian, and are assumed to be from Median. Sometimes, both the Median and Old Persian forms of words are found.

Scythian (Saka) dialects were spoken by tribes in Central Asia.

^{*} Marking reconstructed older forms with an asterisk (*) has been dispensed with, as they will be easily recognisable as such by their orthography and by '<' (coming from) and non-reconstructed forms will be marked throughout (OAv., etc.). The asterisk has therefore been reserved for restored (and uncertain) forms. Note the convention '-S-' for the alternating -h-I-s-.

1.1.1 The Old and Young Avesta, Old and Young Avestan

The Avestan languages are known from the *Avesta*, the sacred book of the Zoroastrians (Mazdeans, Mazdayasnians), a collection of mostly ritual texts assumed to have been composed in the second and first millennia BCE. The texts were orally transmitted until committed to writing some time in the late Sasanian period (ca. 224–651 CE; see Skjærvø 1995, 2006; Kellens 1998). The extant Avestan texts represent only a part of the *Avesta* known at that time.

Avestan falls into two chronologically distinct layers: Old Avestan (OAv.) and Young Avestan (YAv.). Young Avestan represents a more developed form of the language than Old Avestan, especially in phonology, but also in morphology and syntax. Thus, Young Avestan is typologically closer to Old Persian (OPers.), and the simplest assumption is that these common developments had taken place before the Old Persian-speaking tribes migrated out of Central Asia at about the turn of the millennium (Skjærvø 2003–2004). Old Avestan and Young Avestan are apparently not simply different stages of the same language, as there are phonological and morphological isoglosses separating them (ibid.; de Vaan 2003: 5–10; Panaino 2007).

1.1.2 The oral background of the Avestan text

The extant text of the Avesta does not represent a text composed in writing in ancient times. Rather, it is a compilation of mainly ritual and a few didactic texts that had been transmitted orally for centuries and even millennia before being written down some time after ca. 600 CE, though not all, necessarily, at the same time. During this time, the texts had been, presumably, judging from what we know of oral poetry, first been composed and recomposed in memory and performance; then, at some time committed to memory so as not to be recomposed or changed in any way ('crystallised'). This happened, at different times, to both the Old Avestan and the Young Avestan corpora. Nevertheless, over time, the priests by necessity interfered with the text, both intentionally and unintentionally, as it was passed down through the generations and as the Iranians moved into new areas and maybe, even, changed dialects. What the situation was in the late sixth century, therefore, when it was decided to write the tradition down, we can only speculate about. It seems reasonable, however, to assume that the two principal texts, the liturgies of the yasna and the videvdad sade ceremonies, were well known by the priests among whom the alphabet was devised and so represent 'official' texts. The same may be the case of the principal texts recited at festivals to individual deities (the *vašts*) and some others, but it is not reasonable to think that all the texts were present at the religious centres; some were probably remembered only in some places by some priests, who may then have been called in to perform what they remembered to the newly educated scribes.

The oral background of the Avestan texts suffices to explain the grammatical inconsistencies and (from our point of view) erroneous forms and uses. The ideas, common throughout the twentieth century, that the 'errors' were due to the 'authors' and 'late' composition, was based on the notion that oral literature could be evaluated in this respect like written literature (see Skjærvø 2005–2006, 2006b: 112–15). Note also that the suggestion that Old Avestan might in fact be later than Young Avestan, adducing the comparison with the use of Latin in Europe long after it was no longer a spoken language, is faulty, as Latin was learned from existing manuscripts and grammars.

The most important fact to keep in mind is that the priests who performed the texts no longer spoke the languages and that their understanding of them was that of the secondary traditions as recorded later in the Pahlavi texts.

As a result, on the one hand, the Old Avestan texts contain many elements that are clearly borrowed from or influenced by Young Avestan and, on the other hand, Young Avestan texts contain both elements that are imitations of Old Avestan ('pseudo-Old Avestan') and later features introduced by the scribes (including from local spoken languages). This makes it a challenge to determine which of the sound changes we observe in our extant manuscripts already belonged to the 'original' two languages and which ones were introduced during the oral and written transmission of the texts. It renders even more problematic attempts to identify additional linguistic stages between Old and Young Avestan (see Tremblay 2006).

Nevertheless, although it is not likely that the texts in every detail reflect a genuine spoken language, research has shown that, in spite of all the inconsistencies of the extant text and contrary to the common opinion of pre-Second World War European scholarship, it reflects a real linguistic system (Morgenstierne 1942).

1.1.3 The Avestan alphabet

Some time during the Sasanian period a phonetic alphabet was invented, which was used to write down the known Avestan texts to ensure their correct recitation, crucial to the success of the rituals in which they were used. The alphabet was based on the Middle Persian (Pahlavi) script, of which various stages and styles are known. It is usually assumed that the Avestan script was primarily based upon the common Pahlavi script as known from the extant manuscripts, with the addition of forms taken from the Psalter script (see, e.g. Hoffmann 1988). We have no guarantee, however, that the script seen in the extant manuscripts is identical with that of the first manuscripts. It is just as likely that the shape of the Avestan letters developed together with those of the Pahlavi letters, for instance.

What the principles were that governed the phonetic analysis of the spoken text we do not know for certain, but they were probably the same that applied to the learning of the text. Thus, it is possible that the priests simply assigned a sign to each of the sounds they had been taught to utter during recitation, e.g.: 'to speak this word you say the sound X' > 'to write this word you use the sign X'.

The oldest manuscripts of the *Avesta* are from the thirteenth-fourteenth centuries (*Vispered* ms. K7a: 1278?; *Yasna* mss. J2 and K5: 1323; *Videvdad* mss. K1: 1324, L4: 1323; *Xorde Avesta* ms. Jm4: 1352), and, from the evidence of the manuscript colophons and mistakes common to all the manuscripts of a text, all go back to single manuscripts for each part of the *Avesta* that were in existence around 1000 CE.

Most manuscripts of the *Avesta* are much later, however, and, for some parts of the text, the manuscript tradition does not go back beyond the sixteenth-eighteenth centuries. This means that text criticism in the Classical sense can only restore the readings of manuscripts no older than 1000 CE, but mostly later.

A serious desideratum is a study of individual manuscripts in order to determine the scope of scribal variations in paleography and orthography. Until this has been done, no definitive descriptive orthography, hence also phonology and morphology, of Avestan can be written. Current and earlier descriptions are all, to a large extent, based upon the orthography of K. F. Geldner's critical edition, which is the one most often referred to for

grammatical purposes. It is not a completely 'critical' edition, however, since the relative importance of the manuscripts was not clear to him during the publication (see his *Prolegomena*). The edition can therefore not (as is now widely recognized) be used directly as the basis for grammatical analysis.

This situation also renders theories about dialect features in Young Avestan doubtful, such as that of Schindler (1982), who interpreted the different treatments of final *-anh* (< IIr. *-ans*) in terms of dialects, and Hoffmann, who ascribed features such as $hu > x^v$ instead of *huu*- (Hoffmann and Forssmann 1996, §6.2) and $V\beta V > V\mu V$ to an Arachotian dialect (ibid., §63cg).

1.1.4 Stages of Avestan

We may represent the history of the Avestan texts after the proto-Iranian stage schematically as follows (cf. Hoffmann 1970, Skjærvø 1994, Kellens 1998, de Vaan 2002: 11–15; Tremblay 2006: 276–77):

- Mid-second millennium BCE: Composition of ritual texts constantly recomposed and linguistically updated in performance, the last direct evidence of which are the extant Old Avestan texts.
- End of second / early first millennium: Composition of texts, constantly linguistically updated, etc. which resulted in the Young Avestan texts.
- Late Old Avestan period: Crystallisation of a set of Old Avestan texts as unchangeable, but, probably, with the introduction of editorial changes then and/or later. These were the 'five $G\bar{a}\partial\bar{a}$ s of Zarathustra', as they are called in the Young Avesta, plus the Yasna Haptaŋhā'ti, the sacrifice in seven sections.
- First half of first millennium(?): Crystallisation of the Young Avestan text (containing the *Old Avesta*) as unchangeable.
- Up to ca. 500 CE: Transmission of the entire immutable text with introduction of linguistic novelties and changes by the oral transmitters.
- 600+: Creation of a phonetically unambiguous alphabet, in which the entire known corpus was written down (to the extent it was deemed worthy?).
- Ca. 600 to thirteenth century: Written transmission of the text (copying of manuscripts), still probably influenced by the oral tradition, and oppression of the religion and its texts by the Arab conquerors, all of which contributed to deterioration of the text. Ca. 1000 CE there was only single manuscripts in existence of each part of the extant Avesta.

Another problem is the 'canonisation' of the corpus, that is, the process of selecting which texts were to be part of the sacred corpus. The concept, however, is based on the canonisation process of the Bible and may not have the same relevance for the Avestan texts.

1.1.5 Old Persian

We do not know when or how the Old Persian-speaking tribes came from Central Asia to south-western Iran, where they are found in the historical period from the ninth century onward. The extant Old Persian texts all date from the sixth to the fourth century BCE. They are written in a cuneiform script, probably invented under Darius for the purpose of recording his deeds. The Old Persian language as we know it from the inscriptions (sixth-fourth centuries) was already about to change to 'proto-Middle Persian', the predecessor of Middle Persian as known from the first century BCE on, as we can see from the late inscriptions, in which 'wrong' orthography, especially endings, are common (Sk jærvø 1999: 158–61). It is therefore probable that Old Persian had already been spoken throughout most of the first half of the first millennium BCE and had been more or less contemporary with Young Avestan.

1.1.6 The Old Persian script

The Old Persian script is a cuneiform script, but differs from all the neighboring script of the time in having a small set of signs.

Opinions vary about who invented and first used this script, but strong arguments have been adduced that Darius invented it for his Behistun (Bisotun) inscription (520 BCE). On the one hand, it has been shown that the Old Persian version of his ancestor Cyrus's inscription is a later addition to the Akkadian and Elamite versions, and those attributed to his grand- and great-grandfathers Arsames and Ariaramnes are probably modern, less likely antique, forgeries (Schmitt 2007: 25–31). On the other hand, in §70 of the Behistun inscription, Darius appears to say that he was the first to write 'in Aryan'.

Although the orthography is relatively consistent, there is no particular reason to think that an orthographic standard had been established (e.g. that of the Behistun inscription) that was supposed to be followed both under Darius and after him and against which modern scholars are entitled to judge diverging spellings to be errors. This is all the more true for late inscriptions, which were obviously written by scribes who no longer spoke 'the King's Old Persian' (see Sk jærvø 1999b: 158–61).

1.1.7 Old Iranian grammars

As the extant Avestan text cannot be assumed to represent actually spoken languages, any description of the two Avestan languages based upon this text will also not be of actually spoken languages. Let us sum up:

- the 'crystallized' text probably represents a language no longer spoken by the current generation;
- the oral transmission took place over a large territory, and we do not know from which local traditions the extant texts have come to us, which may all have left their imprints on the text in the form of dialect features;
- the oral transmission went on for centuries, and we do not know to what extent phonological and grammatical features may reflect the languages of the transmitters, rather than the original languages;
- the oral transmitters, at some stage, grew increasingly unfamiliar with the (whole) 'correct' text and would substitute passages they knew in places they did not belong, upsetting the grammar and the context (and metre);
- inferior oral traditions influenced the written tradition and, probably, vice versa. The most serious consequence of this situation is, of course, that no complete phonemic analysis of the two Avestan languages is possible, since it is a concept presupposing the possibility of capturing an actual linguistic state.

It must always be kept in mind that 'Avestan' always means 'the Avestan text as presented by the manuscripts'. One consequence is that 'Old Avestan' does not

necessarily imply that a form is thought to have been spoken by the original speakers; it can also be a form modified by Young Avestan speakers. For instance, it is not likely that Old Avestan had OAv. $ha^i\partial ii\bar{\sigma}m$ beside $ha^i\partial\bar{\iota}m = YAv$. 'true, real'; it is, in fact, more likely that the 'original' form, that spoken by the composers, was * $ha\partial jam$.

As for Old Persian, two features need to be kept in mind:

- 1. the lateness of the language of the inscriptions in the history of Old Persian warns against forcing phonetic and grammatical forms too much into an Old Iranian mould; instead one should consider Old Persian as suspended, as it were, between the Old Iranian and the Middle Iranian language types;
- 2. the mixed-language type prevents us from grasping the genuine South-West Iranian phonological system.

1.2 The phonology of Indo-Iranian

The traditional reconstruction of late Indo-European phonemes, after the laryngeals H_2 and H_3 had colored *e* to *a* and *o* (etc.), is set out in Table 3.1.1. A number of changes distinguish Indo-Iranian from this reconstruction.

TABLE 3.1.1: LATE INDO-EUROPEAN PHONEMES

Vowe	ls and dipl	nthong	<u></u> s				Sylla	bic liquids, nasals
i	e ē ei ēi eu ēu	a ā ai āi au ā		ō ōi ī ōu	и	(ə)	r l	ņ m
Cons	onants							
Labia	als	р	b	$b^{\prime\prime}$		й	т	
Denta	als	l	d	ď		lr	п	s (z)
Palata	als	k	ĝ	\hat{g}''		i		
Velar	s	k	g	g"				
Labic	ovelars	kų	g ^ı	$g^{\mu h}$				
Lary	ngeals	$\hat{H_1}$	\tilde{H}_2	H_1				

1.2.1 Consonants

1.2.1.1 IIr. Velars

The IE. labio-velars $k^{\mu} g^{\mu} g^{\mu} h$ merged with the velars into one series, $k g g^{h}$.

1.2.1.2 IIr. Affricates

The IE. palatals $\hat{k} g g^h$ became the palatal affricates $\check{c} j j^h$ [tś dź dź^h].

The velars $k g g^h$ produced the allophones $k^{\nu} g^{\nu} g^{\nu h}$ before *i*, *i*, *e*, which developed into (post-)alveolar affricates *č j j*^h [tš dž dž^h]; when IE. *e*, *a*, *o* merged into IIr. *a*, the conditioned variants became phonemes.

1.2.1.3 IIr. šž

IIr. \check{s} and \check{z} developed from various sources:

- IE. s(z) became $\check{s}(\check{z})$ after *i* and *u*, *r* and *r* (<*r* and *l* and their syllabic variants), *k* and $g^{(h)}$, and *p* and $b^{(h)}$ (the 'ru(p)ki' rule); this rule also worked after an intervening *n*, e.g. acc. plur. -*inš*, -*unš*, -*rnš* (Av. -*īš*, -*ūš*, -*∂r*^d*š*);
- The resulting š became voiced ž before voiced stops, but also before vowels, notably in
 prefixes and before enclitic particles (Ir. duž-, niž-; yūž-am).
- The IIr. palatal affricates $\dot{c} \, \dot{j} \, \dot{j}^h$ [tś, dź, dź^h] became š and $\ddot{z}^{(h)}$ before dentals and, probably, after labials.
- š and ž developed in the IE. 'thorn' groups, 'kp, kp', etc. > IIr. ćš, jź, kš, g^hž > Ir. š, ž, xš, gž (all Ind. kş).

1.2.1.4 IIr. The laryngeals

The IE. laryngeal H_2 aspirated the (voiceless) stops before vowels $(pH_2 > p^h, tH_2 > t^h, kH_2 > k^h)$.

Between vowels, laryngeals left a hiatus (or some kind of glide) and, between consonants, it is thought, a *schwa*-like central vowel ρ . They were lost after vowel before consonant with lengthening of the vowel (e.g. $eH > \bar{e}$).

1.2.1.5 IIr. Liquids and nasals

r and l (and syllabic l and r) merged, though l was preserved sporadically in dialects, both Iranian and Indic.

The syllabic nasals n and n merged with a and nH and nH before consonants with \bar{a} .

1.2.2 Vowels

o in open syllable became \bar{a} (Brugmann's Law). IIr. forms with *a* instead of \bar{a} are often caused by a laryngeal following the syllable-closing consonant, e.g. *sauu-aiia-* 'revitalize' $< \dot{c}auHaia$ - vs. *srāuu-aiia-* 'recite, sing' $< \dot{c}rāuaia$ -.

 $\tilde{e} \, \tilde{a} \, \tilde{o}$ and the corresponding diphthongs $\tilde{e}i$, etc. merged into \tilde{a} and $\tilde{a}i$, etc.

The IE. qualitative ablaut $e \sim o$ was lost by this merger and only partly replaced by the quantitative ablaut $a \sim \bar{a}$. See also de Vaan 2003, §§30.2–3.

1.2.3 Proto-Indo-Iranian phoneme inventory

In overview, the reconstructed phoneme inventory of proto-Indo-Iranian was as set out in Table 3.1.2:

1.2.4 Ablaut

A distinctive feature of IE. inflection was the qualitative and quantitative ablaut, correlated with stress patterns. While in Indo-Iranian the qualitative ablaut was lost after the merger of $\bar{a} \ \tilde{e} \ \tilde{o}$, the quantitative ablaut was retained albeit modified by these various developments, and ensuing analogies. The basic vocalic ablaut grades were thus as in Table 3.1.3, but other forms are found, as well, especially in connection with lost laryngeals (examples below).

Vowels and d	iphthongs	Syllabic liqui	ids			
i Ə aā aiāi auā		ŗ ī				
Consonants Labials	р.	b	b^{h}	ų	т	
Dentals Palatals	t ć [tś]	<i>d</i> j [dź]	d^{h}	r (l)	n	s (z)
Palato-Alveo Velars Laryngeal		j[dž] g	ј ћ g"	i		š (ž)

TABLE 3.1.2: PROTO-INDO-IRANIAN PHONEMES

TABLE 3.1.3: PROTO-INDO-IRANIAN ABLAUT

long:	ā	āi	āи	ār	ān	ām
full:	а	ai	аи	ar	an	am
zero:		<u>i</u> li	<u>i</u> l u	r / <u>r</u>	n I a	m I a

1.3 The phonology of Proto-Iranian

Proto-Iranian shows the following typical changes separating it from proto-Indic:

- IIr. interconsonantal *a* was lost in Iranian in all positions (with sporadic development, helped by analogy, of anaptyctic vowels in initial consonant groups; see Beekes 1981, Ravnæs 1981, Mayrhofer 1981, Pirart 1988);
- IIr. *rH* became Ir. *ar* in most contexts, but sometimes *r* (Av. *ər*) (acc. to Cantera 2001, in labial context when unstressed);
- The voiced and aspirated voiced consonants merged: $b, b^h > b; j, j^h > j$, etc;
- The new aspirated stops $p^h t^h k^h$ and unaspirated stops p t k before consonants were spirantised to f 0 x (e.g. kt > xt);
- A sibilant developed in the clusters dental + dental: t-t, d-d, $d-dh > t^{s}t$, $d^{z}d$;
- Dentals were lost before s/z, ś/ź, š/ž, including in the sequences T₁^{S/S}T₂ > S/ŠT₂: t^st, d^zd
 st, zd, and ćt, jd [tśt, dźd] > št, žd. This rule also affected voiced aspirated clusters that resulted from 'Bartholomae's Law' (see section 2.3.2.1b);
- Geminates were simplified, including those resulting from assimilation (s-s > s, z-z > z, s-ć > s, jz > z, d-n > n, p-b > b, etc.);
- Most significantly, also for later vocalic modifications and changes, s > h except before stops and *n* (see section 2.1.2.2).

1.4 Early Iranian dialects

Proto-Iranian split into at least four distinct proto-Iranian dialect groups, characterised, among other things, by the developments of the palatal affricates \dot{c} , \dot{j} and the groups \dot{c}'' , \dot{j}'' (see Schmitt 1989: 27–28).

The two dialect groups unattested by texts are:

- Old Northwest Iranian, represented by the later Alanic dialects and modern Ossetic, in which initial p > f and internal ri > l;
- Old Northeast Iranian, represented by Middle Iranian Khotanese and modern Wakhi, in which ć^u and j^u were assimilated to s and z.

The two attested groups are:

- Old Central Iranian, represented by most of the remaining dialects, including Avestan and Median, in which \dot{c} and \dot{j} merged with Ir. s and z, respectively, but \dot{c}^{u} and \dot{j}^{u} became sp and zb;
- Old South-West (Perside) Iranian, represented in historical times by the dialects of Pārsa/Fārs, including Old Persian, in which \dot{c} and \dot{j} merged with Ir. θ and d, but \dot{c}^u and \dot{j}^u with s and z. Other Perside developments: Ir. $\theta > \check{s}$ before \check{i} and n (Av. $ha^i\theta iia$ -, OPers. $ha\check{s}iya$ 'real, true'; Av. $ara\theta ni$ -, OPers. $ara\check{s}ni$ 'ell');
- Ir. Or and cr > a sibilant <ç> of uncertain nature that later merged with s (Av. puOra-, OPers. puça-, MPers. pus 'son'; Av. sraiia- 'to lean', OPers. niçāraya- 'give back').

There are numerous 'Median' forms in OPers., e.g. *asan*- 'stone' vs. OPers. $a0d^{*}ga$ 'stone', *aspa*- 'horse' vs. OPers. *asa*-. In some instances, the Elamite transcriptions reflect Perside forms not found in the inscriptions (see, e.g. Hinz 1973; cf. section 3.6.3.3). As a rule, the Elamite transcriptions of Old Persian names show the Perside form, while the Akkadian ones show the Median forms, e.g. *ciça*["]*taxma*-, but Elam. *ti-iš-šá-an-tam-ma* = **tiçantama*, with $\check{c} - \varsigma > t$ - ς (cf. Greek *Tissaphernēs* < OPers. **čiça-farnah*-).

At this stage, the consonant phonemes of the four groups were presumably identical except for the palatal sibilants in proto-North-East Iranian, see Table 3.1.4.

Palato-Alveolars \check{c} \check{j} \check{s} \check{z} Velars k g x PharyngGlott. h	Velars	k g x	ų т r(l) n i	s z [śźNE-Ir.] šž
---	--------	-------	--------------------	-------------------------

TABLE 3.1.4: EARLY IRANIAN CONSONANT PHONEMES

1.5 Writing systems

1.5.1 The Avestan script

The Avestan alphabet contains ca. 55 letters (Table 3.1.5), some being, apperently, only scribal and/or local and chronological variants. Each letter is usually written separately, although ligatures like those of Pahlavi are also found. There are fairly distinct differences in ductus between older and later manuscripts and from scribe to scribe, but no paleographic study has yet been made to investigate chronological and geographical trends. See, for instance, the three different handwritings in manuscript L4 in the British Library, London, the original manuscript from 1323 and the fairly recent additions (L4a, b) currently available online at *avesta.ana.usal.es/cataloges.htm*.

~	~~	۴	لمع	L	r	د	9	ಗು	ĿЦ	L	Ļ	٤	દુ	なった
a	ā	å (å)	å (å)	i	ĩ	u	ū	e	ē	0	õ	э	õ	ą (ą̄), *ə (ə̄)
e		7	فلا			3					ዲ		fe	
Р		b	β			f					m		mฺ (hm)	,
ø		و	٩	`۲		S		Ø	16		١		Æ	
t		d	δ	δ2		θ		<u>t</u>	1 2		n		ņ	
٩		63	Ŀ	٩		ş		۴	Ľ		3		ş	ન્ડ
k		g	g2	γ		x		x ^v	ŕ		- ŋ		ŋ ^v	Ŋ
ષ		L									٢٦			
c		j									۲ د ń			
17		Ċ		Ş		ш	•	>	ዩ					
y		Y	й	V V		uu		1	h					
								•						
33		5	Ċ	ಲು		50		Ä٦						
S		Z	š	ž		ś		ş						

TABLE 3.1.5: THE AVESTAN ALPHABET

Words are separated by a dot (with or without spaces) and sentences often by more elaborate punctuation, e.g. multicoloured floral designs. Individual words and components of compounds are not distinguished. In Western academia, the dot is kept in compounds, but usually replaced by a space between words. The common practice of asterisking words reinterpreted as compounds (or compounds reinterpreted as individual words) is based on unfamiliarity with the script.

Not infrequently, especially in the *Old Avesta*, punctuation is used, incorrectly from our point of view, to delimit morphemes (e.g. plural endings in *b*-), in which case sandhi forms are applied (e.g. *-at.biš* beside *-adbiš*), and even to split up consonants that the priests pronounced as double, e.g. *aësəm.mahiiā* for *aës³mahiiā* 'of Wrath' (the Pahlavi translation has the correct interpretation) and *hām.miiāsa-* for *hām.miiāsa-* (beside *hām°miiāsa-*) 'harness' < *ham-jasa-*.

For notes on individual letters, see section 2.1.

1.5.2 The Old Persian script

The Old Persian script has 3 vowel signs < a, i, u>, 33 consonant signs <C(V)>, 8 ideograms/logograms, numerals, and a word separator (Table 3.1.6). There are minor differences in ductus throughout the corpus.

The consonant signs are consonantic or syllabic with inherent -a, -i, -u. There are only four <Ci> signs and seven <Cu> signs; the <Ca> signs are used for the missing <Ci> and <Cu> signs. Consonants not followed by vowels are written with <Ca> signs.

Short and long \tilde{t} , \tilde{u} are spelled <i, u>, preceded by <Ci> and <Cu> signs when they

Ca iii	<0>	Ci 11	<i></i>	Cu ∢îī	<u></u>	Ca ⊀	<na></na>	Ci	Cu #	<nu></nu>
T	<ă>					ត	<pa></pa>			
٢Ĭ	<ba></ba>					37	<ra></ra>		-≪	<ru></ru>
١٣	<ca></ca>					4	<sa></sa>			
Ŧ	<ça>					₹	<ša>			
ñ	<da></da>	ЗĬ	<di></di>	∢ĭ	<du></du>	=ॉर्ग	<18>		۲ĩ۴	<tu></tu>
ĭ≪	<fa></fa>					KI	<0a>			
<11	<ga></ga>			¢	<gu></gu>	-1-	<va></va>	†i <vi></vi>		
¢(<ha></ha>					¶¶	<xa></xa>			
-K	<ja></ja>	. ∉	<ji></ji>			₩.€	<y#></y#>			
F	<ka></ka>			۲	<ku></ku>	H H	<za></za>			
휘	<la></la>					1 11	<:>			
-11	<ma></ma>	ĭ¢	<mi></mi>	**	<mu></mu>					
≈K	<am<sub>1> = Auramazdā</am<sub>			₩ <dh<sub>1> = dahąyāuš</dh<sub>				:B G> = b	aga	
=iT	$\langle AM_2 \rangle = Auramazdā$		4		l ₂ > = daha	-	₩ <	:BU> = t	ūmiš	
=≣K	<amha></amha>	= Aura	ımazdāha	54		- > = xšāya	-			

TABLE 3.1.6: THE OLD PERSIAN SYLLABARY

exist: <Ca-i, Ci-i> and <Ca-u, Cu-u> (exceptionally <Ci> = Ci). Frequently, we find <-u-va> for \tilde{u} (<pa-ru-u->, <pa-ru-u-va-> = $par\tilde{u}$ - 'much'), <i-ya> beside <i> before consonant in *niyasādayam* <na-i-ya-ša°> 'I set down' beside *nīsādayam* <na-i-ša°>, presumably reflecting the development of *-iya-* > *-i*-.

Final \tilde{t} , -ai and - \tilde{u} , -au were written <-i-ya> and <-u-va>, but the final -v or -y could be omitted when followed by an enclitic word (hau-maiy, beside hauv-maiy 'he ... me', tayai-šaiy 'who ... his', etc.). Beside -ava- and -aya-, we also find -auva (bava- and bauva- 'become') and -aiya (dāraya- and dāraiya- 'hold').

After h, an i was usually not written (transcribed as ha-).

The syllabic r (transcribed as *a*r) was also spelled <ra>, e.g. vazarka- 'big' > Mod. Pers. bozorg, vs. martiya- > Mod. Pers. mard.

Logograms can take case endings (e.g. $\langle X\check{S}$ -ha-ya-a $\rangle = x\check{s}\bar{a}ya\partial iya$ -hayā 'the king's', $\langle DH_1$ -na-a-ma $\rangle = dahay\bar{u}$ -nām 'of the lands', $\langle BU$ -ya-a $\rangle = b\bar{u}m\check{t}$ -yā 'of the earth'). See also section 2.2.

2 PHONOLOGY

2.1 The phonology of Avestan

The Avestan languages share some important features that give them their characteristic look, different from Old Indic and Old Persian: raising, lowering, rounding, and nasalisation of vowels, anaptyxis; spirants, palatalisation and labialisation of consonants, nasalisation of intervocalic h.

Thus, Avestan phonology is very complex. The exact inventory of phonemes is unclear, as the number of phonetic realisations and morphophonological variants is very large, though all part of an internally consistent phonological system, in many respects similar to those of later East Iranian languages (Morgenstierne 1942).

In the following, the phonologies of Old and Young Avestan are described as they had evolved through many layers of historical and redactory processes down to the end of the Sasanian period, when at least some of the texts were first written down, and beyond, during the written transmission. They are therefore the artifacts of a learned tradition, and can not be assumed to reflect the actual phonological systems of the languages when they were spoken.

In view of the uncertainties regarding the shaping of the Avestan phonology, I have refrained from providing a reconstruction of their phonemic systems. For a recent attempt, see de Vaan 2003: 615–29. Instead, Tables 3.2.1–2 contain the basic vowels and consonants, some of which are conditioned variants, differing in Old and Young Avestan.

2.1.1 Vowel systems

The letters $a \ \ddot{a}$, $\partial \ \bar{o}$, $o \ \bar{o}$, $e \ \bar{e}$, and nasalised q, reflect the development and partial phonemisation of allophonic variants mainly from the basic low pair $a \ \bar{a}$, the diphthongs ai, $\bar{a}i$ and au, $\bar{a}u$, and r. See Table 3.2.1.

TABLE 3.2.1: AVESTAN VOWELS

	Front	Central	Back, rounded	Nasal
High Mid Low Syllabic r	iī eē	ə	น นิ 0 อิ สิ	i <iia, ī=""> ų <uuą> į <īa ą, ā <ā r <1a></uuą></iia,>
Diphthongs:	aē ao, aō	ดิเ่ Ōi ดิน อิน		

2.1.1.1 Notes on the vowels

For details on the Avestan vowels, see now de Vaan 2003.

All Avestan vowels except e and \bar{e} are found in initial position, but o and \bar{o} only in YAv. $o\bar{i}m$, $\bar{o}iium$, etc. < aiuam 'one' and in a few words where $\bar{o}i$ - is from ui- (e.g. $\bar{o}ifra$ - for vifra-?).

All vowels are also found in anaptyxis and epenthesis, particularly ∂ , *i*, and *u*, and may form secondary diphthongs.

2.1.1.2 Vocalic length

Old Avestan probably maintained the length opposition longest in the high row, at least in part: $-i\check{s}$, $-u\check{s}$ vs. $-i\check{s}$, $-\check{u}\check{s}$ (see de Vaan 2003: §§9, 13).

In Young Avestan (and to some extent in OAv.), the distribution of short and long $il\bar{i}$ and $ul\bar{u}$ may be conditioned by phonetic context (not etymology); it may also be a matter of scribal preferences and local practice at different times. There is therefore no distinction between proto-Iranian short and long *i* and *u* and Avestan contraction products, -im, $-\bar{u}m$, and $-\underline{i}am$ all > $-iml-\bar{u}m$ and -um, $-\bar{u}m$, and $-u\mu am$ all > $-uml-\bar{u}m$ (ibid., §§8, 12).

The exchange of vowel length, $a|\bar{a}, i|\bar{i}, u|\bar{u}$ is common and may, at least in some instances, be caused by shifts of accent (ibid., §30.1.1).

In final position, length opposition is neutralised in all three Old Iranian languages. Old Avestan final vowels are long; Young Avestan final vowels in monosyllables are long; in polysyllabic words, we have -a, -i, -u, -e and $-\partial$ (epenthetic), but $-\bar{o}$, -a, and $-\bar{\partial}$ (= OAv. $-\bar{o}\eta g$) and, rarely, $-\bar{u}$ ($\leq -uq\bar{\partial}$).

Short ϑ (in OAv. also written $\bar{\vartheta}$) is an allophone of *a* before nasals (*hanti* 'they are') and before *uu* followed by *ilī*. Long $\bar{\vartheta}$ is a phoneme in Young Avestan, since it is a distinctive ending: $-\bar{\vartheta}$ with allomorph -q.

It is not known whether the length in a was originally phonemic. The short < a> is used in only one known manuscript to spell *a* before η (see Hoffmann and Narten 1989: 31; de Vaan 2003, § 18). Here *a* will be used for a.

2.1.1.3 Diphthongs

ai. The diphthongs $a\bar{e}$ and $\bar{o}i$ are partly in complementary distribution. YAv. $\bar{o}i$ is preferred before consonant clusters, except *s* or *š* plus one consonant (Fortson 1996), whereas OAv. $\bar{o}i$ is apparently also found before *s* and $\bar{s} < ss$ and $\bar{s}\bar{s}$: $d\bar{o}i\bar{s}\bar{i}$ 'you show' $< daic\cdot\bar{s}i$ (strongly doubted by de Vaan 2003: 352 n. 436). For Ir. $ai\underline{i}$, OAv. has $\bar{o}ii(\bar{o}i.)$ and aii; YAv. aii (e.g. OAv. $x^{v}\bar{a}\partial r\bar{o}i.\bar{a}$, YAv. $x^{v}\bar{a}\partial raiia$ 'in comfort'). Final ai in monosyllables became OAv. $\bar{o}i$, YAv. $-\bar{e}$ (but $y\bar{o}i$); in polysyllables, it became OAv. $\bar{o}i$ and $-i\bar{e}$ (= $-\bar{e}$ with preceding palatalisation), YAv. -ie. Before enclitics, both OAv. and YAv. have $-a\bar{e}^{\circ}$.

au-. OAv. prefers $\bar{a}u$, YAv. *ao* (many mss. $a\bar{o}$), but also $\bar{a}u$ in imitation(?) of OAv. (de Vaan 2003, § 16.1). In final position, *-au* became **-ao*, YAv. *-uuo* (also OAv.) but *-ao*° before enclitic (e.g. YAv. *drao-ca* 'and in tree'; see Skjærvø, 2005a). The apparent diphthongs *au*, *ou*, and *aou* are the result of labialisation of *a* (see section 2.3.2.4a).

The IIr. and Av. diphthongs $\bar{a}i$, $\bar{a}u$ are indistinguishable in the script from Av. \bar{a} + epenthetic *i*, *u*.

2.1.1.4 Hiatus

In Old Avestan, long vowels and diphthongs resulting from laryngeal loss remain disyllabic: \bar{a} , $a' < a'\bar{a}$, $a'\bar{o}$; -qm < -a'am (e.g. plur. gen., opt. 1s); $a\bar{e}$, $\bar{o}i < a'\bar{i}$; $\bar{a}i < a'ai$.

2.1.1.5 Ilr. r

The IIr. syllabic r shows up in the later Ir. languages as r preceded by a vowel that varies according to the phonetic contexts, e.g. *ir*, *ur* (de Vaan 2003, §24). Avestan usually has ∂r followed by an anaptyctic ∂ , but $r\bar{\partial}$ after t (OAv. $\bar{a}tr\bar{\partial}m$), and sporadically elsewhere. Young Avestan has *arš* for OAv. $\partial r^3 \bar{s}$.

2.1.1.6 Nasalised vowels

All vowels could at some stage be nasalised. Thus, q is a realisation of an and $\bar{a}n$ before spirants: $zq\theta\beta a$ -, and sibilants: $vqs < v\bar{a}ns$ -t, and of long \bar{a} before n or m. nqma, n $\bar{a}ma$.

The two signs for nasalised q may originally have denoted nasalised \ddot{a} vs. nasalised \ddot{a} ; thus final $-\bar{a} < -a\eta h$ may originally have alternated with $-\bar{a}$ rather than with -q.

In Old Avestan, the spellings iiq(n) and uuq before *m* may represent nasalised *i*: $friiq(n)mah\bar{i}$ we make (you) friendly'[?] < fri-*n*-mahi; and *u*: *huuqmahi*° we press' < *hu*-*n*-mahi. Similarly, the nasalised \bar{z} is written $\bar{z}q$ in OAv. $m\bar{z}q$ (Y. 28.4). Nasalised *i* and *q* are written (or became) \bar{i} and \bar{u} before sibilant. In Old and Young Avestan, nasalised *r* is written $\bar{z}q$ before \bar{s} and \bar{z} .

2.1.2 Consonant systems

Old and Young Avestan, judging from the orthography, had the consonants set out in Table 3.2.2, which include phonemes and allophones with differing distribution in Old and Young Avestan. Note also that the convention 'X became Old Avestan/Young Avestan Y' is subject to the above caveats.

	Stops/Affr.	Fricatives	Contin.	Nasals	Sibilants
Bi-labials	рb	β	ц	(¹ m) m	
Labio-dentals		fv			
Dentals	t d	ο δ		n	S Z
Alveolar			("r) r		
Alveo-pal.	čj				šŽ
Retroflex (?)	-				Š
Palatals		y(?)	į	(ń)	š Š
Velars	k g	$x \gamma$	2	ŋ ⁴ ŋ	
Palato-velars	0	X		ή ^μ ή	
Labio-velars		x"		ŋ ^{vh} ŋ ^v	
Glottals	()	h		5 5	

TABLE 3.2.2: AVESTAN CONSONANTS

2.1.2.1 Notes on the consonants

<u>*i*</u>. The letter <u>*i*</u> probably represented an unreleased stop and was an allophone of /*t*/ and /d/ in final and pre-consonantal position: YAv. *janaț* 'he killed', OYAv. <u>*tkaēša*-</u> '*guidance', YAv. <u>*tbaēšah*-</u> 'hostility'. In the manuscripts, <u>*t*</u> alternates with δ : <u>*atka*-</u> and <u>*a\deltaka*-</u> 'coat', <u>*druuațbiiō*</u> and <u>*druuaδbiiō* < <u>*druuaņt*-</u> 'possessed by the Lie'. – The rare final -g'<u>*t*</u> is etymological in OAv. <u>*pa*^{*i*}*tiiaog'*-<u>*t*</u> 'answering', <u>*yaog*'-<u>*t*</u> < <u>*yuj*-</u> 'to harness', but may be a graphic representation of an unreleased final -g in YAv. -*hāg'*<u>*t*</u> 'following'; <u>*parag't*</u> 'away from' (Hoffmann and Forssman 1996: 99).</u></u></u>

r had a (pre)aspirated/unvoiced(?) allophone before *p*, *k*, *t*, apparently limited to stressed syllables in proto-Avestan (see section 2.3.4). Before *k*, *p*, it is written *hr*, while proto-Av. *^{*h*}*rt* became § (see section 2.1.2.3). In final position -*r* takes a supporting vowel $(-r^{5})$.

n was realised as a nasal of uncertain nature written n or *n* before consonants (in editions, usually normalised as n), except \underline{i} and \underline{u} . Before \underline{i} , possibly also i, *n* was palatalised to \dot{n} (\tilde{n}), but the letter $\langle \dot{n} \rangle$ is not consistently used in the manuscripts, e.g. $a\dot{n}ii\bar{o}$ or $ainii\bar{o}$, or $ainii\bar{o}$, $nitam\bar{o}$ 'nethermost' or $\dot{n}itam\bar{o}$; in this description I am adopting the convention anii- but ainii-.

 $h > \eta(h)$. Intervocalic h and its palatalised and labialised allophones are usually preceded by their class nasal: $-\ddot{a}h\ddot{a} - > -\ddot{a}\eta h\ddot{a} -, -\ddot{a}h\dot{a}\ddot{a} > -\ddot{a}\eta h\ddot{a} -, and -\ddot{a}hu\ddot{a} - > -\ddot{a}\eta^vh\ddot{a} -; similarly,$ $<math>-hr > -a\eta(h)r$ - (usually normalised as $-a\eta r$ -, but mss. often $-a\eta hr$ -). These clusters are indistinguishable from IIr. *ns* clusters: OAv. $m\ddot{a}\dot{\eta}h\ddot{a} < mansi$ 'I have thought'. The nasalisation is omitted in a not well-defined subset of words with internal h, often before i: loc. sing. *manahi* 'in thought', less often before u: neut. *vohu* (see section 2.3.1.2). – A similar nasalisation in Old Persian is suggested by Elam. < pat-ti-ya-man-ya-a> for OPers. *patiyāvahṣyaiy* (DB 1.55), but other explanations of the Elamite form are possible, and, if the nasalisation is genuine, the form may be 'Avestan' (cf. Av. *auua\u00e3he* 'to (my) aid'; see Skjærv\u00f8 1999a: 18-19. x^{v} vs. *huu* and $-\eta^{v}h$. The Avestan labialised velar fricative x^{v} is also an allophone of *hy*, alternating with *huu* and the labialised velar aspirated nasal $\eta^{v}h$.

Initial $h\underline{y}$ - and $h\underline{u}\underline{y}$ - both became x^{i} - or huu-: Av. $x^{v}afna$ - 'sleep' ($<h\underline{y}a$ -) and Av. $x^{v}\overline{a}\partial ra$ - 'good breathing space, comfort' ($<hu-\overline{a}^{\circ}$), but $huuar\overline{s}ta$ - 'well-done' ($<hu-\underline{y}a^{\circ}$); OAv. $huuar\overline{s}$ 'sun', gen. $x^{v}\overline{s}ng$, YAv. $h\overline{u}$ (all disyllabic).

Medial -h(u)u- became OAv. $-x^v$ -, but YAv. $-y^vh$ -: OAv. $nomax^va^it\bar{t}$ - 'containing homage', YAv. $bao\delta ay^vha^it\bar{t}$ - 'conscious'; remained: OAv. dat. sing. $ahuii\bar{e}$ 'for the (new) existence' (< ahuuai), YAv. ay^vhe ; or became OAv. -ghuu-, YAv. $-y^vh$ -: OAv. $aoj\bar{o}ghuuant$ -, YAv. $aojay^vhant$ - 'strong'. – In Young Avestan, the only examples of intervocalic x^v are $kax^aar\partial a$ - 'sorcerer' (cf. OInd. $k\bar{a}khorda$), fem. $kax^var^{\partial i}\delta \bar{t}$ -, and the country name harax^vaⁱt\bar{t}- 'Arachosia'.

 \dot{x} vs. *hii* and *ift*. The Avestan palatalised velar fricative \dot{x} is an allophone of $h_{\dot{l}}$, alternating with *hii* and the palatalised velar aspirated nasal *ift*: initially and medially, \dot{x} is common in Old Avestan, but rare in Young Avestan: OAv. 3s opt. $\dot{x}ii\bar{a}t$, YAv. *hiiāt* 'may he be', OAv. gen. sing. fem. $a\dot{x}ii\dot{a}$, YAv. $aifh\dot{a}$ 'her'; OAv. $va\dot{x}ii\dot{a}$, YAv. $vaifh\dot{a}$ 'better things'; YAv. $\dot{x}iiaona$ - (ethnic); $da\dot{x}iiunqm$, gen. plur. of daifhu- 'land'. OAv. - $\dot{x}ii$ - alternates with -*hii*- (perhaps a pre-stress variants, see below): OAv. gen. sing. $a\ddot{s}ahii\bar{a}$ vs. $a\ddot{s}a\dot{x}ii\bar{a}-c\bar{a}$ (cf. YAv. $a\ddot{s}aifh\bar{a}-c\bar{a}$).

2.1.2.2 Sibilants

The sibilants s and z are common before stops: spaiia- 'throw', zbaiia- 'invoke' $(\langle c^{iy}, j^{iy}), daste$ 'is given', dazde 'is placed', and nasals: snaēža- 'to snow', vasna- 'exchange value, price', asman- 'sky, stone'; s is occasionally found before other consonants and in final position (Tremblay 1999), where it is the result of dental assimilation: OAv. dasuuā < dad-sua, nom. of t-stems: °tās < °-tāt-s, OAv. stavas 'praising' < staunt-s; OYAv. šs 'was' < šs-t.

2.1.2.3 'Shibilants'

The three sibilants $\check{s} \check{s}$ \check{s} had merged into one sound [\check{s}] by the time of our earliest manuscripts, but must originally have been separate:

- $\breve{s} = [\breve{s}]$ with the voiced allophone \breve{z} (*duš* vs. *duž*-);
- šs, written šs, šsii must have been a palatal(ised) sibilant resulting from the palatalisation of č [tš] before <u>i</u>: č<u>i</u>āti- > Av. ś(ii)āⁱti- 'joy', OPers. šiyāti- (cf. Sogd. šāt, but Khot. tsāta- [ts^hāda-] 'rich'). The corresponding voiced sound has no letter in the alphabet and probably merged with ž: YAv. druža- (OAv. drujiia- 'to lie'); aži- 'dragon' for aji- (OInd. ahi-);
- š(<^hrt, see section 2.1.2.1) may originally have been a rhotacised alveolar sibilant, e.g. Av. mašiia- '(mortal) man' (rendered in Pahl. as maši) or, perhaps, a retroflex or lateral affricate or flap (cf. Pahl. mahli), but later a retroflex sibilant.

2.1.2.4 Distribution

Most consonants are found in initial position before vowel; exceptions include the voiced fricatives (and probably *f*), the velar nasals ($\eta \ \eta \ \eta'$), and ξ .

In final position, we find *m* and *n*, *r*, the dental \underline{t} , and the sibilants *s* and \underline{s} . Final -*s* is also found in sandhi (see section 2.3.3). The consonants *r* and *s* (in *sandhi*) take ϑ as a supporting vowel as finals (e.g. $d\bar{a}tar^{\vartheta}$ 'O creator!', $kas^{\vartheta} t\bar{e}$ 'who for you?').

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 ă, ĭ, ũ

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{i} 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.

	Stops/Affric.	Fricat.	Contin.	Nasals	Sibilants
Labials	рb	ſ	v(y)	т	
Dentals	t d	0	r, 1	п	s, c z
Palatals	čĬ	V	<i>(i)</i>		š (ž?)
Velars	k g	x			
Pharyngeal	h				

TABLE 3.2.3: OLD PERSIAN CONSONANTS

2.2.2.1 Notes on the consonants

On $\varsigma < \text{Ir. } \theta r$, $\dot{c}r$, see section 1.4.

Old Persian may have had a phoneme \check{z} , judging from $nij\bar{a}yam$ [niž $\bar{a}yam$?] < *nis- $\bar{a}yam$ 'I went out', though it may be simpler to assign [\check{z}] to the phoneme / \check{j} / and assume that it was pronounced [d \check{z}] as written. Alternatively, OPers. <j> was actually pronounced [\check{z}], and there may have been no phoneme / \check{j} /.

Elamite, Akkadian, and other transcriptions attest to etymological, but unwritten sounds, e.g. preconsonantic n: < ba-da-ka-> for $bd^{"}daka$ 'bondsman', cf. MPers. bandag; cica"taxma-, proper name, Elam. <zi-iš-šá-an-tak-ma>, Akk. <ši-it-ra-an-tah-ma> (for Median ci0rantaxma); sequence hu: huvaipašiya 'self', Av. $x'a\bar{e}pa'0iia$ -, MPers. $xw\bar{e}bas$. In some cases, the various transcriptions are inconclusive, e.g. $a^{h}uramazd\bar{a}$, Av. $ahura-mazd\bar{a}$ - (YH.), Elam. <u-ra-maš-da>, Akk. <ú-ra-ma-az-da, a-hu-ru-ma-az-da-'>, Greek $\bar{o}romasd\bar{e}s$), MPers. Ohrmazd, Hormezd. Before m, h could be written or omitted (e.g. $a^{h}miy$ and ahmiy 'I am'). Note also morphophonological variation such as pres. $ha^{m}-taxsa$ - 'be diligent', imperf. ham-a-taxsa-.

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

did/made' (Av. *akər*^o*nao-1*) 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. $x \bar{s}n$: initial and intervocalic). There are no examples of two-consonant groups in final position, and forms such as Av. $\bar{a}f\bar{s}$ 'water' nom. sing. may have been transferred to the *i*-declension ($\bar{a}p\bar{i}[\bar{s}]-\bar{s}im$ (?) 'the water . . . him', beside athematic inst.-abl. plur. abis < ap-bis).

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 $d\bar{a}rayavaušahay\bar{a}$ 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): $\langle Cy \rangle$ for $\langle Ciy \rangle$: *nayāka-*, *abayapara*; use of y or *iy* to write long \bar{c} : *paradaydām* for *pardēd*"(?) (MPers. *pālēz*); contraction of *iya* \geq \bar{i} in *martīhāyā* (A³?); *st* for *št* in *nistāya*; loss of final consonants and their preceding vowels in edings, 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 \bar{a} before h and nasals and $\underline{i}/\underline{i}$ and $\underline{u}/\underline{u}$. For details, see de Vaan 2003, Chapter 6.

2.3.1.1 Centralising of $a, \bar{a} > \vartheta(\bar{\vartheta})$

 $ah > \mathfrak{o}(\bar{\mathfrak{o}})$. Ir. *h* caused centralising of a preceding *a*: OAv. *am\bar{\mathfrak{o}}hmaid\bar{\mathfrak{o}}* 'we have thought'; *vac\bar{\mathfrak{o}}* 'speech' (but mostly - $\bar{\mathfrak{o}}$ reintroduced from YAv.?).

In Young Avestan, the *a* remained in initial and medial position (reintroduced into the OAv. text: *ahmat* 'us'), and final *-ah* became $-\bar{o}$ (occasionally \bar{o} : $n \partial m \bar{o}$ 'homage'); in sandhi, the *a* reappears: $-a - s^{\circ}$.

 $aN > \partial N$. Short *a* was centralised before nasal, in more positions in Old than in Young Avestan; – initial: OAv. $\partial n \partial^i t \bar{t}$ 'no going', $\partial mauuant$ - 'powerful' (YAv., $a^i niti$, *amauuant*-); in final: OYAv. $-\delta m$.

Final -an-h > Ir. $-a\eta h$: In Old Avestan, this became $-\bar{\partial}ng$, notably in the thematic acc. plur. $da\bar{e}uu-\bar{\partial}ng$ 'old gods' and the *n*-stem gen. sing. $x^v-\bar{\partial}ng$ 'sun' ($< hu\mu-a\eta h$). In Young Avestan, it probably became nasalised $-\bar{\partial}$ which developed variously to $-\bar{\partial}$ and -q: acc. pl. $yazat-\bar{\partial}$ 'gods', $a\bar{e}sm-q$ 'firewood', gen. sing. bar^ssm-q 'barsom'; final $-u\bar{\partial}$ in turn became $(uu)\bar{u}$; acc. plur. $da\bar{e}uu-\bar{u}$ ($da\bar{e}\bar{u}$), gen. sing. $h\bar{u}$ ($< huu-\bar{u}$), etc. (see also Hoffmann 1970; de Vaan 2003: 492–93).

Final $-\bar{a}h > a$. Long \bar{a} became rounded long a before h in final: $-\bar{a}h > -a$; the a remains in sandhi: $-a-s^{\circ}$.

 $\bar{a}N > \bar{o}N$. Long \bar{a} was centralised to \bar{o} before nasal in a few Old Avestan words: $\dot{x}ii\bar{o}m$ 'may I be' and *strom*, gen. pl. of *star*- 'star' (both disyllabic < -*a'am*). In both Old and Young Avestan, $\bar{a}N$ alternates with -*aN* in the manuscripts.

au > au. Ir. au became au sporadically in initial position: OAv. \bar{a} . vaocat 'he has said', YAv. $auar'z^{\circ}$ 'not producing'; and when followed by $il\bar{i}$, OAv. $kauuit\bar{a}t$ - 'the word/ title of kauui', YAv. sauuista- 'richest in life-giving strength', huuanhauim '*comfort' (<huuanhauijam).

2.3.1.2 Rounding of $a, \bar{a} > \bar{a}$ or \bar{b}

a + u. YAv. a became o before (primary or secondary) ($ul\bar{u}$ (uu) in the following syllable, regularly before r: $po^{u}ru$ - 'much' < paru, $po^{u}ruua$ - 'earlier' < paruua-, also when the u was the result of contraction: $po^{u}rum < paruuam$ (see Kellens 1986), sporadically elswhere: OYAv. $voh\bar{u}$ 'good' (but $va\eta hu$ -), $vohun\bar{i}$ - 'blood', YAv. $moyu^{\circ}$ '*Magian'.

a in labial context. Change of $a > \tilde{a}$ or \tilde{o} (also $\tilde{a} > \tilde{o}$) is found in Old Avestan, sporadically in Young Avestan, when *a* is in multiple labial context: $ap\bar{o} m\bar{a}$ vs. $ap\bar{a}$; YAv. dat. plur. "*ruuō'biiō* < *uruuan-* 'soul'; dat. sing. *māuu^ōiia* 'for me' (OAv *ma'biiā*); note also $dab^{o}nao$ - 'deceive' (2 syllables; OInd. dabhno-), $du\tilde{z}^{u}z^{o}ba$ 'making bad invocations' < $du\tilde{z}$ - $zb\bar{a}h$ - (<- $juu\bar{a}$ -). In Young Avestan, final - $uu\bar{o}$ for -uua is found in a few cases, e.g. instr. sing. $b\bar{a}zuu\bar{o}$ 'arm'. OAv. $h\bar{o}i0\bar{o}i < ha\bar{e}0a$ - '*cordwork', with $\bar{o}i$ for $a\bar{e}$, may be the result of assimilation.

 $\bar{a} + u$. Labial umlaut of \bar{a} is found especially in Old Avestan when followed by $\tilde{u}(\underline{u})$ in the next syllable: *u*- stems: *jiiōtūm* < *jiiātu*- '*livelihood'.

a + r. The sequence $-a + r - (-a + \partial r^*)$ in derivatives of $fra - \partial r^*$ 'move forth' gave OYAv. $-\bar{\partial}r^*: fr\bar{\partial}r^*t\bar{\partial}it$ 'moving forth', $fr\bar{\partial}r^*nao$ - 'send on its way'; the OAv. abl. sing. $fr\bar{\partial}r^*t\bar{\partial}is$ 'from moving forth' may show assimilation.

2.3.1.2a Old Avestan initial 5°ā- < a-/ā-

In several words with initial $\bar{\sigma}$ caused by one of the above processes, the original $a-l\bar{a}$ were reintroduced: $\bar{\sigma}^{3}\bar{a}d\bar{u}$ for $*\bar{\sigma}d\bar{u} < *\bar{a}du$ '?' by *u*-umlaut; $\bar{\sigma}^{3\bar{a}}n\bar{u}$ for *anu* 'along', centralised before nasal or by *u*-umlaut; $\bar{\sigma}^{3\bar{a}}\eta h\bar{a} < \bar{a}h\bar{a}$ instr. sing. of $\bar{a}h$ - 'mouth', centralised before nasal or before *h*; $\bar{\sigma}^{3\bar{a}} - <auuua$ 'down', by labial assimilation.

2.3.1.3 Raising of $a, \bar{a} > e$

a and \bar{a} can be raised (fronted) when preceded by \underline{i} and followed by palatal or palatalised sounds.

ia became *ye*-, *-iie*-, $-^{i}\check{e}(<-ai)$:

- before palatal consonant: OYAν. iθiiejah- < θjajah- 'danger';
- before palatalised consonant: OYAv. yezi < jazi 'for if'; OAv. fem. sing. yezuui 'young' <jaziui-; YAv. inf. ending -iie'õiiiāi < -ja-diāi; frāiieze < -jaziē < -jazai 'I sacrifice'; OAv. loc. sing. yesnē < jasnie (<jasnai), Av. yesniia- < yasnijā- 'worthy of sacrifices (yasna-)'; comp. fem. sing. -iiehī < -iiahiī-; 2nd and 3d sing. pres. ind. act./ mid. -iiehile < -jahiliē and -iie'til-iiete < -jatiljē, -jeńhē < jahja and jahai: Av. gen. sing. yeýhē < jahja 'whose', OAv. inf. -iieýhē < -jahai;

- in final after h, r, s in some words: ahe 'his' < ahia (also gen. sing. ending -ahe); dre 'Aryans' < aria; nase 'perish!' < nasia;
- *iāN* became *ieN* when followed by *i*, *ī*, or *-iē*: 1s pres. ind. act. *-iiemi < iāmi* subj. *-iieni < -iāni*, mid. *-iiene < -iānⁱē* (< *-iānai*).

2.3.1.4 Combined centralising and raising and rounding of a

a > a > i. After palatals, a before nasal further became *i* in Young Avestan, sporadically in Old Avestan:

- after the palatals c j (but a was sometimes restored): OAv. hacānā 'company' (instr. sing.), beside OYAv. haciņtē 'they follow', YAv. raocana- 'window' vs. raocinauuaņt- '*bright';
- *iaN* and *µaN* regularly became OAv. *jāN*, *µāN* or *jiN*, *µūN* (the *a* occasionally remains), YAv. *jaN* or *jiN*, *µuN*: OAv. *yām*, YAv. *yim* 'whom'; OAv. nom.-acc. dual *yāmā* 'twins', YAv. *yima-* 'Yima' (but OAv. *yimas-cīţ* 'also Yima'); OAv. *a'riiāmā*, YAv. *a'riiaman-* 'Airiiaman'; YAv. *po"rum < paruuµam* 'before, in front'; in final syllable, Old Avestan often preserves the *ā* (*yām*, *-iiām*; always *-iiān*, *yāng*, *-iiāng*; *-uuāng*), but contraction of *jəm > ūn* is frequent: OAv. *aniiām* 'other', YAv. *a'nim*; YAv. *haxāim* (<*-āiam*) 'companion'; OAv. *ha'0iiām* and *ha'0īm* 'true, real', YAv. *ha'0im*. Contraction to *-ūm* is found only in the 2nd plur. mid. ending *-dūm*.

iaN and *uaN* after vowels: Young Avestan regularly has contraction, Old Avestan sporadically: $a\underline{i}iN > a\overline{e}N$, $\underline{a}\underline{i}iN > \overline{a}iN$, $\underline{i}\underline{i}iN > \overline{i}N$ (*iN*): OAv. $a\underline{i}i\overline{o}m$ 'this one', YAv. $a\overline{e}m$, 3rd plur. pres. inj. $-a\overline{e}n < -a\underline{i}an$. In the 3p opt. of $a\underline{i}aa$ -stems, $-a\underline{i}a\underline{i}an$ became $-a\underline{i}aa\overline{e}n$, occasionally preserved in the manuscripts, but most often replaced by $-a\underline{i}ion$ (Skjærvø 1998: 191).

 $auN > aoN (\bar{a}uN)$, $\bar{a}uN > \bar{a}uN$, $uuN > \bar{u}N (uN)$: OAv. $k \Rightarrow r^{3}naon (<-auan)$ 'they shall make', YAv. $k \Rightarrow r \Rightarrow n\bar{a}un$; YAv. baon 'they became'; YAv. $ad\bar{a}unta$ (< dauua-) 'they spoke deceiving words'; OAv. $tuu\bar{a}m < tuuam$ 'you', YAv. tum; YAv. bun < buuan 'they shall become'; YAv. $a\bar{u} < auanh$ 'them'.

The sequences -ajum, -aiuam, and -aujam were simplified to YAv. -aēum, -ōiium (-aoiium), or -aēm: vaiiu- 'Vaiiu': acc. vaēm; daēuua-: acc. daēum, vīdaēuua- 'discarding the old gods': acc. vīdōiium; haoiia- 'left': haoiium, hōiium, hōim.

Combined labialisation and palatalisation is seen in YAv. *paoⁱrim* 'first' < *paruijam* (OAv. *paⁱruuīm*, trisyllabic).

The forms with *a* are frequently restored, especially in certain morphological categories; thus, YAv. 3p -*aiiən* is more frequent than -*aēn*. OAv. *jant* before \bar{i} , \bar{e} (<-*ai*) remained or became *iient*, *uuant* remained. In Young Avestan, *jant* became -*int*- (usually after *c*, *j*, sibilants, and θ), but was often retained, and its *a* could then be raised to *e*: -*iie*^{*i*}*nti*, -*iiente*. YAv. *yant* became -*unt*-, but adjectives in - η^v hant- have analogical - η^v hant- beside regular - η hunt-.

In both Old and Young Avestan, diphthongs resulting from contraction of two syllables remain metrically disyllabic.

2.3.1.5 Shortening of \bar{a} and lengthening of a

Ir. \bar{a} is shortened in Old Avestan under phonetic conditions, for rhythmic reasons, or as a result of stress movements: before *ii* or *uu*, in the gen. plur. ending *-anqm*; in the preverb \bar{a} -, in initial syllable when an enclitic was attached to the word, in antepenultimate or

earlier syllables or when the word was unaccented (?): *a-iiaŋhā* 'you shall request' $<\bar{a}$ -yā-; *a-xštaī* 'he will stand by' $<\bar{a}$ -°; *abiias-cā* 'and to them' $<\bar{a}$ biias°; *uštanəm* vs. *uštānāi* < *uštāna*- 'life breath'. It is shortened in Young Avestan in similar environments.

Ir. *a* is frequently lengthened in Old Avestan in initial syllables, occasionally in noninitial syllables: nom. plur. *kāuuaiias-cā* < *kauui-* 'poet'; – after *ii*: 3rd sing. inj. mid. *maniiātā* 'he thinks' < -*iata*; – after *uu*: instr. sing. x^{t} *ānuuātā* < x^{t} *ānuuant-* 'containing the sun'); – sporadically elsewhere: gen. plur. *hātam* < *hant-* 'being'.

Ir. *a* is lengthened in Young Avestan in initial syllables: $\bar{a}iia < aja$: $x \ st \bar{a}uuaii\bar{o}$ vs. $x \ st \bar{a}uui\beta ii\bar{o} < x \ st auui$ - (ethnic name) and sporadically elsewhere.

For details, see de Vaan 2003, Chapter 2.

2.3.2 Consonants

2.3.2.1 Assimilation and dissimilation

2.3.2.1a Voice assimilation

The results of voice assimilation (voicing and devoicing) seen in Iranian occurred at various times and in various situations.

Devoicing affected unaspirated voiced stops before unvoiced sounds, mainly t and s, š: Av. baxta- 'shared' (< IIr. b^hak -ta < b^hag -); Av. vista- 'found' (< IIr. uit^s -ta- < vid-), baxša- 'distribute' (< IIr. b^hak š-a < b^hag -). On the analogical replacement of bd, etc. with pt, see section 2.3.2.1b.

Voicing was more common, unvoiced stops, affricates, and sibilants being assimilated to a following voiced stop or sibilant:

- stops: YAv. upa-bdi 'on the foot-hill (of)' (<upa- + pad-); YAv. dat.-abl. plur. a'βiiō, OPers. instr.-abl. plur. abiš < ăp- 'water' + -bjah, -biš; OAv. dat.-abl. plur. drəguuō. d'biiō YAv. druuaţbiiō < druguat- 'possessed by the lie' + -bjah; instr. plur. Av. azd'bišš < ast- 'bone' + -biš;
- affricates: OAv. 2p in j. θβar⁰ž-dūm < θβar³s- 'to fashion' (< IIr. θμarć-);
- sibilants: OAv. zdī 'be!' < ah-ls-; mazdā- 'all-knowing < placing (all) in (his) mind'
 <mas-dā- (<mņs-); niž-bər³ta- 'removed' (<niš- + bər³ta-); duž-zaotar- 'evil libator'
 (< duš- + zaotar-).

Final š was voiced before vowels and voiced consonants in compounds and before suffixes (see also section 1.2.1.3: OAv. $\partial r^2 \tilde{z} \cdot ux \delta a$ - 'straight utterance' (but YAv. $ar \tilde{s} \cdot ux \delta a$ -); $du \tilde{z} \cdot a \partial r a$ - 'with bad (constricted) breathing space'; $a\beta^2 \tilde{z} \cdot d\bar{a}na$ - 'water container' ($\langle \tilde{a}f \tilde{s} + d\bar{a}na \rangle$).

2.3.2.1b 'Bartholomae's law'

A special case of assimilation is 'Bartholomae's law', according to which an IIr. final voiced aspirate of the stem passed both its aspiration and voice on to an initial t or s of an ending, so as to produce clusters of the type, e.g., $-b^{h}-t- > -bd^{h}-$, $g^{h}-z > g\bar{z}^{h}$ (with ruki, see section 1.2.1.3). The resulting clusters remain in Old Avestan: IIr. aug^{h} - 'to present oneself (as), say' had $3s aug^{h}-ta > aog-d^{h}a > OAv. aog'd\bar{a}$ and $2s aug\bar{z}^{h}-sa > aug-\bar{z}^{h}a > OAv. aog'\bar{z}\bar{a}$; from IIr. μaj^{h} - 'to convey' we have $\mu aj^{h}-tra$ - 'conveyor, draught animal' > $\mu aj^{-}d^{h}ra > OAv. va\bar{z}dra$ -; IIr. $dad^{h}\bar{a}$ - 'place' had $3s \operatorname{mid.} dad^{h}-tai > dad^{z}-d^{h}ai$ (see section 1.3 > OAv. $dazd\bar{e}$ 'it is placed' (vs. IIr. dad-tai 'it is given' > $dat^{s}tai > OAv. dast\bar{e}$, YAv. daste);

IIr. d^hab^{h-} (> dab^{h-}) 'deceive' had the desiderative stem $di-db^{h-}sa- > di(d)bz^{h}a- > OYAv.$ $di\beta za-$ 'seek to deceive' (but OInd. dipsa- with elimination of z).

In Young Avestan and Old Persian, these groups remain only in isolated words: YAv. *ubda-* 'woven' $< ub^{h}-ta-$ ($< uab^{h}-$); OAv., OPers. $azd\bar{a}$ 'known' (OInd. $addh\dot{a}$), but most often they are analogically replaced by unvoiced groups: YAv. aoxta, vaštar- 'draught animal', dapta- 'deceived' (for dabda-), $g \partial r'f \delta a$ - 'grasp' (for $grb - \ddot{z}^{h}a - \langle grb^{h}-$ 'seize'); YAv., OPers. basta- 'bound' (OInd. $baddh\dot{a}$ -).

2.3.2.1c Geminates

Geminates resulting from internal sandhi and assimilation were simplified: YAv. $usn\bar{a}$ -'wash (up)' $\langle us-sn\bar{a}-; vis\bar{a}n- \langle vis-s\bar{a}n- (\langle vis- + /i\bar{a}n- 'who gains a village', with <math>\dot{c}-\dot{s} > \dot{s}\dot{s} > \dot{s}$).

Analogically restored forms are frequent, e.g. YAv. *viš.har³zana*- 'abandonment of the villages' for *višarz*° ($\langle vis + harz^{\circ} \rangle$).

2.3.2.1d Dissimilation

Dissimilation in point of articulation is perhaps to be seen before *m* in *vahma*- 'hymn' if from *vaf*- (pres. *ufiia*-) 'weave', and *daxma*- 'burial mound', if from *dafma*- $< d^{h}ab^{h}$ - 'construct' (cf. Gk. *taphos*, Hoffmann 1975: 338; Sk jærvø 2005b).

Voice dissimilation is found in the groups $f\partial r > f\delta r$ and $x\partial(r) > x\delta(r)$ (no examples of $f\partial V$): $naf^{3}\delta r\bar{o} < naptar$ - 'grandson, scion'; $ux\delta a$ - 'utterance', $ap\bar{a}x^{3}\delta ra$ - vs. $ap\bar{a}xtar$ - 'northern'.

2.3.2.2 Spirantisation

2.3.2.2*a* Unvoiced stops and the unvoiced fricatives $f \theta x$

The unvoiced fricatives $f \ 0 \ x$ are independent phonemes before vowels (see section 1.2.1.4), but allophones of $p \ t \ k$ before consonants, e.g. IIr. $k \ y \ge 1$ r. $x \ y$ in YAv. perf. part. vaox^{*}ah- 'having spoken' < ya-yk-yah- (see Skjærvø 1997a). The stops remain after sibilant: OAv. $\bar{a}sk^{*}ti$ - 'following' (< sak- 'follow'), gen. plur. $str\bar{o}m$ 'stars', $v\bar{a}striia$ - 'forager'.

In Avestan, Ir. *ft* appears to have reverted to *pt*: OAv. sing. nom. *ptā* 'father' vs. dat. $f^{\delta} \delta r \delta i < f \theta r ai$, YAv. *dapta-* 'deceived'.

2.3.2.2b Voiced stops b d g and voiced spirants $\beta \delta \gamma$

The voiced stops b dg and the voiced fricatives $\beta \delta \gamma$ are in complementary distribution in both Old and Young Avestan.

In Old Avestan, the Iranian voiced stops β and γ are allophones of b and d before \dot{z} : di β $\ddot{z}a$ -, $a\gamma$ $\ddot{z}aonuuamna$ - '?'; otherwise the voiced stops remain unchanged; β replaces μ after 0, and δ replaces 0 after x and $f(x\delta, x^{2}\delta; f\delta, f^{2}\delta)$.

In Young Avestan, the Iranian voiced stops remain regularly only initially and after nasals and sibilants ($z \ \ddot{z}$), sporadically also in other words. Elsewhere they become the voiced fricatives $\beta \ \delta \ \gamma$: $a'\beta i$ preverb (OAv. a'bi), $du\gamma\delta a$ 'daughter' (OAv. $dug^{a}d\bar{a}$), $dri\gamma u$ -'poor' (OAv. drigu-); γ is also found initially before nasals and sibilants: $\gamma^{a}n\bar{a}$ - 'woman' (OAv. $g^{a}n\bar{a}$ -), $\gamma^{a}mata$ - 'gone', $\gamma \ddot{z}ar^{a}\cdot\gamma \ddot{z}ar$ - 'flow'. Finally, f and x are voiced before \ddot{z} : $a\beta^{a}\ddot{z}d\bar{a}na$ - 'water container', $v\bar{a}\gamma \ddot{z}(\partial i)bii\bar{o}$, and δ is an allophone of θ in the groups $f\delta r$ and $x\delta$, see section 2.3.2.1 d.

Later changes. The resulting Young Avestan voiced fricatives are all subject to further

contextual and chronological, possibly also dialectal, changes and variations: β tends to become $\underline{u} > uu$: *viiāuua'tī*- 'shining' $< vi-\bar{a}-\beta\bar{a}- < b\bar{a}-$ 'to shine', *auuara-* 'to bring' $(<\bar{a}-\beta ara-)$. In turn, \underline{u} may combine with preceding *a* to form the diphthong *ao*: $a^{i}\beta i$ 'to' > *auui* > *aoi* (mss. *aōi*, *aōui*, etc.; *aδa'βiia-* 'not to be deceived': sing. nom. masc. *aδaoiiō*, but acc. *aδauuim*.

 δ vs. θ : Sporadically, δ alternates with θ , notably in forms of $va\bar{e}\theta$ - ($va\bar{e}\delta$ -) 'to know' and in pres. $da\delta\bar{a}$ - ($da\theta\bar{a}$ -) < $d\bar{a}$ - 'to give, place', sporadically elsewhere.

y is lost before u and sporadically before u: YAv. druuant- < druyuant- drogunant-); rouui- 'fast' < rayui- (fem. of rayu-); raom < rayum; mo"rum < maryum 'Merv', but driyum, moyu° (see Skjærvø 1997b).

2.3.2.3 Consonant groups and anaptyxis

Most Indo-Iranian consonant groups survived in Avestan, and anaptyxis does not create additional syllables as shown by the meter. The anaptyctic vowels is typically ∂ , but also a, i, u (often as conditioned variants of ∂). Anaptyxis is found in more contexts in Old than in Young Avestan and varies among the manuscripts. Following are some of the more unusual groups (others are common and trivial):

Stop + stop:

- initial: OAv. pt- in ptar- 'father' (nom. ptā, p"tā; acc. p"tarām, ptarām); db- in d"ibitā '?' (< duitā); tk- in tkaēša- '*guidance'; YAv. p^(a)tar³ta- 'winged'; in Young Avestan, pt- in ptar- has been replaced by pit- and db- by tb-; other groups have been simplified: db- > b-: bitīm 'second(ly)' (< dbitijam, but ā-tbitimlā-δbitim 'a second time'); IIr. pt-, kt- > t-: YAv.: tū[†]riia- < ptruia- 'uncle', kturia- (< ktruia-, cf. ca0rušī 'fourth'; but ā-xtū[†]rīm 'a fourth time');
- medial: OAv. āsk³ⁱti- 'following'* (<ā-skti-); gen. plur. dug³dram < dug³dar-'daughter'; YAv. hapta 'seven', aţka- (aδka-) 'coat'; ubda- 'woven'; YAv. ā-ţbitimlāδbitim 'a second time'.

Stop + non-stop:

initial, common: + continuants: OYAv. br-, etc.; + glides: dii-, duu-; OAv. also + fricative: d⁵j-; + nasal: OAv. g^on, g^om-, d^om-; - in Young Avestan less common: dj->j-, gn, gm-> y^on, y^om-, dm-> nm-.

Fricative/sibilant + continuant, common:

- initial and medial: fr-, fii-, fš-, sr, zr-, γž-, f³δr (<f0r) and medial x³δr (<x0r: OAv. f³raša-, YAv. fraša- 'filled with (life-giving) juices'; YAv. fiiaŋ^rha- 'to hail', OYAv. fšuiiant- 'cattle tender'; OAv. s³raoša-, YAv. sraoša- 'readiness to listen, Sraoša'; OYAv. z^(*)razdāiti- 'reliance'; YAv. yžara- 'flow';
- medial: OYAv. vax³ δra 'speech organ', OAv. raf³ δra 'support'; YAv. gen. sing. naf³ $\delta r\bar{o} < naptar$ 'grandchild, scion'.

Two fricatives + consonant. Initial groups of two fricatives (fricative + sibilant) + consonant are found occasionally: OAv. dat. sing. $f^{\circ}\delta r \bar{o}i < ptar$ - 'father', $fs^{\circ}rat\bar{u}$ - '?'; YAv. $fst\bar{a}na$ - '(woman's) breast', xstuua- 'sixth', $xsn\bar{u}man$ - 'favour', $xsm\bar{a}k \Rightarrow m$ 'your (plur.)'.

Final groups with \check{s} or $t: kar^3 f\check{s}$ 'body', $v\bar{a}x\check{s}$ 'word'; $vax\check{s}t$ 'he has grown'. Final -t is, from a synchronic perspective, sometimes dropped after a sibilant. Historically, we must distinguish between two cases: 1. $-t-t > -t^s-t > Av$. -s-t: OAv. " $r\bar{u}raost$ 'howled' < "raud-t; YAv. $n\bar{a}ist$ 'scorned' < $n\bar{a}id$ -; 2. $-s/\check{s}-t > Av$. $-s/\check{s}$: OAv. $\bar{a}s$ 'was', *vcts* 'he has overcome' $< v\bar{a}n$ -s-t; xšnāuš 'he has favoured' $< -\bar{s}$ -t. The -t was then reintroduced by analogy: OAv. $c\bar{o}i\bar{s}$ -t 'he has pointed out', *vaxš*-t, YAv. $t\bar{a}\bar{s}$ -t 'he fashioned' (Tremblay 1999).

2.3.2.3a Groups at morpheme boundary

Groups found only at the morpheme boundary include in principle all combinations of any final group + C or any initial group: dat.-abl. $v\bar{a}\gamma z^{\circ/i}bii\bar{o} < vak-/vac-$ 'word', frādat.fšau- 'cattle-furthering', Orafs-ca 'and satisfaction', afš-tacin- 'flowing with waters', afš-ci0ra- 'containing the seed of water', $k \Rightarrow r^{\circ}f z x^{\circ}ar$ - 'body-eater'; fraor°t-fraxšnin-'(a mind) with foreknowledge of and turned toward the reward)(?)'.

2.3.2.3b Anaptyxis in Old Persian

Anaptyxis is found in OPers. only in groups containing d in the vicinity of u: $d^u ruva-$ 'healthy, whole', $sug^u da$ - vs. sug da- 'Sogdian'.

2.3.2.4 Palatalisation and labialisation of consonants

In the Avestan text, palatalised and labialised consonants are indicated either by special letters (n, n, x, s, and n, x, v) or by writing *i* and *u* before the consonants (*i*- and *u*-epenthesis). The exact phonetic nature (and age) of the phenomenon is not known. The sibilants are not marked for palatalisation (s, z, s, z), but permitted palatalisation of preceding *a* (see section 2.3.1.3), and *m* was not affected. Labialisation affected only *r* and proto-Ir. *h*. For details, see de Vaan 2003, Chapter 7.

Palatals + i_j The alveo-palatal consonants c, j usually remained before i, e.g. ci- 'who, what?', but were palatalized before vowel:

- ci > š(ii): YAv. š(ii)āiti- 'happiness' < čiāti- (also OPers. šiyāti-); fem. apaši 'backwards'
 apāčī;
- jį, ji > ž, ži (rare): YAv. druža-: OAv. drujiia- 'to lie'; aži- 'dragon' < aji- (OInd. ahi-).

2.3.2.4a i- and u-epenthesis in Avestan

i-epenthesis occurs regularly before *r*, dentals, and labials and in consonant groups: Av. *irixta*- 'left', OAv. *gddī* 'come!', 1p mid. ending "*ma'dē*; YAv. *stao'ti* 'praises', *vand'ntī*-'victorious' (fem.); *i0iiejah*- 'danger'; *a'pī*, *a'bĭ*, *aē'biiō*; – between compounds: *tarō'dīti*- for *tarō.dīti*- 'scorn'; – in consonant groups: dat.-abl. plur. *vāyž'biiō* (<*vāk*- 'word'); *a'rime* 'in peace and quiet' (<*ar*"*m'e*, cf. *armaē*"); – vocalic *ər*": *miriia*- 'die' <*m*<u>r-i</u>a-;

u-epenthesis. This occurs regularly before *r*: YAv. "*rūraod*- 'howl', *a*"*ruša*- 'rosy white', *po*"*ru*- 'much'; OAv. *pa*"*ruuiia*- 'first'.

Combined *i*- and *u*-epenthesis. This occurs before *r*: YAv. *paoⁱriia*- < paruia- 'first'; *paoⁱrī*- < paruī-, fem. of *po^uru*- 'much'; – vocalic *ər*²: $t\bar{u}^{i}riia$ - 'father's brother; fourth' (< (p/k)truia-), dat.-abl. plur. *nəruiiō*, *muruiiō* 'for the men' (< nr-uistio - nr-biah).

2.3.2.4b Dissimilation of ii and uu to ai, ai and au

In a further development, the sequences $ii(\underline{i}\underline{i})$ and $uu(u\underline{u}\underline{i})$ resulting from epenthesis were dissimilated to ∂i , $ai(\partial \underline{i}, a\underline{i})$ and $\partial u(\partial \underline{u})$: OAv. $\partial n\partial^{t}ti$ - 'non-going' ($\langle an-i^{t}ti$; cf. $x^{v}\overline{i}tic\overline{a}$ 'and good going'); daddiat 'shall she see' ($\langle d\overline{i}d\underline{i}at$ ').

On absence of epenthesis due to stress, see section 2.3.4.

2.3.2.4c Epenthesis in Old Persian

Possible examples of epenthesis include $pa^i \bar{s}iy\bar{a}$ 'before' (M Pers. $p\bar{e}\bar{s}$ if from $pa0\bar{a}(k)$) and $y\bar{a}u^hman$ - and $y\bar{a}u^hma^in$ - (in control(?)' if from yau^s -man- (harnessing' ($\langle yaug$ -; several other interpretations have been proposed, see, e.g. Hoffmann 1975: 56–57, 1976: 633 n. 20).

2.3.2.5 Glides

The glides-initial y-, y- and intervocalic i, y-are in complementary distribution.

 $\underline{i}, \underline{u} > i\underline{i}, u\underline{u}$. Both postconsonantic and postvocalic \underline{i} and \underline{u} were apparently realised (by the time of our mss.) as $\underline{i}\underline{i}$ and $\underline{u}\underline{u}$ (including $\underline{u}\underline{u} < u\beta$), written \underline{i} and $\underline{u}\underline{u}$; note OAv. $\overline{o}i \cdot \underline{i} = YAv. ai \cdot \underline{i}$ for $ai \cdot \underline{i}$. In Old Persian, $\langle iy, uv \rangle$ is written for postconsonantic $(\underline{i})\underline{i}, (\underline{i}\underline{i})\underline{u}$.

 $a-\mu C > aoC$ or $\bar{a}uC$ at the morpheme boundary (reduplication, prefixes): Av. perf. stem vaon- < μa - μn - < van- 'to win', OAv. vāunu- '*winner'; YAv. vaox^vah- 'having spoken' < μa - μk - μa - < vak- 'speak'.

Initial $\bar{i}_{\bar{i}} > ii$ and $uu - (< u\beta -) > uu$. These are rare and are often written $y - (\bar{i} -)$, v - in the manuscripts: *iieiiən* ($\bar{i}eii$ -, Y. 42.6), subj. of the perf. stem *ii-āii*- < ai- 'go' (cf. OInd. $iy\bar{a}y$ -), $uua(\dot{u}ua) < u\beta a$ 'both'.

įų and *ųį*. These groups (also with $\mu < \beta$ and μ) survive occasionally in the manuscripts (only *iiuu*; no examples of *uuii*?), but sometimes were resolved by anaptyxis (or dissimilation?): initial, *viiemi* and *v^aiiemi* < *via*- 'pursue', *y^auua* = *yuua* (*yúua* < *yuuan*- 'youth'); – medial, *hāuu^aiia*, *hāuu^aiia*-ca 'left (hand)' (cf. fem. *haoiiā*-); *driuu^aiias*-ca (< *driuuī*- fem. of *driyu*- 'poor'; see Skjærvø 1997b). Often they were simplified to *ių* < iuu>. Final -*įųõ* (<-*įau*) appears as -*iiō*: voc. *maniiō*- < *maniiu*- 'spirit'; loc. *daŋhō* < *daŋhū*- 'land'; see de Vaan 2003, §25.10; Sk jærvø 2005a: 202–3).

du. The initial cluster du- shows up variously (see section 2.3.2.3): OAv. duuaēšah-'hostility', $d^{ai}bišiia$ - 'be hostile', YAv. $\underline{i}ba\bar{e}\bar{s}ah$ -, $\underline{i}bi\bar{s}iia$ -, but perf. diduuaēša 'I have been hostile'; OAv. $d^{ai}bitiia$ - 'second', YAv. bitiia-, but $\bar{a}\underline{i}bit\bar{u}m$ 'a second time', OPers. $duvit\bar{i}ya$ -. Intervocalic du: 2nd plur. mid. $-d\underline{u}am > OAv. -d\bar{u}m$, YAv. $-\delta\beta am$; YAv. $ar^{2}\delta\beta a$ - 'upright', beside ar'duua-.

 0μ . The cluster 0μ became Av. 0β : ratuš 'model' vs. gen. ra $0\beta\bar{o}$, but loc. gātuu $\bar{o} < g\bar{a}tau < g\bar{a}tu$ - 'place'.

In Old Persian, the θ also spread to the rest of the paradigm: *xratu*- 'intelligence' (MPers. *xrad*) and *xra* θ *u*-, but only $g\bar{a}\theta$ *u*- attested (MPers. $g\bar{a}h$).

2.3.2.6 Simplification of consonant groups

Certain consonant groups lose one consonant. The loss may have been early (e.g. earlier than the IIr. ru(p)ki rule) or late: OYAv. $di\beta za$ - 'seek to deceive' < di-dbza- (OInd. dipsa-); OAv. loc. plur. $naf s\bar{u} < nap(t)$ - $su < nap\bar{a}t$ - 'grandson'; YAv. $\circ fsn\bar{i}$ - 'with ... breasts' (cf. $fst\bar{a}na$ - 'breast'); YAv. $s\bar{a}\partial r$ - vs. $s\bar{a}star$ - '(false) teacher' (see also section 2.3.2.1a).

Final *-ant-s* regularly became Av. *-qs* (*cuuqs* 'how great?'), but appears to have been simplified to *-an-s* early enough to develop like IIr. *-an-s* in the nom. sing. of active present participles > proto-Ir. *-anh* (OInd. *-ām* before vowels): YAv. *ja'ðiiq* and *framrū* (<°*nnruµanh*); the YAv. nom. sing. ending *-ō* may then have been substituted for *-ā*. (Schindler 1982 proposed dialect influence in these forms.)

2.3.3 Sandhi

Stem-initial or -final consonants or vowels are regulary modified by preceding or following sounds after prefixes or before suffixes (derivational or inflectional), as well as, more generally, between members of compounds, according to the rules discussed above.

Changes to a word-final consonant or vowel are usually caused by enclitics, mostly Ir. -*ca*, -*cit*, occasionally pronouns with initial *t*-, and, exceptionally, before nouns with initial *t*-. This sandhi principally affects final vowels and final Ir. -*cusl-ah*:

- before enclitic Ir. -ca, -cit: OAv. manas-cā 'and thought', gaēθås-cā 'and living beings', yimas-cīţ 'even/also Yima'; YAv. miθras-ciţ 'even/also Miθra', haomąs-ca 'and the haomas', vīspās-ca 'and all'; OPers. (with -s-c- > -š-c-): manaš-cā 'and thought', kaš-ciy 'anybody';
- before enclitic pronouns and nouns: OAv. yāŋgs-tū 'whom you', YAv. ōiγ'matas tūrahe (proper name).

In compounds: OAv. $r\bar{a}nii\bar{o}.sk\partial r^{\prime}t\bar{i}$ - 'joy-making' (<-as-k-); YAv. drujas-kanā- 'den of the Lie'; OPers. vahayaz-dāta-, proper name: 'given as the better (of the two)'.

Final -t was probably assimilated to following sibilants and affricates, but in Avestan it was restored as $-\underline{t}$; in Old Persian, it was also analogically replaced by $-\underline{s}-\underline{c}$: YAv. $\underline{at}-c\overline{t}$, $\underline{yat}-c\overline{t}$; OPers. \underline{aciy} , \underline{yaciy} , but $\underline{aniyas}-ciy$, $\underline{avas}-ciy$, $\underline{cis}-ciy$.

2.3.3.1 Anaptyxis in sandhi

Anaptyxis in sandhi occurs after OAv. final -m before fricative or sibilant: $y\bar{a}m^{2} spašu \partial \bar{a}$ 'whom you *regard', $h\bar{a}m^{2}$. fraštā 'he consulted with'; – after final -s/-š before consonant: OAv. vasas^a.xša ∂ra - 'having command at will', YAv. us'. histon 'they stood up', nomas^a tē 'homage to you!'; yas^a $\partial \beta qm$ ('half' -sandhi: < yas + $\partial \beta qm$ for *yas tuuqm), aýhås^a tanuuō 'of this body'.

2.3.3.2 Final vowels and diphthongs in sandhi

Before enclitic $-c\bar{a}$, vowel quantities may change and, at least in Old Persian, original quantities reappear: OAv. sauua-cā vs. sauuā 'life-giving strengths', $x^{t}\bar{u}i-c\bar{a}$ 'and good going' vs. $\partial n\partial^{t}t\bar{i}$ 'non-going'; – YAv. mašiiā-ca vs. mašiia 'mortal men', etc.; – OPers. mana-cā vs. manā 'of/to me'; avahāya-rādiy 'on account of that' vs. avahāyā.

In Avestan, monophthongised final dipthongs reappear: $ta\bar{e}-c\bar{t}\underline{t}$ 'they too' vs. OAv. $t\bar{o}i$, YAv. $t\bar{e}$; YAv. drao-ca 'and in tree' vs. * $druu\bar{o}$.

2.3.4 Stress-related alternations

Changes in vowel length are found frequently throughout the Avestan corpus (see section 2.1.1.7e). At least some of these changes seem to be due to stress, which is sometimes termed 'rhythmical shortening/lengthening'. Other cases of lengthening and shortening of vowels includes final \tilde{a} , \tilde{t} and \tilde{u} before enclitics.

We do not know what the actual stress patterns of Avestan and Old Persian were, although stress must have been responsible for several morphophonological alterations, both in the case of vowels and of consonants. Vowel quantities often change when words receive an enclitic particle or in the course of declension or conjugation. Enclisis also seems to have affected the palatalisation and labialisation of consonants and the use of anaptyxis, as well as the distribution of alternate consonants.

Epenthesis appears to be omitted in words with enclitics: OAv. $\partial n \cdot \partial^{i} ti \cdot (\langle ant^{i}ti \cdot \rangle vs. x^{v} \cdot iti \cdot c\bar{a}; buua'nt\bar{i}$ 'they shall become' vs. buuanti-cā; ma'ni-madi-cā 'and we think' vs. $v\bar{a}^{u}r\bar{o}^{i} - ma'd\bar{a}$ 'may we *classify'; YAv. frādati-ca 'and he furthers', vīsati-ca vs. vīsa'ti 'twenty' (see de Vaan 2003: Chapter, 7).

Absence or presence of anaptyxis in Old Avestan may depend on stress patterns: $u\check{s}\partial^{u}r\bar{u}$ (< $u\check{s}u^{u}ru$ -) vs. $u\check{s}uruii\bar{e}$; $a^{i}riiamn\bar{a}$ vs. $a^{i}riiam^{a}nas-c\bar{a}$; $\partial r^{3}\check{z}-ji\check{s}$ vs. $\partial r^{3}\check{z}^{2}-jii\bar{o}i$.

The (pre)aspirated/unvoiced allophone of r before p, k, $t(hrp, hrk, hrt > \tilde{s})$ is apparently limited to syllables which bore the stress in proto-Avestan: acc. kəhrpəm 'body' vs. hukər^opta- 'having a good body'; mahrka- 'destruction' vs. amər^oxti- 'absence of destruction'; aša- 'Order' vs. astuuaţ.ər^ota- 'he through whom Order will have bones', acc. ašim 'reward' vs. $\bar{a}r^{oi}tim-ca < artim-ca$ (P. 39) beside ašim-ca; bāšar- 'rider' <bar-tar- vs. bar'tar- 'carrier' (corresponding to bara- mid. 'ride' vs. act. 'carry'). For details, see de Vaan 2003, §29.

2.3.5 Metro-phonology

Certain (morpho-)phonological phenomena expected from the history of the language are illuminated by the Avestan meters.

The Old Avestan meters are syllable-counting and based on rhythmical units of (more or less) identical numbers of syllables. Stanzas contain three to four rhythmical units ('lines') composed of two smaller units ('half-lines') divided by a cesura.

The Young Avestan meter is based on regular rhythmical units of eight syllables. Next in frequency are probably units of seven and nine syllables. Set formulas tend *not* to be adjusted to the meter and frequently causes the number of syllables to differ from the standard eight (see Lazard 1984, 1990, 2002).

The principal phonological features revealed by the Old Avestan meter are disyllabic long vowels and diphthongs and 'Siever's Law' (section 2.3.5.2). In the Young Avestan octosyllabic meter, contracted vowels and Siever's Law apparently provided the poets with flexibility of syllable count, and often, apparently, they scanned these words according to the needs of the meter. Whether they actually did this cannot, of course, be verified.

2.3.5.1 Disyllabic long vowels and diphthongs

Disyllabic long vowels and diphthongs are found in laryngeal-stem nouns and verbs, in compounds, and between preverb and verb, as well as in certain morphemes which may or may not have contained laryngeals. Examples:

Nouns: neut. *h*-stem $d\hat{a} = da'\hat{o}$ 'gift'; *Han*-stem $mq\theta r\bar{a} = mq\theta ra'\bar{a}$ 'keeper of the $mq\theta ra'$ (< $man\theta ra$ -Han-, but obl. $mq\theta r\bar{a}n$ - < $man\theta ra$ -Hn-); gen. plur. -qm (- $\bar{o}m$) (always disyllabic); - $\bar{a}rmd'ti$ - 'humility' has a disyllabic initial \bar{a} - (cf. OInd. $ar\dot{a}mati$ -).

Verbs: subj.: $d\bar{a}'t\bar{i} = da'a't\bar{i}$ 'he shall give/place' ($\leq daH$ -ati; but $dada't\bar{i}$ 'they give/place' $\leq da$ -dH-ati $\leq da$ -dH-nti).

Compounds: $f^{3}rašaoštrāi = fraša'uštrāi, vīštāspa- = višta'aspa-, d^{5}jāmāspa- = djāma'aspa-, all proper names, but$ *spitāma-*'Spitamid' <*spita-Hma-*'having fattened strength (*Hama-*)',*darəgāiiu-*<*darga-Hiu-*'giving a long life span (*āiiu-*)'.

Between preverb and verb: $\bar{a}iia\underline{i} = \bar{a} - a\underline{i}a\underline{i}$ 'he shall come', $\bar{a}it\bar{e} = \bar{a} - it\bar{e}$ 'to come', $\bar{a}ii\bar{o}i = \bar{a} - i\underline{i}\bar{o}i$ 'I request'.

Optional disyllabic scansion: the thematic dat. sing. ending $-\bar{a}i$ is most often disyllabic; - the thematic subj. endings $1s - \bar{a}$, $\bar{a}i$, $3s - \bar{a}t$, 3p - qn are mono- or disyllabic.

2.3.5.2 Siever's law

II. \underline{i} and \underline{u} after consonant were realised as \underline{i} and \underline{u} or \underline{i} and \underline{u} according to whether the preceding syllable was light or heavy: if \underline{i} and \underline{u} were preceded by short vowel plus one consonant (light syllable), the phonetic realisation was \underline{i} and \underline{u} ; if \underline{i} and \underline{u} were preceded by a syllable with a long vowel or diphthong plus one or more consonants or by short vowel plus more than one consonant (heavy syllable), it was \underline{i} and \underline{u} .

In Iranian, stops before consonantal [i] and [u] were then spirantised, but remained before [ii] and [uu]. This is still the situation in Old Avestan:

- after light syllable, disyllabic: ufila- 'weave' < uf-ia-, mor'0iiu- 'death' < mrt-iu-;
- after heavy syllable, trisyllabic: vaēpiia- 'a *trembler' < uaip-ija-, mašiia- 'mortal man' (<mart-ija-).

The endings in $-d\underline{u}$, however, apparently do not cause Siever's Law: OAv. $v\overline{v}duii\overline{e}$ '(in order) to know' (< uiduai, light) $m \partial r' ngduii\overline{e}$ '(in order) to be destroyed' (< mrng-duai, heavy; there are no examples of the 2p ending $-d\overline{u}m < -d\mu am$ after consonant in metrically unambiguous positions).

In Young Avestan, there are many exceptions: suffix *-tuua-*, $-0\beta a$ - (see section 4.6.2): $mq0\beta a$ - 'that ought to be thought' $< man-0\mu a$ and $fr\bar{a}iias^{3}0\beta a$ - 'that ought to be sent forth in sacrifice' (for $\circ_{i}as$ - $tu\mu a$ -); $-suffix -\mu ant$ - (see section 9.1.1.1): $\bar{a}f \circ nt$ - $< \bar{a}fuuant$ -'rich in water' (for $\bar{a}p$ - $u\mu ant$ -); -tu-stems: gen. plur. $y\bar{a}0\beta am < y\bar{a}tu$ - 'sorcerer' (for $i\bar{a}t$ - $u\mu a'$ am-).

2.3.6 Phonological changes associated with inflection and endings

(Morpho)phonological changes associated with inflection and nominal and verbal endings affect vowels and consonants, among them the following.

Important vowel changes include $a, \bar{a} > e$ (see section 2.3.1.3); $-an - > -\partial n$ and -in- and $-aiaN - > -a\bar{e}n$, $-aiaiaN - > -aia\bar{e}N$, and -auaN - > -aon (see section 2.3.1.4).

Consonant changes are found in stems (caused by the IE.-IIr. ablaut) and include spirantisation (see section 2.3.2.2); palatalisation (see section 1.2.1.2); dental assibilation (see section 1.3); assimilation (see sections 1.3, 2.1.2.2., 2.3.2.1); voice dissimilation (see section 2.3.2.1); and the modifications of IIr. \dot{c} and \dot{j} and IIr. s(z).

Spirantisation of voiceless stops (p/b, k/g); nom. sing. $\bar{a}f$ - $\check{s} < ap$ - 'water', $v\bar{a}x$ - $\check{s} < \mu ak$ -'word' drux- $\check{s} < drug$ - '(cosmic) Lie'; loc. plur. af- $\check{s}u < ap$ -; aor. lp μaux -madi, past part. μx -ta- $\langle \mu aug$ - 'harness'; weak perf. stem $\check{c}a$ -xr- $\langle kar$ - 'do', $\check{c}a$ -xn- $\langle kan$ - 'love'; ci-cit- $\langle kait$ - 'distinguish'.

Palatalisation of velars before IIr. e, i; acc. sing. $u\bar{a}c-am < uak-$; pres. jan-lgn- 'strike down', aor. jam-, past part. gmata- < gam- 'come'.

Dental assibilation: pres. act. 3s das-tai < da-d-t°, daz-dai < da-d^h-t°, imp. act. 2s daz-di, mid. 2p daz-duam < da-d-d° < dā- 'give', d^hā- 'place'; inj. 3s nāis-t, imp. 2p nis-ta < naid-'scorn' (but nāis-mi analogical for *nāin-mi); past. part. uis-ta- < uaid- 'find', bas-ta-(analogical for *baz-da-), band^{h-} 'bind'. Assimilation of voiceless stops before (IIr. aspirated) voiced stops: instr. plur. abis < ap-bis; azd-bis < ast- 'bone'; – before \tilde{z} : $aug-\tilde{z}a < aug$ -.

Assimilation of sibilants: nom. sing. haruatās- < haruatāt- 'wholeness'; pres. 2s vaši < vać-ši (vaš-ši) < vać- 'wish'; imp. mid. 2s frać-šua < frašua < parć-lfrać- 'ask'.

Voice dissimilation of $x0 > x\delta$ is found, e.g. in *tar*-stems: *f*-0r-*ai* > $f\partial \delta r \delta i < ptar$ - 'father'; perfect 2s: $\mu a - \mu a x - 0a > vauuax$ ' $\delta a < wak$ - 'speak'; and in the suffixes -0a-, -0ra-: vax' δra - 'speech organ'.

Modifications of IIr. \dot{c} and \dot{j} : plur. acc. $a\dot{s}n-ah < asan$ - 'stone, heaven'; pres. 3s $va\dot{s}-ti$, 2p $u\dot{s}-ta < va\dot{c}$ -; OAv. $\partial r'\dot{s}$ 'straight' (adv.) $< H_{l'}\dot{j}-\dot{s}$ (cf. $\partial r'^2 zu$ - 'straight' adj.); sing. instr. $bar\dot{s}n-\ddot{a} < bar\dot{j}^han$ - 'height'.

Modifications of IIr. s(z): nom. sing. $v\bar{a}x-\bar{s} < uak$ -, loc. plur. $af-\bar{s}u < ap$ -; loc. plur. $anf^{h}ahu < anf^{h}ah-hu$ 'in constrictions'; pres. Is ah-mi, 2s ahi, 3s as-ti, 3p h-anti, imp. 2s z-di < ah- 'be'; pres. inj. 2s bar-a-h < 'you carry', opt. 2s $bar-ai-\bar{s}$; imp. mid. 2s -Sua: pres. Av. $y\bar{a}sa-g'ha < y\bar{a}-sa$ - 'request', $dasua < da-d-sua < d\bar{a}$ - 'give'; aor. $kr-\bar{s}ua$, pres. $kr-nu-\bar{s}ua < kar$ - 'do'; s-aor. inj. mid. 1s mag-h-i, 3s man-s-ta < man- 'think'; imp. 2p $0r\bar{a}-z-duam$; 3s act. 3p $st\bar{a}-h-at < st\bar{a}$ - 'stand'; subj. 3s $nai-\bar{s}-a-t < nai$ - 'lead'; perf. stem $hu-\bar{s}uaf < huap$ - 'sleep'.

3 MORPHOLOGY I: NOMINAL MORPHOLOGY

The morphological categories of nouns, verbs, etc. are the same in all three Old Iranian languages and are largely identical with the inherited Indo-Iranian system. They are much less well known than the Old Indic system, however, because of the limited material.

There are some modifications: in Young Avestan and Old Persian, the abl. sing. is marked in all declensions. In Old Persian, the genitive merged with the dative and the instrumental with the ablative into two cases: gen.-dat. and instr.-abl. In Young Avestan and Old Persian, a 'preterital optative' developed.

Note also that Old Persian shares morphological (also lexical) isoglosses with Middle and Modern Iranian languages remaining in Central Asia, so-called 'Randsprachen' phenomena.

Typically, the morphological categories are defined by the type and morphology of the inflection and derivation. Both nominal and verbal stems may consist of a root or root + formant, to which inflectional endings are attached: R-(f)-E.

Both nominal declension and verbal conjugation are characterised by complex patterns of quantitative ablaut in the so-called athematic classes, affecting the root, and/ or the formant, and/or the ending, as opposed to the absence of ablaut in the nominal and verbal so-called thematic classes, both marked by a thematic vowel -a (< ablauting IE. -o/-e). The various ablaut patterns result in the extremely complex inflectional morphophonology described above and below.

It is useful to classify nominal and verbal stems as strong and weak (occasionally also middle). The strong stem, if possible, takes the lengthened grade of the root or stem formant, the weak one the full or zero grade. Strong cases are the nom., acc. sing., nom.-voc.-acc. dual, and the nom. plur.

Pronouns have several endings not found in nouns.

3.1 Nouns

Iranian, on the whole, maintains the inherited the system of vocalic and consonantic declensions in nouns and adjectives; the triple gender (masc., fem., neut.) and number (sing., dual, plur.) systems; and the eight cases.

3.1.1 Gender

The distribution of the genders in nouns, adjectives, pronouns, nominal forms of the verb, and numerals is that of Indo-Iranian, with some individual Iranian features, e.g. *vak-lvac-* is feminine in Old Indic (Latin *vox* fem.), but masculine in Avestan.

A few words have both feminine and neuter forms (not in complementary distribution), e.g.:

- fem.-neut.: YAv. zao0rā- 'libation'; p əšanā- 'battle'; OP. hunarā- 'skill';
- YAv. neut. a-stems frequently have fem. plur., e.g. sing. nmānəm 'house', plur. nmānå; masc.-fem.: OAv. mqθrā- 'poem' (fem. Yasna 43.14).

See also section 3.1.3.1 Derived feminines.

3.1.2 Number and case

There are three numbers: singular, dual and plural. The few dual forms found suffice to show that this category was of the old Indo-Iranian type, but with distinct genitive and locative forms in Old Avestan. See Tables 3.3.1-2

Proto-Iranian had eight cases: nominative, vocative, accusative, genitive, dative, ablative, instrumental, and locative. All are preserved in Avestan, while in Old Persian they were reduced to six, the genitive being also used for the dative and the ablative having merged with the instrumental.

Case syncretism is common: vocative = nominative in dual and plural; genitive = ablative except in the *a*-stems (in YAv. and, partly, OPers., the abl. was distinguished from the gen.); nominative = accusative in the feminine plural; nominative = accusative (no voc.) in the neuter singular, dual, and plural; dative = ablative in the plural; dative = ablative = instrumental in the dual; Old Persian (and Young Avestan?), genitive = locative in the dual.

3.1.3 Stem classes and declensions

Synchronically, stems can be classified as vowel stems (ending in $a, \bar{a}, i, \bar{i}, u, \bar{u}, ai$, and au) and consonant stems (most commonly ending in n, r, h, but also p, t, nt, d, etc.). The main difference is between *a*-stems and all the others: only *a*-stems had distinct forms for the gen. and abl. sing. in Indo-Iranian and proto-Iranian (elsewhere, gen. = abl.) and a gen. sing. not ending in -h/-s. Another useful classification is declensions with and without -h/-s/-s (-S in the following) in the nom. sing.

Diachronically, several of the 'vowel' stems are laryngeal stems, with $\bar{a} < \bar{a}$ or aH, $\bar{i} < iH$, and $\bar{u} < uH$ and are still declined as consonant stems. The feminine \bar{i} -stems fall into two groups, the so-called $v_{\vec{r}}k\bar{i}$ -type, with the invariant formant -i-H- (> -iC, -ijV), and the so-called $dev\bar{i}$ -type, with ablauting formant $-\bar{i}-I-jaH$ -. The feminine

 \bar{a} -declension apparently acquired several features from this type, including the voc. sing. in -*ai* and the element -*i* \bar{a} -.

Iranian declensions are on the whole inherited from Indo-Iranian, sharing both regular paradigms and archaic singularities with Old Indic, from which they differ mainly because of the phonological developments described above.

Special Iranian features include the protero-, hystero-, and holo-kinetic declensions (see section 3.1.1.6b).

The principal innovations are the extension of the abl. sing. ending -t in Young Avestan and Old Persian and the syncretism of cases in Old Persian.

3.1.3.1 Derived feminine adjectives and nouns

Feminine forms of most *a*-stem adjectives are declined according to the \bar{a} -declension: Av. $s\bar{u}r$ -a- 'rich in life-giving strength', fem. $s\bar{u}r$ - \bar{a} -.

Some a-stem adjectives, notably those denoting material, have ' $v_{I}k\bar{i}$ -type' feminine forms: YAv. maniiauu-a- 'belonging to the world of thought', fem. maniiauu- \bar{i} -; zarəna $\bar{e}n$ a- 'of gold', fem. zarəna $\bar{e}n$ - \bar{i} -, OPers. a $\partial a''$ gain-a- 'of stone', fem. a $\partial a''$ gain- \bar{i} -; female patronymics in Av. - $f^{\partial}\delta r$ - \bar{i} - 'daughter of'.

The *u*-stems and consonant stems have '*devī*-type' feminines with zero grade of ablauting suffixes: YAv. *pour-u-* 'much', fem. *pao'r-ī-* (< par-u- paru-i-). In this type, the final -*ī-* probably palatalised a preceding $k > \check{c}$ and further to \check{s} : *apaš-i* 'backwards' $< *apa\check{c}-i < apank$ - (only example).

Non-ablauting suffixes: present participles of thematic verbs in -*aⁱnt*-*ī*-, -*∂nt*-*ī*-: van-aⁱnt*ī*- 'winning', bar-*∂nt*-*ī* 'carrying'; comparatives in -*iiah*-, fem. -*iieh*-*ī*-: maz-*iiah*- 'greater', fem. maz-*iieh*-*ī*-;

ablauting suffixes: adjectives and present participles of athematic verbs in -ant-, fem. - $a^{i}t$ - \bar{i} : $b \partial r^{3}z$ -ant- 'high', fem. $b \partial r^{3}z$ - $a^{i}t\bar{i}$ -; perf. part. -uuah-, fem. - $u\bar{s}$ - \bar{i} -: $da\delta$ -uuah- 'creator', fem. $da\delta$ - $u\bar{s}$ - \bar{i} -; agent nouns in -tar-, fem. - θr - \bar{i} -: bar^{3} -tar- 'carrier', fem. bar^{3} - θr - \bar{i} - 'womb'.

Fem. (and neut.) forms of *i*-stem adjectives are declined as *i*-stem nouns: masc., fem., neut. $\bar{a}hu^{i}r$ -*i*- 'belonging to Ahura Mazdā'.

Neut. adjectives are declined like neut. nouns: nom.-acc. sing. Av. sūr-əm, āhuⁱr-i, voh-u 'good', OPers. fraš-am 'perfect', par-uv 'much'.

Pronouns and the numerals '3' and '4' have some special masc. and fem. morphemes (see section 3.6.1).

3.1.4 Protero-, hystero- and holo-kinetic declensions

In these declensions, full and zero grades in formants and endings alternate. Proterokinetic forms have stem formant in the full grade and the ending in the zero grade; hysterokinetic forms have stem formant in the zero grade and ending in the full grade; and holokinetic forms have two full grades or two zero grades.

Avestan has a greater incidence than Old Indic of the proterokinetic as opposed to hysterokinetic, including from *n*-stems (r/n-stems), e.g. hysterokinetic gen. sing. -*i*-ah, -*u*-ah, -*n*-ah, but proterokinetic -ai-š, -au-š, -aŋ-h.

3.1.5 Case endings

The basic case endings as reconstructed for proto-Iranian are set out in Tables 3.3.1–2. Note, again, the convention -S = -h/-s/-s. Laryngeals are not always noted.

For actual Avestan and Old Persian endings, see on vowel and consonant changes (see sections 2.3.1-2). Note in particular assimilations between final consonants of stems and initial *S*- and *b*- of endings.

Note also that the new YAv. abl. forms are formed by replacing the proto-Av. gen. ending -S by -t: $ga^{i}ri$ - 'mountain': Ir. gen. garai- $\vec{s} \rightarrow garai$ - $t > gar\bar{o}i$ - \underline{t} ; nar- 'man': Ir. gen. $n\underline{r}\cdot\underline{s} \rightarrow n\underline{r}\cdot\underline{t} > n\underline{r}^{-}\underline{t}$); $bar^{3}sman$ - 'barsom': Ir. gen. barsman- $h \rightarrow$ abl. barsman- $t > bar^{3}sman$ (the ending reappears before the postposition -a: $va\bar{e}sman$ -d 'up to the entrance hall').

	Basic	Consonant stems
Sing.		
v	-Ø	-Ø
N	-S, -Ø	-hl-sl-š, -Ø
Α	-m, -am	-am
NAn	-am, -Ø	-Ø
G	-ah, -S	-ah, -hl-š
Ab	- <i>t</i>	-atl-t
D	-ai	-ai
I	-ā, -H	-ā
L	-i, - Ø	-i
Plur.		
NV	-ah	-ah
Α	-ah, -nS	
NAn	-i, -H, -Ø	-i, -H, -Ø
G	-a'ām	-a'ām
DAb	-bjah	-bjah
I	-biš	-biš
L	-Su	-hul-sul-šu
Dual		
NAV	-ā	-ā
NAn	-ai, -ī	-ai
G	-āh	-āh
DIAb	-bjā	-bjă
L	-ah	-ah

TABLE 3.3.1: CASE ENDINGS: CONSONANT STEMS

3.1.5.1 The zero ending

No ending is typical of several cases and declensions, sometimes accompanied by ablaut of the stem formant. Among the noteworthy instances are the following:

- nom. sing. masc. h-, r-, n-, and ai-stems, which also drop the final consonant: YAv. naⁱre.man-å (<-āh) 'having manly thoughts', OAv. p-tā < p-tar- 'father', aⁱriiā-mā < aⁱriia-man- 'Aⁱriiaman', kauu-ā 'kauui, poet';
- nom.-acc. sing. neut. n- and r-stems have zero grade of the formant: nā-mā 'name' < nā-mn, aii-ar' 'day' < ai-r;
- nom.-acc. plur. neut. h-, n-, and r-stems have lengthened grade: YAv. nā-man 'names', OAv. aii-ār⁵ (YAv. aii-an), vaxii-å < uahi-āh 'better things';
- loc. sing. neut. n/m-stems also have (apparently) lengthened grade beside -i: OAv. caš-man 'in the eye' (also caš-ma'n-i), OYAv. dam 'in the house' (YAv. also dam-i).

Vowel ste	ems				
	a-stems	ā-stems	ī-stems	<i>i-lai</i> -stems	<i>u-lau</i> -stems
Sing.					
V	-a-Ø	-ai-Ø	-i-Ø	-ai-Ø	-au-Ø
Ν	-a-h	-ā-Ø	-ī-Ø	-i-š, -ā-Ø	-u-š, -āu-š
Α	-a-m	-ā-m	-īm	-i-m, -āj - am	-u-m, -āu្-am
NAn	-a-m	1		-i-Ø	-u-Ø
G	-a-hja	-ā-jā-h	-jāh	-ai-š, -j-ah	-au-š, -ų-ah
Ab	-āt	[-ā-jā-t	-jāt	-ai-t	-au-t, -u-at]
D	-āi (-a' ai)	-cīi (-ā-jā-i)	-jāi	-aį-ai, -į-ai	-ay-ai, -y-ai
Ι	-ā	-ā (-a <u>i</u> -ā)	-ī	-ī	-ū, -ųā
L	-a-i	-ā-į-ă		-ă-Ø	-au, -Ø
Plur.					
NV	-ā (-āhah)	-ā-h	-īš	-ai̯-ah, -āi̯-ah	-au-ah, -āu-ah
Α	-a-ŋh	= N	= N	-i-nš	-u-nš
NAn	-ā			-ť	- <i>ū</i> ĭ
G	-ān-a`ā́m	-สิท-ล`สี้ทา	- <i>เ</i> -n-a`ส้เท	-i-n-a` <i>ām</i>	-น-ก-ล`ลี้m, -นู-ล`ลี้m
DAb	-ai-bjah	-ā-bjah	-ī-bjah	-i-bjah	-u-bjah
I	-āiš	-ā-biš	-ī-biš	-i-biš	-u-biš
L	-ai-šu	-ā-Iาu	-ī-šu	-i-šu	-u-šu
Dual					
NAV	-ā	-ai	-ī	-ī	-17
NAn	-ai				
G	-a į-āh	-ai-āh		- <i>iू-āh</i>	-y-āh
DIAb	-ābjā	-ābjā	-ī-bjā	-ī-bjā	-u-bjā
L	-aj-ah	•			-y-ah

TABLE 3.3.2: CASE ENDINGS: VOWEL STEMS

Note that the endingless instr. sing. and the nom.-acc. plur. neut. probably had an original final laryngeal -H.

3.1.5.2 Endings in *b*-

Several endings have an original initial *b*- (see Tables 3.3.1–2; pronominal forms, see Table 3.3.5). In Young Avestan, the forms with *b* are common in all positions, but must be due to analogyg, as the forms with *-b*- are phonetically expected only after consonant (*-nbiš*, *-t.biš*, etc.). After vowels, *b* became $\beta > \mu$ (*uu*), which is still frequently preserved (see Skjærvø 2007a): dat.-abl. plur. *xštəuui-βiiō* (<*xštauui-*, a mythological people), *võiynā-uiiō* < *võiynā-* (a kind of natural disaster, flood?), *rasma-oiiō* (<*rasman-* 'battle line'); note also the pronominal dat. sing./plurs. *māuuõiia* (<*maβia* 'for me'), etc.; – dat.-abl.-instr. dual *bāzu-βe* < *-bia* < *bāzu-* 'arm'; – instr. plur. *-βiš* > *-uiš* (**-aoiš*): *vaŋuluiš* < *vaŋhu-* 'good'. The forms vāyž'l'biiō, instr. *vayžibiš* < *vak-* 'word' must have replaced forms such *vay-βiō* and **vay-βiš* > **vaoiiō* and **vauuiš*.

The *n*-stem forms such as $n\bar{a}m\bar{a}ni\bar{s} < n\bar{a}man$ - 'name', $a\bar{s}aon\bar{s} < a\bar{s}auuan$ - 'Orderly' I believe are analogical replacements for $n\bar{a}mau\bar{s}$, $a\bar{s}auau\bar{s}$ (see Sk jærvø 2007a).

The expected forms of the *ah*-stems, *-*az-biš* and *-*az-biah*, were replaced by $-\overline{b}bi\overline{s}$, $-\overline{b}bi\overline{c}$, as if $-ah + bi\overline{s}$.

3.1.5.3 Added $-\tilde{a}$

In Young Avestan, a final $-\bar{a}$ can be added to the acc. sing. ($v\bar{a}r\partial m$ -a '*according to pleasure') and the abl. sing. ($-\bar{a}\partial$ -a, $-m\partial nd$ -a), with the specific meaning 'all the way to, up to and including, throughout' (see section 5.4.6.3). Old Avestan also has dat. sing. $-\bar{a}i$ and $-\bar{a}i.\bar{a}$.

In the loc. sing./plur. we find the particle in all three languages: OAv. (only sing.) $x^{v}\bar{a}\partial r\bar{o}ii-\bar{a}$ 'in good breathing space'; YAv. $g\bar{a}tauu-a$, OP. $g\bar{a}\partial av-\bar{a}$ 'in place'; – YAv. $g\bar{a}tu\bar{s}uu-a$, OP. $dahyu\bar{s}uv-\bar{a}$ 'among the lands'.

This particle may be identical with OAv. \bar{a} , used to emphasise 'here and now/there and then'(?), which is combined with a variety of local (temporal) cases.

3.1.6 Individual declensions

Following are some notes on special features of individual declensions. For further details, see Hoffmann and Forssman 1996, Skjærvø 2007b.

3.1.6.1 The *i*- and *u*-stems

Most *i*- and *u*-stems have ablauting (proterokinetic) stem formants *-i-l-ai*- and *-u-l-au*-, except a small set with hysterokinetic ablaut *-i-l-ia*- and *-u-l-ua*- (see section 3.1.1.4, Table 3.3.3).

The forms are distributed somewhat differently in Old and Young Avestan; thus, some masc. *u*-stems have gen. sing. from *-auš* in Old Avestan, but from *-uah* in Young Avestan: OAv. *xrat-āuš*, *pas-āuš*; YAv. *xra0β-ō*, *pas-uuō* < *xratu*- 'wisdom', *pasu*- 'sheep'; OAv. instr. sing. *xratū*, OYAv. *xra0β-ā*. The masc. *pasu*- 'sheep' also has the irregular nom.-acc. plur. *pas-uuō* (OInd. acc. plur. *paśvas*).

On various aspects of *u*-stems see also Pirart 1993; Tremblay 1998; de Vaan 2003, §§16.3.1-2; Skjærvø 2005a.

A special hysterokinetic *i*-stem is $ra\ddot{i}$ - 'wealth' < raHi-, which has the two stems $ra\bar{e}$ - < raHi- and $r\bar{a}ii$ - (shortened raii-) < raHi-.

3.1.6.2 Monosyllabic and polysyllabic *ai*- and *au*-stems

Monosyllabic *au*-stems include the well-attested *gau*- 'cow' and *diau*- 'heaven' (only gen. sing. *diiaoš*); *nau*- 'ship' is absent from the OIr. corpus; *gau*- is inflected as consonant stem, with standard strong and weak case forms, but acc. sing. *gqm*, plur. *gå* (OInd. *gām*, *gās*).

Old Iranian has a few polysyllabic *ai*- and *au*-stems (traditionally classified as subsets of *i*- and *u*-stems), which take the long grade of the stem formant in strong cases and protero- or hysterokinetic forms in the weak cases (the distribution of lengthened and full grade in Avestan is obscured by shortening and lengthening of *a* and \bar{a}), among them the proterokinetic *hax-ai*- 'companion' with strong stem < sakH-ai-, weak stem *haś*- < hač-i- < sakH-ai-, and *kau-ai*- 'poet'; and the hysterokinetic *dahi-au*- 'land'. See Table 3.3.3 (only attested forms).

Old Avestan also has hi0-au- '*cord-master' with nom. sing. hi0-āu-š, acc. sing. hi0- c_l -m, and proterokinetic YAv. abl. sing. hi0-uua-t (?).

Sing.	<i>ai</i> - stems endings	kay-ai-	hax-ai-	<i>au</i> -stems endings	<i>dahi-au-</i> Avestan	Old Persian
V N A	-ā -āj-am	kauuā kauuaēm	haxā haxāim	-āu-š -ā́u̯-am	daýhuš daýhaom	dahạyāuš dahạyāum, dahayāvam
G Ab D L	- <u>i</u> -ai		haśe	-au-š -au-t -aų-ai -au	(OAv. da <i>xiiūm)</i> daýhaoš daýhao <u>t</u> daýhaoe daýhō	(°dahạ yum) dahạ yauš dahạ yauv-ā
Plur. NV A	-ăį-ah	kāuuaiiō	haxaiiō	-āų-ah -ū-š		dahạ yāva daha yāva
G L Dual	-j-aʾằm	kaoiiąm	haśąm	-u-s -ū-naʾā̈́m -u-šu	daxiiunąm	dahą yūnām dahą yūnām dahą yušuv-ā
NAV				*-ā-u̯-ä	daýhu	
	Proterokine	etic <i>i</i> -stems		Proterokine	etic u- stems	
C in a	endings	pati-, kauui-	ra'i-	endings	xratu-, pasu-	
Sing. N A			raēš raēm			
G	-j-ah		rāiiō	-y-ah	xra0βō	
D	- <u>i</u> -ai	pa'0e		-y-ai =	xra0ße	
I	- <u>i</u> -ā		raiia	- <u>y</u> -ā	xra0βā	
Plur. NA A			rāiiō raēš	-y-ah	pasuuō	
G	-į-a'ām	kaoiiąm	raes raiiąm	-ų-a'am	xra0βąm	

TABLE 3.3.3: ai- AND au- STEMS, PROTEROKINETIC i- AND u- STEMS

3.1.6.3 Holo-kinetic stems

These include the following stems:

- the laryngeal stem pantā-lpa0- 'path' (< pant-aH-, pnt-H-): nom. sing. pant-å (< pantā-h < pant-aH-s) acc. sing. pant-am, instr. sing. pa0-ā (< pnt-H-ā);
- a few nouns with stem formant -Han-: marta-Han- 'accompanied by death(?)': nom. plur. mar³t-ān-ō (<marta-Hăn-as), gen. sing. mar³0-n-ō (<mart-Hn-as);
- a few neut. u-stems: dā"r-u- 'tree, wood', āii-u- 'life span', zān-u- 'knee' (sing. nom.-acc. YAv. dā"r-u, āii-u, gen. drao-š, yao-š; dat. yauu-el yao-e, instr. yauu-a, loc. drao°; plur. dat.-abl. žnu-biias°; cf. Gk. doru 'wood', gonu 'knee').

3.1.6.4 *r*-stems

The masc. *r*-stems have nom. sing. with lengthened grade of the formant and zero ending. The *r*-stems comprise the following (relatively few forms attested):

- words denoting kinship: OAv. p^(ilu)tar-, YAv. pitar-, mātar-, OAv. dug²dar-/YAv. duyδar-, x^vaŋhar-, brātar-, naptar- 'grandson', as well as nar- 'man'; these have full grade -ar- in strong cases and zero grade -r/r- in weak cases;
- agent nouns in -tar-: pātar- 'protector', dātar- 'maker, creator', as well as star- 'star' have lengthened grade -ār- in strong cases.

Both types behave partly like vowel and partly like consonant stems: nom. sing. $-\bar{a}$; hysterokinetic sing. gen. *-rah*, *-rai* (YAv. $pi\partial r\bar{o}$, OAv. $f^{3}\delta r\bar{o}i$, YAv. $d\bar{a}\partial r\bar{o}$, $d\bar{a}\partial re$); acc. plur. *-ah*; – acc. plur. *-rnš* (OAv. $n \sigma rqš$); proterokinetic gen., dat. sing. *-rš*: OAv. $n \sigma r^{3}\bar{s}$, YAv. $nar\bar{s}$; $s\bar{a}star\bar{s} < s\bar{a}star$ - 'false teacher' (weak stem $s\bar{a}\partial r$ -).

ātar- 'fire' was probably originally a neuter *r*-stem, with nom.-acc. sing. $*\bar{a}tr$, to which masc. endings were added: nom. $\bar{a}tr$ - \check{s} , acc. $\bar{a}tr$ -am > Av. $\bar{a}tar\check{s}$, $\bar{a}tr$ - δm (Hoffmann and Narten 1989: 73 n.126).

3.1.6.5 Stem-formants containing n

These comprise the stem formants -an-; -ian-; -uan-, -man-; -ant-, -uant-, -mant-; -ank, -iank-.

In the zero grade of the formant, the *n* when between consonants is vocalised to n > a, producing the alternations $-\bar{a}n/-an/-n--a$; $-\bar{a}nt/-ant/-at$; $-\bar{a}nk/-\bar{a}nc/-\bar{a}k/-\bar{a}c$ (-*ac*-), $-i\bar{a}nk/-i\bar{a}nc/-\bar{a}k/-\bar{c}c$.

3.1.6.5a Stems in -an-

YAv. f. xšapan- 'night' and m. asan- 'stone, sky': sing. nom. xšapa, acc. xšapan= plur. acc. xšafn \overline{o} , ašn \overline{o} , plur. loc. xšap \overline{o} huua (< xšapahu + -a).

3.1.6.5b Stems in -jan-

The masc. and fem. *ian*-stems have nom. sing. in $-i\bar{a} > Av$. -ie: m. *fraŋrasiiān*- (proper name): sing. nom. *fraŋrase*, acc. *fraŋrasiiānəm* (only forms); – f. *kaniian*- 'young woman': sing. nom. *ka'ne*, acc. *ka'nīnəm*, gen. = plur. nom. *ka'nīnō* (sing. gen. also *kaniiâ*).

3.1.6.5c Stems in -uan-, -man-, -Han-

Example: $a \xi \bar{a} uuan$ - m. 'righteous': sing. nom. $a \xi auu \bar{a}$, acc. $a \xi auu an \bar{a}m$, sing. gen. = plur. acc. $a \xi a on \bar{o}$ and $a \xi \bar{a} un \bar{o}$ (<-un-), plur; dat.-abl. $a \xi auu a b i i \bar{o}$ (<-nb-); man0raHan- 'keeper of the ma0ra': sing. nom. ma0r \bar{a} = ma0ra' \bar{a} (<man0ra-H \bar{a}), dat. ma0r \bar{a} ne (<man0ra-Hn-ai).

The neuter stems have sing. loc. and plur. nom-acc. with lengthened grade and zero ending, beside forms with ending -i (see section 3.1.5.1).

Because of the morphophonological vagaries of Ir. \underline{u} , the *uan*-stems are sometimes no longer recognizable as such, e.g. Av. *span-lspa-lsūn*- 'dog' ($< \dot{c}uan-l\dot{c}un-; "ru0\betaan$ - 'entrails' < ru0uan-; - YAv. a0aruan-, a kind of priest: strong stem $\bar{a}0rauuan-$, week stem $a0a^{\mu}run-$.

The voc. sing. of *uan*-stems ends in *-um* (*-əm*), with the final *-n* apparently assimilated to the preceding u(a): $a \bar{s} \bar{a} u m < a \bar{s} a \bar{u} an$ 'Orderly', $y u m < y u \bar{u} an$ 'youth', $\bar{a} \partial r a om < \bar{a} \partial r a \bar{u} an$, $\partial r i z a \bar{f} - u an$ 'three-mouthed'.

3.1.6.5d Stems in -ant-

These differ from the *n*-stems in having nom. sing. in -*S*, but are otherwise similar to the *uan*-stems. The *ant*-stems include adjectives and present and aorist participles (these have no ablaut when from thematic verbs).

The nom. sing. varies: adjectives have YAv. $-\bar{o}$ and forms from *-anh*, pronouns and present participles *-qs* (see section 2.3.2.6). Acrostatic presents have the weak stem throughout (OAv. *stauuas < stáu-nt-s < stau-* 'praise').

3.1.6.5e Stems in -uant-, -mant-, -Hant-

Stems in *-uant-*, *-mant-* have sing. nom. and voc. from stems in *-uah-l-mah-*: YAv. sing. nom. druuå < -uah, voc. druu $\bar{o} < -uah$, acc. druuantam, gen. druuat $\bar{o} < drug-uant-$ 'possessed by the lie'; maza-Hant- 'big': YAv. sing. masc. acc. mazantam (mazantam), neut. nom.-acc. mazat (< maza-Hnt).

3.1.6.5f Stems in -Hank, -iHank-

Most of these are derived from preverbs denoting direction, but also from other words. They have various unusual features: sing. nom. in $-\check{s}$ with loss of the velar (cf. *ant*-stems): neut. sing. nom.-acc. in $-g^{\circ}t$; palatalisation in sing. acc., plur. nom.: sing. nom. *parqš* 'away $< parān(k)-\check{s}$, neut. $parāg^{\circ}t$ (see section 2.1.2.1); sing. acc. *niiåncim* (<-cam) 'downwards', plur. nom. *niiåncō*.

3.1.6.6 Stems in -ah-, -jah-, -yah-

Most of the *ah*-stems are neuter (cf. Gk. *genos*, etc.) and masculine only in compounds. They take the full grade throughout, except in the plur. nom.-acc. (*manå* < $-\bar{a}h$ 'thoughts') and masc. sing. nom. *na're.manå* 'with manly thoughts'.

The *iali*-stems are comparatives (see section 3.2) and the *uah*-stems perfect participles (see section 4.6.1.2). They both take the lengthend grade in the strong cases, but only *uah*-stems have zero grade $-u\breve{s}$ -.

3.1.6.7 Neuter *r/n*-stems

The archaic heteroclitic neut. r/n-stems have r-stem nom.-acc. sing. and r- or n-stem nom.-acc.plur.: *aiiar*' 'day', gen. sing. *aiiq* (<- $a\eta h$), nom.-acc. plur. OAv. *aiiār*⁵, YAv. *aiiqn*; OAv. *huuar*⁵ 'sun', gen. $x^* \bar{a}\eta g$, YAv. $h\bar{u}$ (disyllabic < $hu^2 ar$, $hu^2 a\eta h$). Note OAv. $r\bar{a}zar$ - '*straightness', sing. instr. $rasn\bar{a}$; Old Persian *vazar- 'greatness' (in vazar-ka-'great'), sing. instr.-abl. $vasn\bar{a}$ 'by the greatness (of Ahuramazdā)'.

3.1.6.8 Stems in laryngeals

Indo-Iranian laryngeal stems ending in vowels plus laryngeal became long vowel-stems in the attested corpuses: $aH > \bar{a}$, $iH > \bar{i}$, $uH > \bar{u}$.

Before endings in vowels, the lost laryngeal left a hiatus, e.g. mazdaH- 'omniscient': acc. sing. mazdaH-am > OAv. mazdam (3 syllables); gen. sing. mazdaH-as > mazda'ah, OAv. mazdå (3 syllables) > YAv. mazdå (2 syllables); – OPers. nom.-acc. plur. $a0a''gaintya^h$ < -*iHah* 'of stone'; – tanuH- 'body': gen. sing. tanuH-ah, OAv. tanuuas°. See also on pantaH in section 3.1.6.3.

G DIAb	j	*u̯ag-bi̯ā		°tād-ātāh °tad-b <u>i</u> ā
Dual NAV	āp-ā			° tātā
L	a f- šu			
1	a(p)-biš	*u̯ag-biš		azd-biš
DAh	a(p)-bjah	*u̯ag-bi̯ah		°brd-bjah
G	ap-a'am	<i>นุล</i> č <i>-ล</i> 'ลทา	°dru j-a`am	stut-a'am
NAn				ast-i
A	ap-ah	yač-ah		stut-ah
NV	āp-ah	u̯āč-ah	dru j-ah	stut-ah
Plur.				
L	ap-i			
I	ap-ā	นูač-ā		
D	ap-ai			
Ab	ap-at		dru j-at	°brt-at
G	ap-ah	yač-ah	dru j-ah	stut-ah
NAn				as
A	āp-am	นูลิč-ลท	dru j-am	xšnut-am
NV	āf-š	ųāx-š	drux-š	xšnu-s
Sing.				

TABLE 3.3.4: EXAMPLES OF STEMS IN STOPS

ap- 'water', *uak-* 'voice, word', *drug-* '(the cosmic) deception', *xšnut-* '*satisfaction', n. *ast-* 'bone', *stut-* 'praise', *°brt-* 'carrying, riding', fem. derivatives in *-tāt-*:

3.1.6.9 Other consonant stems

The stems in other stops are fairly regular. Examples are seen in Table 3.3.4 (reconstructed proto-Iranian).

In Old Persian, where final groups were apparently not allowed, some words may have been transferred to other declensions (see Section 2.2.2.1).

The two *m*-stems *zam*- 'earth' and *ziiam*- 'winter' have sing. nom. *zå* and *ziiå* and weak stems *z'm*- (monosyllabic, *-sm*- in compounds) and *zim*- (often confused in the mss.); -dam- 'house' has gen. sing. OAv. $d\bar{a}ng$ (<danh < dam-s), YAv. loc. sing. dam, dami.

3.1.6.10 Suppletive stem-systems

There are various kinds of suppletive stem-systems, e.g.:

- alternating vowel and consonant stems: Av. zā-lzam- 'earth, ground', ziiā-lziiam- 'winter'; OAv. sauua-lsauuah- (in complementary distribution) 'life-giving strength', ušā-lušah- 'dawn', YAv. kaniiā-lka'nīn- 'young woman'; OPers. āpī-lāp-(?) 'water';
- alternating consonant stems: nt/s-stems, t/s-, and t/n- (napah-Inapat-Inaptar- 'grand-child, scion'; °carat-l°caran-); neut. r/n-stems.

3.2 Adjectives: comparative and superlative

The comparative and superlative of adjectives (including participles) and adverbs is made either with the suffixes -ijah and -ista or with the productive type -tara and -tama. The

suppletive type Eng. good vs. better, is attested in OPers. vazarka- 'great', ma0-išta-'greatest'.

The comparative/superlative in *-tara-l-təma*- is made from the (weak) stem of adjectives or adverbs and with appropriate sandhi before the ending: YAv. *ama-uuas-tara-l-təma*- 'more/most powerful' (*-uuast- < -unt-t-*); *hubās-təma- < hubāh*- 'giving good gifts'; *yāskər*'s*-tara-l*'*təma- < yās-kər*'t*-t* 'performing (well) at the audition'; YAv. *tauruuaiiqs-təma- < °iiant-t-* 'overcoming, victorious', YAv. *hubao'bi-tara-l*'təma- 'more/most fragrant'; OPers. *apa-tara-* 'farther'; YAv., OPers. *fra-tara-* 'ahead (of)', Av. *fra-təma-*, OPers. *fra-tama-* 'foremost'.

The comparative/superlative in -*iiah-l-išta*- is made from the root in the full grade. Adjectives with suffixes lose these: Av. *ak-a*-: $a\dot{s}$ -*iiah*- ($< a\dot{c}\bar{u}ah$ -), *ac-išta*- 'more/most evil'; $b\bar{u}^{i}$ -*ri*- 'plentiful': *bao-iiah*-, $db\bar{o}$ -*išta*- $< d\mu$ -); $dri\gamma$ -*u*- 'poor': $dra\bar{e}j$ -*išta*-; $sp \Rightarrow n$ -*ta*- 'life-giving': *span-iiah*-, $sp \Rightarrow n$ -*išta*-; drug-*uant*- 'possessed by the Lie': draoj-*iiah*-, draoj-*išta*. Forms from pres. parts. (or verbal nouns) include $ba^{i}r$ -*išta*- 'who carries most often' $< bar-\Rightarrow nt$ - 'carrying', OPers. *tauv*- $\bar{t}yah$ - 'mightier' < tu-*nu*-*va*"t- 'who has power'.

From roots with laryngeals we have forms such as the following: Av. $dar^{3}\gamma a$ - 'long' ($\langle drH-ga$ -): $dr\bar{a}j$ -iiah-, $dr\bar{a}j$ -išta ($\langle draHg$ -); $\bar{a}d$ -ra- 'needy' ($\langle nHd$ -ra-): $n\bar{a}^{i}d$ -iiah- ($\langle nHd$ -); $po^{u}ru$ - 'much' ($\langle prH-u$ -): $fr\bar{a}$ -iiah-, $fra\bar{e}sta$ - ($\langle praH-iah$ -, praHista-).

A few adjectives have both kinds of superlative, but with different meanings: OAv. *po"ru-toma-* 'in highest numbers'; *sponto.toma-* 'having the name *sponta-* in the highest degree(?)'; YAv. *aka-tara-* 'worse (for sb.)'.

Double superlative: YAv. draēj-ištō-təma- 'the poorest of the poor'.

3.3 Adverbs

Adverbs can be invariable particles or forms of adjectives (also comparative and superlative) or other words:

- underived: Av. mošū 'soon, quickly'; OAv. nū, OYAv. nūrəm, OPers. nūram 'now';
- nom.-acc. neut. sing. of a noun or adjective: OYAv. vasō 'at will' (< vasah- 'will'); YAv. daršat, OPers. daršam 'vigourously'; YAv. po"rum 'in front', OPers. paruvam 'before';
- abl. and loc. sing.: Av. dūrāţ, OPers. dūradaš 'from afar'; Av. dū'rē 'in the distance', OPers. dūraiy (apiy) 'far (and wide)';
- ending -S (Schindler 1987): OAv. ər³š, YAv. arš 'straight' (< Hrj-š);
- compounds: YAv. yalā. kər^atəm 'as it is done', OPers. pasāva (< pasā-ava) 'afterward'.

Adverbs of place and manner are made from adjectives, pronouns and preverbs with suffixes: $-\partial ra$, $-\partial a$, -da, $-d\bar{a}t$ (OPers. $-da\check{s}$), and -tah, e.g.: Av. $ya-\partial r\check{a}$ 'where'; $ka-\partial\check{a}$ 'how?'; OAv. $a-d\bar{a}$ 'then', OPers. $ava-d\bar{a}$ 'there'; YAv. $a-\delta\bar{a}t$ 'from there', OPers. $d\bar{u}ra-da\check{s}$ 'from afar'; Av. $ai\beta i-t\bar{o}$ 'all around', OPers. $a^{h}ma-ta^{h}$ 'from that (place)'.

Comparative and superlative: $b\bar{a}\delta a$ '*sometimes, *again and again', sup. $b\bar{a}^{i}\delta$ -istəm; fra-'forward': comp. fratarəm, sup. fratəməm.

See also section 9.1.2.2 Adverbial *āmredita* compounds.

3.4 Pronouns

There are personal, possessive, demonstrative, reflexive-reciprocal, relative, interrogative and indefinite (indefinite relative) pronouns, most of them of the Indo-Iranian type.

3.4.1 Personal pronouns

The personal pronouns distinguish three persons; the 3rd person distinguishes three genders. All persons have tonic and non-tonic enclitic forms (see Tables 3.3.5–6).

	lst pers.		2nd pers.	
Sing.				
-		encl.		encl.
V			tū	
Ν	ajam		tũyam	
А	mām	mā	Quām	θųā
G	ma-na	mai	taya	tai
Ab	ma-t		0ya-t	
D	ma-b <u>i</u> a(h)	mai	ta-bjah	tai
L			Qua(j)i	
Plur.				
Ν	vajam		įūž-am	jūš
Α	ahmā	nāh		uāh
G	ahmākam	nah	jūšmākam	yah
D	ahma-bja	nah	jūšma-bja, šma-bja	yah
Ab	ahma- <u>t</u>		jūšma-t, šma-t	
I	ahmā		šmā	
Dual				
NAV	ลินูลิ(?)			
G	1		juyākam	

TABLE 3.3.5: 1ST AND 2ND PERSON PERSONAL PRONOUN

TABLE 3.3.6: 3RD PERSON PRONOUNS

	Tonic:			Enclitic		
	m.	n.	f.	m.	n.	f.
Sing.						
Ν	*ha, *ha-h	ta-t	hā	_	it	hī
Α	ta-m	ta-t	tām			
G	a-hja		a-hi̯-āh	hai/šai	hai/šai	hai/šai
Ab	a-hm-ā	t	a-hį-āt			
D	a-hm-ā	i	a-hi̯-āi	hai/šai	hai/šai	hai/šai
Ι	a-nā		a-jā			
L	a-hm-i		a-hjā			
Plur.						
Ν	tai	tā	tā-h			
Α	ta-ŋh	tā	tā-h	inš (dinš)	ī	hīš/*šīš
G	ai-š-a'a	т	ā-h-a'am			
DAb	ai-bjah		ā-bjah			
Ι	tāiš		ā-biš			
L	ai-šu		ā-hu			
Dual						
NAV	tā	tai	_	_	hī	hī

There are three 3rd-person demonstrative pronouns: ha- $(\check{s}a$ -)/ta-, i-(hi- $/\check{s}i$ -, di-), and a-. Some forms are poorly attested and difficult to classify.

ha-lta- serves as 3rd-person personal pronoun and weakly deictic 'that', but is often difficult to distinguish from the far-deictic demonstrative pronouns; *i*- is only enclitic; and a- is identical with the near-deictic demonstrative pronoun.

In Old Persian, the far-deictic pronoun is used as emphatic personal pronoun.

3.4.2 Possessive pronouns (adjectives)

Only Old Avestan has genuine possessive pronouns; these are derived from the oblique stems of the 1st and 2nd sing. personal pronouns by thematisation: ma- 'my', $0\beta a$ - (< $0\mu a$ -> 'thy', and from aka-extensions of the oblique stems of the 1st and 2nd plur. personal pronouns: $ahm\bar{a}ka$ - 'our', $x\bar{s}m\bar{a}ka$ - 'your'. For the 3rd person, the genitive of the personal pronoun is used or the possessive reflexive pronoun $h\mu a$ - 'his, her, its, their'.

In Young Avestan and Old Persian, the genitive of the personal pronoun is used.

3.4.3 Demonstrative pronouns

The demonstrative pronouns have a three-way deixis of varying emphasis, corresponding to 1st, 2nd and 3rd person:

- 1st-person deixis (near-deixis): *ima-la-* and *aēša-laēta-* 'this' (Latin *hic*, Spanish *este*);
- 2nd-person deixis (unclear): OAv. huuō/ana- 'that near you', also 'derogatory' (cf. Latin iste, Spanish ese);
- 3rd-person deixis (far-deixis): hāulanna- 'that (over there)' (Latin ille, Spanish aquel).

All three have two (or more) stems, one reserved for the nom. masc. and fem., the other for the other cases, or a more complex distribution. See Table 3.3.7.

3.4.4 Relative pronoun

The relative stem is *ia*-, with nom.-acc. neut. OAv. *hiiat* (with *h*- of unclear origin), YAv. *yat* (rarely *hiiat*). In Old Persian, *ia*- was univerbated with the demonstrative pronoun *ha-lta-: haya-ltaya*- (cf. Adiego Lajara 2000). See Table 3.3.8.

3.4.5 Interrogative and indefinite pronouns

The stems ka-lca- and ci- serve as interrogative pronouns (see Table 3.3.8) and, with enclitic -ca and -cij, repeated, or negation, as indefinite pronouns: Av. kas-cij 'whoever', OPers. kas-ciy, cis-ciy 'anything'; kataras-cij 'each (of two)'; ka- ka- 'each and every'; – negative and preventive: $n\bar{o}ij kas$ -cij, $na\bar{e}$ -ci- 'not any', $m\bar{a}$ -ci- 'let not any'.

Indefinite relative: OAv. $y\bar{o} \dots ci\bar{s}$ -ca (sing. m.), $y\bar{o}i \dots caiias$ -ca (plur. m.) 'whoever', $y\bar{a} \dots c\bar{i}$ -ca (plur. n.) 'whichever', yahmāi \dots kahmāicīţ 'to whom-so-ever'.

3.4.6 Reflexive pronouns and reciprocity

These are OYAv. $x^{t}a$ - and YAv. hauua- 'own'; YAv. $x^{t}a\bar{e}pa^{t}\theta iia$ - 'own'; OPers. ^huvaipašiya- 'self', ^huvāipašiya- 'own'. The meaning of $tan\bar{u}$ - 'body' sometimes comes close to 'own body, self'.

Near-de	eictic (1st pers	.) dem. pron	ima-la-:	Far-deictic (3rd pers.) dem. pron haulaua-		
	m.	n.	f.	m.	n.	f.
Sing.						
N	ajam	im-at	ijam	hāu	ay-a-t	<i>hcıu, h</i> ติน
Α	im-am	im-at	im-ām	<i>ลนุ-ล-</i> m	ay-a-t	<i>ล</i> บู-ā-m
G	a-hja		a-h-jāh	ay-a-h	nja	ay-ah-jāl
Ab	a-hm-a	īt 🛛	a-h-jāt			ay-ah-jāt
D	a-hm-à	71	a-h-jāi			ayı-ah-jāi
I	a-nā		ajā	ay-ā, i	<i>ล</i> นู-a-nā	
L	a-hm-i		a-h-jā			
Plur.						
N	im-ai	im-ā	im-āh	ayai	<i>ล</i> มู-ลิ	ay-ā-h
A	im-aŋh	im-ā	im-āh	aya-ŋh	ay-ā	ayā-h
G	ai-š-a`am		ā-ha`am	ā-ha`am au̯-aiš-a`am a		
DAb	ai-b <u>i</u> al	'n	ā-b <u>i</u> ah			
I	āiš		ā-biš	ay-āiš		
L	ai-šu		ā-hu			
Dual						
NAV	im-ā			<i>ล</i> นู-ā		
G	āh, a <u>j</u> č	īh		ay-āh		
DIAb			ābjā			
Far-deid	ctic (2rd pers.)	dem. pron	hculana-			
m.		•				
	Sing.	Plur.				
N	hcui					
I	anā(?)	anāiš				

TABLE 3.3.7: DEMONSTRATIVE PRONOUNS

Reciprocity is usually expressed by *aniia*-... *aniia*-, OPers. *aniya*-... *aniya*- 'one ... another, each other' (see Jamison 1997).

3.4.7 Pronominal case endings

Pronouns have some case endings that differ from those of nouns, including the dat. sing./plur. ending $-b_{ia}(h)$ in the pers. prons. 1st and 2nd (see also sections 2.3.1.2, 3.1.5.2); – neut. nom.-acc. sing. -at in poss. and dem. prons. (and pronominal adjs.); – masc. nom. plur -ai; – masc.-neut. dat., abl. sing. formant -hm-; – fem. gen., dat., abl., loc. formant - h_{i} ; – gen. plur. masc. formants -s-, fem. -h-. See Tables 3.3.5–8.

There is at least one OAv. fem. sing. form in $-a\bar{e}$: $x^{"}a\bar{e}^{\circ}$ 'own' (cf. latin hae-c).

3.5 Adpositions

Old Iranian has pre- and postpositions. Some of these are only prepositions, some are also preverbs, and some are derived from nouns, adjectives, or adverbs or particles. In some cases it is difficult to distinguish between adverbs, preverbs and adpositions. For examples, see section 5.4 Uses of Cases.

Relative pr	onouns:					
	m.	n.	f.	m.	n.	f.
Sing.						
Ν	<u>i</u> -ah	j−a−t	įā	k-ah, či-š	k-at, či-t	kā
Α	<u>j</u> -am	<u>į</u> -a-t	jā-m	k-am, či-m	k-at, či-t	kā-m
G	<u>j</u> a-hja		ja-h-jāh	ka-hja, č-ahja		ka-h-jāh
Ab	ja-hm-a	āt	ja-h-jāt	ka - hm-āt		
D	ja-hm-o	āi _.	ja-h-jāi	ka-hm-āi		ka-h-jāi
Ι	jā			kā, ka-nā		
L	ja-hm-l	i	ja-h-jā	ka-hm-i, č - ahi	mi	ka-h- <u>i</u> ā
Plur.						
Ν	j-ai	įā	jā-h	k-ai, čajah	kā, čī	
Α	<u>i</u> -aŋh	įā	jā-h	k-aŋh	kā	
G	j−ai-š-a	i'am	jā-h-a'am	k-ai-ša'am		kā-h-a'am
DAb	į-ai-bja	ıh	jā-bjah	k-ai-b <u>i</u> ah		
I	jāiš			kāiš		
L	į−ai-šu		jā-hu			
Dual						
NAV	įā		<u>j</u> ai			
G	ja-jāh					
Old Persia	n					
	m.	n.	f.			
Sing.						
Ν	haya	taya	hayā			
Α	tayam	taya	tayām			
IAb	ta yanā	i				
Plur.						
Ν	ta yai y		tayā, tayaiy			
А		tayā	tayā			
GD	tayaišä	โท	ta yaišām			

TABLE 3.3.8: RELATIVE AND INTERROGATIVE PRONOUNS

3.6 Numerals and measure

A relatively large number of cardinals, ordinals and other number words are attested in Young Avestan, while Old Avestan has hardly any. Of the Old Persian number words, only *aiva* 'one', is spelled out, but several Old Persian number words are found in Elamite texts.

3.6.1 'One' to 'four'

'One' is expressed by the stems *aiua*- and *ha*- < *smm*- (see section 3.6.3.1):

- cardinal: Av. aēuua-, OPers. aiva-;
- ordinal: Av. fra-toma- 'foremost, first', OAv. pa"ruuiia-, YAv. pao'riia-, OPers. paruviya-.

'Two' and 'both': The number 'two' is expressed by the stems d(u)ua- and dui- (OAv. $d^{ai}bi$ -, YAv. bi-):

- cardinal: YAv. duua, fem., neut. duiie, duuaē° (i.e. dúua, dúuai);
- ordinal: OAv. duibitiia-, YAv. bitiia-, OPers. duvitīya-;

For 'both', OAv. has nom.-acc. masc. $ub\bar{a}$, fem., neut. $ub\bar{e}$; YAv. nom.-acc. masc. uua, fem., neut. $uiie < \dot{u}\mu a$, $\dot{u}\mu ai$); OPers. nom.-acc. masc. $ub\bar{a}$.

YAv. also has the indecl. uuaēm 'both' (OInd. ubhayam).

'Three': The stem is θri -:

- cardinal: nom. masc. $\theta r \bar{a} i i \bar{o}$, fem. $t i \bar{s} r \bar{o}$, neut. $\theta r \bar{i}$;
- ordinal: Av. Oritiia-, OPers. citīya- 'for the third time'.

'Four': The stem is *čaθβar-lcatur*- (YAv. *caθru*° in compounds):

- cardinal: nom. masc. caθβārō, fem. cataŋrō, neut. catura;
- ordinal: YAv. tūⁱriia- (< ktrui̯a-, cf. ā-xtūⁱ rim 'a fourth time').

'One' has proniminal declension; 'two' and 'both are declined as dual *a*-stems (but OPers. plur. gen.-dat. *ubānām*); 'three' and 'four' have fem. forms with *-hr-l-šr-* (see Table 3.3.9).

'One'				
		m.	n.	f.
Ν	,	aēuuō	ōiium, ōim	ลēินนล
Α	i.	ōiium, ōim	ōiium, ōim	aēuuąm
G		aēuuahe		aēuuaŋha
Ab		aēuuahmāt		
Ι		ลēินนล		aēuuaiia
L		aēuuahmi		-
'Two'				
		m.	n.	f.
NA		duua	duiie, duuaē°	duiie, duuaē°
DAbI		duuaēibiia		
L		duuaiiå		
'Three'				
		m.	n.	f.
Ν		0rāiiō	0rī	tišrō
Α		Oriš	0rī	tišrō
G		0raiiqm		tišrąm, tišranąm
DAb		0ribiiō		-
'Four'				
		m.	n.	f.
Ν		caθβārō	catura	cataŋrō
Α		caturā	catura	cataŋrō
G		caturąm		

TABLE 3.3.9: DECLENSION OF NUMERALS

3.6.2 The remaining numerals

The cardinals 'five' to 'ten': panca, xšuuaš, hapta, ašta, nauua, dasa; these have thematic gen. forms (pancanąm, nauuanąm, dasanąm).

The ordinals (only YAv.) of '5' and '6' are characterised by the root vowel *u*: $pux\delta a$ -, *xštuua*-. 'Seventh' has the formant -0a-: *hapta*-0a-; 'eighth' to 'tenth' the formant -*ma*-: *aštə-ma*-, *nao-ma*-, *dasə-ma*-.

Most of the numerals '11' to '19' are known only from the ordinals, which were identical with the cardinals: *aēuuan-dasa-*, *duua-dasa-*, *0ri-dasa-*, *ca*0*ru-dasa-*, *panca-dasa-*, *xšuuaš-dasa-*, *hapta-dasa-*, *ašta-dasa-*, *nauua-dasa-*.

'20' is vīsaiti. '30' to '50' are compounds with "satəm: 0ri-satəm, ca 0β ar"-satəm, paṇcā-satəm. '60' to '90' are fem. ti-stems: xšuuaš-ti-, haptā-'ti-, aštā-'ti-, nauua-'ti-.

'100' and '1,000' are neut. *a*-stems: *sata*-, *hazaŋra*-, with mixed plur. forms: *tišrō sata*, *ca0βārō sata*, *nauua hazaŋra*, etc. '10,000' is neut. *baēuuarln*-.

Compounded numerals are represented by pancā-ca vīsa'ti '25', Oraiias-ca Orisąs-ca '33', pancā-ca haptā'ti- '75', nauua-ca nauua'ti '99'.

Higher numerals include *duiie nauua'ti* '180' (two 90) and *nauua-ca* . . . *nauuaitiš-ca nauua-ca sata nauua-ca hazaŋra nauuasōs-ca baēuuąn* '99,9999', which is the highest Av. number, there being no word for '100,000'.

3.6.3 Derived numerals

3.6.3.1 Multiplicatives

Multiplicatives ('times, -fold') have simple and extended forms:

- 'once': YAv. ha-kər't, OPers. ha-karam; cf. Av., OPers. hama- 'one and the same';
- 'twice': YAv. biš, biž-uuat; 'thrice': YAv. Oriš, Oriž-uuat; 'four times': YAv. caOruš;
- 'six/nine times': xšuuaž-aiia, naom-aiia;
- the tens: *vīsaiti-uuå*, *θrisaθ-βå*, etc.

3.6.3.2 '-th time'

The '2nd-4th time' are formed from the ordinals with the prefix \bar{a} -: \bar{a} -*ibitun* $|\bar{a}$ - $\delta bitun$, \bar{a} -0ritun, \bar{a} - $xtu^{i}run$.

3.6.3.3 Fractions

Fractions are made with the formant *-Sua-:* 0ri*-suua-,* ca0ru*-suua-,* payta*-n*^rha*-,* hapta*-huua-,* asta*-huua-.* The same formation is attested for Old Persian by Elamite texts: < si-is-mas = ci-suva-, si-is-su-is-ma = cas-du-mas = asta^huva-, etc. (Hoffmann 1965).

4 MORPHOLOGY II: VERBAL MORPHOLOGY

The Iranian verb inherited from Indo-Iranian the categories of aspect, tense, mood, voice, number, and person expressed by 'finite' forms of the verb, and non-finite forms, which behave like nouns (infinitives) or adjectives (participles).

Tenses and moods are expressed by endings and augment, while aspect is expressed lexically by different stems of the verb (see section 7.1).

Verb stems are classified as 'thematic', ending in -a, and 'athematic', ending in other vowels and diphthongs or in consonants. Athematic verbs are frequently thematised.

Most personal endings are the same in the two classes (the 2nd sing. act. is a noteworthy exception), with morphophonological changes in athematic verbs in clusters resulting from contact between the final consonant of the stem and the initial consonant of the ending.

The augment *a*-, which characterises an event as having taken place in the past, is found occasionally in Old Avestan (imperfect and aorist) and Young Avestan (imperfect), but regularly with the imperfect in Old Persian. In Young Avestan and Old Persian, it is also found with optative forms (see below).

4.1 Stem classes

Each conjugation contains a miscellany of stem formations, most of which are no longer productive in Iranian.

Athematic verbs show ablaut in the root syllable, e.g. *jan-lgn-* 'smash', or in the stem formant, e.g. *-nau-l-nu-*, distributed as follows (with exceptions):

- lengthened grade is found in the acrostatic 'Narten' presents (but see de Vaan 2004), the s-aor. ind. sing., and in some 3s perf. forms;
- full grade is found in the singular in the pres., aor., and perf. ind., throughout the paradigms in the subj., and in the 2p pres. ind. and 3s and 2p imper.;
- zero grade is found in the dual and plur. of the pres., aor., and perf., in the 2s and 3p imper., and throughout the opt.

Ambikinetic ablaut, apparently conditioned by (proto-Av.) stress patterns, is found in the 3p pres. and in the 2s and 3s opt. endings:

- zero grade of the root + full grade of the ending: Av. plur. ->n, opt. -iia, -iiā1, etc. (e.g. h->nti, h-iiā1 < ah- 'be');
- full grade of the root (or reduplication) + zero grade of the ending: -aⁱti, -a₁; -īš, -ī₂, etc. (e.g. dad-aⁱtī < dad-a₁ < -ņti, -ņt, daⁱd-ī₂).

4.1.1 Present stems

4.1.1.1 Athematic present stems

Athematic present stems include the following:

- 1. root stems: Av. *ah-las-lh-* 'be', *ai-li-* 'go', *jan-lja-lgn-* 'smash, strike'; *stau-lstu-* 'to praise'; OPers. *ah-las-*, *ai-*, *jan-*;
- 2. reduplicated stems:
 - stems with 'light' reduplication CV-: Av. da-δā-/da-δ- 'give, place', hišhak-lhišc-'follow' (with hišhak- for hi-šak- < Sak-); OPers. da-dā-;
 - 'intensive' stems with 'heavy' reduplication *CVC*-: Av. *zao-zao-lzao-zu* 'keep calling', *car^o-kar-lcar^o-kər*^o' 'keep praising';
- 3. stems with *n*-infixes:
 - na-C-l-n-C- stems: Av. ci-na-h-lcīš- (<ci-n-š-) **assign' (<kaiš-lciš-);
 - nāln-stems (<-na-H-l-n-H-): YAv. zi-nā-lzi-n- 'take away', OP. di-nā-l- (<ji-na-H-l ji-n-H-);

88 THE IRANIAN LANGUAGES

 naulnu-stems: Av. s"ru-naolnu- 'hear' (< sr-na-u-ln-u- [or sru-nau-] < sru-); Av. kər"naulnu- 'do, make', OPers. kunau- (< kr-nau-lnu- < kar-).

4.1.1.2 Thematic present stems

Thematic present stems include the following:

- 1. stems in *a*:
 - root in zero grade: Av. mpr'za- 'wipe', Opers. °marda- (or marda-, MPers. mal-);
 - root in full grade: Av. bara- 'carry', bauua- 'become', OPers. bara-, bava-;
 - root in long grade: Av. *frāda* 'to further';
- 2. stems in *ia* (see also section 4.1.1.4):
 - root in zero grade: Av. miriia-, Opers. mcriia- 'die' (< mr-ja-);
 - root in full grade: Av. spasiia- 'spy on', OPers. jadiya- 'ask for';
- 3. stems in *aia* (see also section 4.1.1.5):
 - root in zero grade: Av. saδ-aiia- 'appear', OPers. θad-aya- (< cnd-aya- < (s)cand-);
 - root in full grade: Av. daēs-aiia- 'show', OPers. °tar-aya- 'cross (river)';
- stems in -āia- with root in zero grade: gə^uruu-āiia- 'seize', OPers. garb-āya- (cf. YAv. gər^oβ-nā-);
- 5. stems in -sa- (OInd. -cha-, IE. -ske-l-sko-)
 - root in zero grade: Av. ja-sa- 'go' (for *gasa- < gm-sa- < gam-), tər³-sa- 'to become afraid'; OPers. ā-ya-sa- 'take' (<jam-), tar-sa-;
 - roots in long ā: Av. yā-sa- 'request', OPers. xšnā-sa- 'know' (< jnā-, cf. Latin, Greek gnō-sk-);
- 6. stems with *n* infix: Av. *kər*^{*}-*n*-*ta* 'cut' (<*kart*-); YAv. *vinda* (<*vaid*-, athematic OAv. *vi-na-d*-);
- 7. reduplicated stems:
 - with 'light' reduplication: Av. hi-šta- 'stand', OPers. (h)i-šta- (<Si-St-a-, stā-);
 OAv. °iia- 'implore' (<i-y-a- < yā-);
 - with 'heavy' reduplication (intensive): Av. *ja-γna-* 'smash to smithereens' (<*gan-l jan-*);
- desiderative stems in -Sa- with reduplication: OAv. dī-draγ-ža- 'to wish to hold firmly' (<drang-ldrng-), OYAv. diβža- 'seek to deceive' < di-(d)b-ž^ha- < di-db^h-ša-(<d^hab^h-); YAv. zi-xšnå-ŋha- 'wish to know' (<jnā-); mi-mar³x-ša- 'wish to destroy' (<mark-).

4.1.1.3 The future stem

A future stem is formed with -Sia- added to the root in the full grade. Old Avestan has only two forms: *vax-šiia- < vak-* 'speak' and *sao-šiia-nt- < sau-* 'revitalise'. Young Avestan has a few, including: *sao-šiia-* and the irregular $b\bar{u}$ -*šiia- < bau-* 'become'. There are no Old Persian forms attested.

4.1.1.4 Passive stem

A passive stem is formed with the suffix -*ia*-, with the root in the zero or full grade: YAv. *kir-iia-* 'be done, be made', OPers. *kar-iya-* (< kria-), YAv. *ba'r-iia-* 'be carried' (< bar-). See also section 4.3.1.

On the 3rd sing. passive in -i, see section 4.3.2.

4.1.1.5 Causative stem

A causative is formed with the suffix $-a_ia$ - to the root in the lengthened (or full) grade. It usually corresponds to a passive or intransitive present: $s^{a}ru$ -nau- 'hear' vs. sru-iia- 'be heard' vs. srauu-aiia- 'make heard' > 'recite, sing'; su-iia- 'be revitalized' vs. sauu-aiia- 'revitalize'.

4.1.1.6 Denominative stem

This group contains stems in -*ia*- and -*aia*- and -*ania*- (cf. Oettinger 1992): *bišaz-iia*- and *baēšaz-iia*- 'to heal' (<*bišaz*- 'doctor', *baēšaza*- 'medicine'), Av. *ar³za-iia*- 'to do battle (*ar³za*)', *pər*'s-aniia- 'to discuss', OPers. *patiy-avah-aya*- 'to pray for help' (cf. Av. *auuah*- 'help'). See also Tucker 2004.

4.1.2 Aorist stems

There are the following principal types of aorist stems:

- the root aorist: Av. jam-lga-lgm- 'go, come' (pres. jasa-), Av., OPers. dā-ld- 'give, place' (pres. da-dā-);
- the thematic aorist: Av. taš-a- 'fashion' (pres. tāš-);
- the s-aorist: Av. stā-h- < stā- 'stand, place', nai-š- < nai-Inī- 'lead' (pres. naiia-), varš- < var³z- 'produce' (pres. vər³ziia-), OPers. dar-š- < dar- 'to hold' (pres. dāraya-);
- the reduplicated thematic aorist: Av. va-oca- < ua-uc-a < vac- 'to speak' (pres. mrao-);
- suppletive systems: Av. va-oca- (pres. mrao-); dars- 'see' (pres. vaēna-).

Some verbs have both root- and s-aorist forms, e.g. Av. man- \sim mah- 'think' (pres. maniia-).

4.1.3 Perfect stems

The perfect stem is formed by reduplication, with the exception of $\bar{a}d$ - $l\bar{a}\delta$ - (invariable) 'say' and $va\bar{e}d$ - $lva\bar{e}\delta$ - ($va\bar{e}\theta$ -) 'know'. The vowel of the reduplication syllable varies:

- a, i, or u, in harmony with the vowel of the root (velars are palatalized before a and i): ca-kan- 'love', ci-kaēθ- '*point out', "ru-raoδ- 'howl', OPers. ca-xr-, weak stem of ca-kār- < kar- 'do';
- rarely ā: dā-dar^os- < vaēn-Idars- 'see';
- roots in initial \tilde{a} have long \bar{a} -: $\bar{a}p$ 'reach', $a\eta h$ < ah- 'be' (< a-ah-);
- the root *ai-li* has perf. stem $i\underline{i}$ -*ai*-: YAv. *ii*-*a* \overline{e} (\overline{i} -*a* \overline{e} -) < $a\overline{e}$ 'go'.

4.1.4 Suppletive stem systems

There are a few suppletive verb systems, e.g. Av. pres. *mrau*-, aor., perf. vac- 'speak'; pres. vaēna-, aor., perf. dars-, OPers. pres. vaina-, imper. dī- 'see'.

4.1.5 Periphrastic formations

On the use of past participle + 'to be' in YAv. and OPers., see section 6.4.2.2; on the pres. part. + modal forms of 'to be' see section 7.2.3.7ce.

4.2 Moods

The subjunctive and optative take special formants added to the stem (present, aorist, perfect), while the imperative is characterised by a special set of endings.

4.2.1 The subjunctive

The subjunctive is formed from the present, aorist, or perfect stems by the formant -a. This means that athematic verbs are thematised, while thematic verbs take the combined formant $-\bar{a}$. The endings are primary or secondary. The primary Is is -ni (vs. indicative -mi).

4.2.2 The optative

The optative is formed from the present, aorist, or perfect stems by the ablauting formant -iaH-I-iH- > -ia-I-i. In thematic verbs, the thematic vowel combines with -i- to yield the characteristic thematic optative formant -ai-.

In Old Persian and, sometimes, in Young Avestan, the optative can take the augment to produce the preterital optative: YAv. *a-uuaēn-ōiš* '(whenever) you saw', *nišāδaii-ōiš* 'you would seat (me)'; OPers. *avājan-iyā*' 'he would kill', *a-kunav-aya*"tā 'they would do' (see section 7.2.2.2).

4.3 Voice

There are two 'voices': active and middle. Verbs can have active and/or middle forms. Some verbs have only active forms, some only middle forms, and some both active and middle forms. Only in the third group can the middle forms have a special function, different from that of the active forms. Intransitive verbs typically have only active (e.g. YAv. $a\bar{e}^i ti$ 'he goes') or only middle forms (YAv. \bar{aste} 'he sits'), while transitive verbs can take both active and middle forms. If they do, then most often the distinction between the two forms is active vs. passive (see further section 7.3.2).

4.3.1 The passive in -ja-

More commonly, the passive ('it is done, he is killed') is expressed by the special present stem in -ia- (YAv. -iia-, OPers. -iya-). In Avestan, this form normally takes the middle endings; in Young Avestan, active endings are also well attested (in Old Persian 3rd person -tiy and -taiy are indistinguishable <-t-i-y>).

4.3.2 The 3rd singular passive in -i

A special Indo-Iranian 3s passive form was made from the aorist stem with the ending -i (OAv. $-\overline{i}$, YAv. -i): OAv. $sr\overline{a}uu-\overline{i}$ 'has become renowned'. In Young Avestan, this rare form was made from the present stem (ja^in-i 'was smashed', $\partial r^{\prime}n\overline{a}uu-i$ 'was sent on its way') and from the perfect stem ($\overline{a}^i\delta-i$ 'is/was said').

4.4 Person marking (endings)

The endings are of the Indo-Iranian (and late Indo-European) type, those of the present and aorist indicative differing from those of the perfect indicative, and with distinct sets of 'primary' in the pres. and perf. ind. and 'secondary' endings elsewhere. The subjunctive takes endings from either set. See Tables 3.4.1-4.

In the 1s, Avestan still has the pres. ind. act. primary ending OAv. $-\bar{a}$, YAv. -a, beside the more common $-\bar{a}mi$; the subj. has $-\bar{a}$ and $-\bar{a}ni$.

The 1st person endings of the dual and plural are parallel: act. primary -uahi, -mahi, secondary -ua, -ma; middle secondary -uadi, -madi, YAv. -maⁱ δel -maⁱde.

On the 3s pass, ending -i, see above.

	Present indicative		Present/aorist injunctive		Present/aorist imperative	
	Athematic	Thematic	Athematic	Thematic	Athematic	Thematic
Activ	e					
ls	-mi	-ā, -ā-mi	-am	-a-m		
2s	-Si	-a-hi	-S	-a-h	-di	-a
3s	-ti	-a-ti	- <i>t</i>	-a-t	-tu	-a-tu
lp	-mahi	-ā-mahi	-ma	-ā-ma		
2p	-0a	-a-0a	-ta	-a-ta	-ta	-a-ta
3p	, -anti, -ati	-a-nti	-an	-a-n	-a-ntu	-a-ntu
•			aoran, -at			
1d	-yahi		-ya	-ลินูล		
3d	-tah	-a-tah	-tam	-ā-tam		
Mido	lle					
ls	-ai	-ai	-i	-ai		
2s	-Sai	-a-hai	-Sa	-a-ha	-Sya	-a-hya
3s	-tai, -ai	-a-tai	-ta	-a-ta	aorām	-a-tām
-	,		aorātam			
lp	-madai	-ā-madai	-madi			
2p	-dyai	-a-dyai		-a-dyam	-duam	-a-dyam
3p	-ntai, -atai	-a-ntai	-ata	-a-nta	presrām	-a-ntām
	-rai-, -ārai				-	
ld			-yadi			
3d	-aitai, -ai0ai	-aitai, -aiθai		-aitam		

TABLE 3.4.1: VERBAL ENDINGS 1. PRESENT INDICATIVE; PRESENT AND AORIST INJUNCTIVE AND IMPERATIVE

92 THE IRANIAN LANGUAGES

	Perfect		Pluperfect
	Active	Middle	
Sing.			
1	<i>-a</i>	-ai	
2	-θa		
3	<i>-a</i>	-ai	- <i>a</i> - <i>t</i>
Plur.			
1	-ma		
3	-1-		-rš
Dual			
3	-ātr	-ātai	
5	-111/	-0101	

TABLE 3.4.2: VERBAL ENDINGS 2. PERFECT, PLUPERFECT

.

TABLE 3.4.3: VERBAL ENDINGS 3. SUBJUNCTIVE AND OPTATIVE

	Subjunctive	Subjunctive		
	Athematic	Thematic	Athematic	Thematic
Active				
l s	-ā	-ā, -ā-ni	-jā-m	
2s	-a-h, -a-hi	-ā-h, -ā-hi	-jā-h	-ai-š
3s	-a-t, -a-ti	-ā-t, -ā-ti	-jā-t, -ī-t	-ai-t
lp	-ā-ma	-ā-ma	-jā-ma, -ī-ma	-ai-ma
2p	-a-∂a, -a-ta	-ā-0a, -ā-ta	-dyai	
3p	-a-n, - a-nti	-ā-n, -ā-nti	-jā-n	
3d			-jā-r, -jā-rš -ī-tam	-aj-an
Middle				
l s	-āi, -ānai	-āi, -ā-nai	-(ī)j-a	-aj-a
2s	-a-hai	-ā-Inai	- ī- ša	-ai-ša
3s	-a-tai	-ā-tai	-ī-ta	-ai-ta
lp	-ā-madai	-ā-madai		-ai-madai
2p				-ai-dyam
3p	-a-ntai	-ā-ntai		-aj-anta

TABLE 3.4.4: 'TO BE'

	Pres.	InjIpf.	Subj.	Opt.	Imp.
ls	ah-mi		ah-ā	h-jā-m	
2s	ah-i		ah-a-h	h-jā-h	z-di
3s	as-ti	ās	ah-a-t(i)	h-jā-t	as-tu
3d	s-tah				
lp	mahi		ah-ā-ma	h-jā-ma	
2p	s-ta			h-jā-ta	
3p	h-anti	āh-an	ah-an	h-jā-r	h-antu
1d		ah-ya(?)			
2d	s-tah				

In the athematic 3rd person pres. and aor. mid., a few forms lack the *t* in the sing. and have forms with *r* in the plur.: OAv. pres. ind. sing. *is-ē* 'desires', aor. imper. sing. *d-qm*, *uc-qm* 'let it be given, spoken', pres. imper. plur. *jān²-rqm* 'let them be smashed!', $xr\bar{u}n^3$ -rqm 'let them be bled!'; YAv. pres. ind. 3rd sing. and plur. *mruii-e* 'is said' ($< mruq_{-}\bar{e}i$), *mruu-* \bar{u} 're 'they are said' (< mrao-lmru-); *niyn-e*, *niyn-ā*'re 'is/are smashed down (upon)' (< jan-lyn-a're, see Hintze 2005); *aŋh-ā*'re 'they sit' (but 3s $\bar{a}ste < \bar{a}h$ -), $s\bar{o}i$ -relsaē-re 'they lie' (but 3s $sa\bar{e}-te$).

4.5 Preverbs

Common preverbs include us- 'up, out' -ni- 'down'; fra- 'forward, forth' -apa- 'away, off'; *ati*- 'up to' -nis- 'out, away, separate, beyond'; *ham*- 'together' -ui- 'out of, apart'. In addition, a subset of adpositions also has a preverbial function (see section 3.5). For examples see sections 5.1.2-3.

4.6 Nominal forms of the verb

4.6.1 Participles

Active and middle participles are derived from the present, aorist, perfect, and future stems of the verb (see sections 4.6.1–3). The 'past participle' with the suffix *-ta-* is derived from the root, usually in the zero grade (see section 4.6.1.4), and the verbal adjectives expressing necessity from the root, usually in the full grade, with various suffixes (see section 4.6.2).

4.6.1.1 Present, future and aorist active participles

The active participles of the pres., fut., and aor. stems take the formant -nt-:

- thematic verbs with fixed stems in -ant: pres. OAv. fem. maēk-a nt-ī- 'sparkling'; YAv. them. bar-ont- 'carrying', bū-šii-ant- 'who will be'; future: OAv. sao-šii-ant- 'he who will revitalize', fem. bū-šii-ent-ī-; – aor.: OAv. han-ant- 'gaining';
- athematic forms with strong stems in *-ant-* and weak stems in *-at-*: pres. OAv. *h-ont-*'being', fem. OAv. *šii-eⁱt-ī-* 'inhabiting'; YAv. *h-aⁱtī-* 'being'; – aor. YAv. '*buu-ant-*'becoming'; – acrostatic present stems with fixed weak stems: OAv. *stauu-at-* 'praising'.

4.6.1.2 Perfect active participles

The perf. part. act. is made with the formant -uah-l-uš-: OAv. vīd-uuah-lvīd-uš- 'knowing', YAv. vīd-uuah-lvīd-uš- 'knowing' (see section 2.3.2.2b) ja-ym-uš- 'having gone/come' ($\leq gam$ -). Note the conditioned changes (Skjærvø 1997a): vaox-^vah- ~ vaokuš- 'having spoken' ($\leq ua$ -uk-uah- $\leq vak$ -), vauuan-uuah- ~ vaonuš- 'having won' ($\leq van$ -), yōid- β ah- ~ yaētuš- 'having taken up one's position' ($\leq yat$ -), tarš-uuah- 'having fashioned' ($\leq ta$ -tš-uah- $\leq ta$ š-).

Two types of adjectives resemble the perfect participle and have similar functions, with *-u-* and *-uan:* OAv. $v\bar{u}d-u$ - 'knowing one', $v\bar{a}-un-u$ - 'winner', YAv. za-z-u- 'winner'; OAv. $ci-ci\partial-\beta an$ - 'who understands', YAv. $y\bar{o}i\partial-\beta an$ - 'standing ready'.

4.6.1.3 Middle participles

The middle participles of thematic verbs end in Av. -*əmna*- (*aiia*-stems: -*aiiamna*-), OPers. -*cumna*-, those of athematic verbs, including the perfect, regularly end in Av. -*āna*-.

4.6.1.4 Past participles in -ta-

The past participle (Eng. 'gone, killed') has the ending *-ta-* with the root in the zero grade if possible and with the regular sound changes: $\frac{\dot{s}uta}{\dot{s}uta}$ 'set in motion' ($\frac{\dot{s}au}{\dot{s}uta}$); *ux-ta-* 'spoken' ($\frac{\dot{s}au}{\dot{s}uta}$); *bas-ta-* 'bound' ($\frac{\dot{s}au}{\dot{s}uta}$); full grade: $d\bar{a}$ -ta- 'given, placed' ($\frac{\dot{s}au}{\dot{s}uta}$); *aox-ta-* 'spoken' ($\frac{\dot{s}au}{\dot{s}uta}$); *aux-ta-* 'spoken' ($\frac{\dot{s}au}{\dot{s}uta}$); *aox-ta-* 'spoken' ($\frac{\dot{s}au}{\dot{s}uta}$); *aux-ta-* 'spo

On the 'periphrastic' perfect, see sections 7.4.2.2 and 7.4.3.

4.6.2 Verbal adjectives in -θa-, -θβa-, -iia-

The 'participles of necessity', expressing 'that which ought to or can be done', are formed with the suffixes $-\partial a$ - ($-\delta a$ - by internal sandhi): $ux-\delta a$ - 'that ought to be spoken'; $-\partial \beta a$ - (-*tuua*- by internal sandhi): $vax'-\delta\beta a$ - 'that ought to be spoken; or $-i\underline{i}a$ -: $kar\underline{s}$ - $i\underline{i}a$ - 'that ought to be ploughed'. The suffix $-\underline{i}a$ - could also be attached to nouns: yesn-iia- 'deserving of sacrifices' < yasna-.

4.6.3 Infinitives

There are two sets of infinitives, which may be formed from the root or the present stem (see also Kellens 1994): those ending in $-d\bar{i}a\bar{i}$ have medial function (cf. Lühr 1994), the others are neutral with respect to voice.

The infinitives in -*diiāi* can be made either from the pres. stem: athem. (root in zero grade) OAv. *ja-idiiāi* 'to strike' (<*jan-*), YAv. *da-z-diiāi* (<*da-d^z-diāi*) 'give, establish', them. YAv. *vaza-idiiāi* 'drive'; or from the advist stem: adv. stem. athem. OAv. *dar'-idiiāi* 'hold (up)'.

The neutral (active/middle) infinitives are the following:

- exclusively OAv.: -ai: p-ōi 'protect' (< pā-); --uai: vīd-uiiē 'know' (< uid-uai); --uuanai, -manai: vīd-uuanōi 'know'; --Sai: athem. nāšē 'to obtain' (< nās-šai); them. srāuuaiieýhē 'recite';
- both OAv. and YAv. (rare) are infinitives in -tai: OAv. gat. tōi 'go' (for ga-tōi < gam-), i-tē 'go', OYAv. mrū-ⁱtē 'speak', s-tōi 'be' (<ali-);
- only YAv., the infinitive in *-taiai* (identical with the dative of an action noun in *-ti*): ux-tāe 'to speak';
- only OPers., the infinitive in *-tanaiy*, made from the root in the full grade: *bar-tanaiy* 'to carry', *car-tanaiy* 'to do' (*< kar-*).

5 SYNTAX I: WORD ORDER AND CLAUSE STRUCTURE

5.1 Word order

The basic word order is verb-final: SOV. Preverbs in tmesis are always, adverbs often, clause-initial; the indirect object usually follows the direct object. The second position in the clause is reserved for enclitics (see section 6.5.1.3).

5.1.1 Adpositions

Adpositions can precede or follow their government. The position is freer in Old Avestan than in Young Avestan and Old Persian.

Adpositions follow enclitic pronouns they govern:

YAv. kaõa [no auui] ājasāt nmāno.paⁱtiš 'when will our home-lord come [to us]?' (Yt. 17.10).

Enclitic postpositions will seek the second place in the clause:

[asmanəm auui] frašusāni 'shall I go forth [to heaven]?' (Yt. 17.57), vs. mā [auui asmanəm] frašusa 'do not go forth [to heaven]!' (Yt. 17.60).

Adpositions (and preverbs) are frequently placed between a noun and its modifier:

YAv. [aēuuqm] vā [auui xšapanəm] 'or [for one night]' (Yt. 8.11).

5.1.2 Preverbs

In Avestan, but not in Old Persian, the preverbs may be detached from the main verb, usually preceding it, sometimes fronted to the beginning of the clause, sometimes separated by one word only (frequently the conjunction -ca; Hale 1993). Coordination of separated preverbs with $(-ca \dots) -ca$ is frequent.

In Old Avestan, they are then often repeated directly before the verb, see section 5.1.3.

They may also be lowered to the end of the clause (or metrical half-line). When a verb with preverb is repeated, only the preverb may be repeated.

In Young Avestan, a verb can, apparently, have two preverbs, e.g. *paiti auua.jasa*- 'to come down *in return'.

Examples:

• joined to the verb in main and subordinate clauses:

OAv. aiiå nõiţ ər³š [vī-šiiātā]... hiiaţ īš d³baomā... [upā.jasaţ] 'they did not [discriminate] correctly between these two, because deception [came over] them' (Y. 30.6);

· separated and fronted:

YAv. [paⁱti] mam ər³zuuō [pər³saŋ^sha] yezi mam [paⁱti.pər³såńhe] '[consult] me [in turn], O upright (Zarathustra)! ... if you [consult] me [in turn]' (V. 18.7);

OAv. $[\bar{a}]$ - $z\bar{i}d^{3}m\bar{a}n\partial m$... $[^{\circ}d\bar{a}\underline{t}]/du\bar{s}it\bar{a}$ - $c\bar{a}$ 'for he [has placed] the home [in]... and difficulty' (Y. 31.18); YAv. *yezi-ca hē [hąm] tafnō [jasāt]* 'and if fever [comes (and joins) with] her' (V. 7.70);

• post-verbal:

OAv. xraosəntqm upā 'let them be howled upon!' (Y. 53.8);

• one preverb for two forms of the same verb:

OAv. $y\bar{a} z\bar{i} [\bar{a}it\bar{i} j\bar{\partial}nghati]-c\bar{a}$ 'namely, (those things) that [are (now) coming] ($\bar{a}iti < \bar{a} a\bar{e}'ti$) and (those) that [shall come] ($\bar{a} \dots j\bar{\partial}ngha'ti$)' (Y. 31.14);

• two preverbs for one verb:

YAv. ā tē aýhe fra-ca stuiie-pres. ind. 'for this I am assigning myself by my praise (ā-stuiie?) to you and utter your praise (fra-stuiie)' (Y. 1.21);

• preverb minus verb:

OAv. [apānō] darəgō.jiiāⁱtīm
[ā] xšaθrəm vaŋhāuš manaŋhō
'[having obtained] (ā-apānō) long life,
having (obtained) (ā) the command of good thought' (Y. 33.5);

• with change of preverb (and verb?):

ka0ā drujəm [nīš] ahmaţā [°nāšāmā] |
tāŋgā [auuā] yōi asruštōiš pər "nåŋhō
'how we shall [take away] here from us the Lie,
(and) [(bring it) down] upon those who (are) full of refusal to listen' (Y. 44.13).

5.1.3 Repetition of preverb in tmesis

In Old Avestan (exceptionally in YAv.), preverbs separated from the verb are often repeated directly before the verb (observing sandhi rules). This phenomenon was early on recognized as ancient interference with the text, as the repeated preverbs obey sandhi rules, but are shown by the meter to be additions to the text:

OAv. [fro] spəntā ārmaⁱtē | ašā daēnå [fra-daxšaiiā] '[launch forth], O Humility, (our) vison-souls through life-giving Order!' (Y. 33.13);

YAv. [auua] mē āziš . . . aŋhuuqm [auua-dər³nq] sadaiieⁱti 'that āzi (= ?) appears (to be) [ripping off] my life thread' (V. 18.19).

5.2 Topicalisation: 'raising' and 'lowering'

Departures from the basic word order are frequent, most often for metrical reasons, but also for emphasis of various kinds (see also section 10 Stylistic features).

'Raising/fronting' and 'lowering/backing' of the main constituents are quite common.

In addition, in the Old Avestan and Young Avestan metrical texts, word order to a large extent depends on the exigencies of the metrical units, although similar tendencies in Old Persian show that it is also a feature of elevated style (cf. Hale 1988).

In general, verbs tend to be raised to initial position, and other parts of the sentence tend to be lowered. In Old Avestan, this often happens when the sentence goes over more than one 'half-line'. In Young Avestan and Old Persian, it frequently happens with complex direct objects. Raising is often combined with other effects, such as parallelism and chiasmus.

5.2.1 Raising of verb

OAv. [ahmī] mazdā anaēšō . . . kamnānā ahmī '[I am], O Mazdā, weak . . . of few men I am' (Y. 46.2) [chiasmus];

YAv. [jamiiāt] võ vaŋhaot vaŋ́hō '[may there come] to you (what is) better than good! (Y. 59.31);

OPers. [0ātiy] dārayavauš xšāya0iya 'King Darius [announces]'.

5.2.2 Raising of direct object

OAv. ya0ā [ratūm] ahurō vaēdā 'how the Lord knows [the model] (to be)' (Y. 31.2);

YAv. *mā yauue [imaţ nmānəm] x^vā0rauuaţ x^var^onō frazahīţ* 'may not ever Fortune providing comfort leave [this house]!' (Y. 60.7);

OPers. [xšaçam] hauv agarbāyatā '[the royal command] he took for himself' (DB 1.41-42).

5.2.3 Lowering of subject

OAv. $\bar{a}uuis \dots h\bar{a}nt\bar{u} \dots [r\bar{a}taii\bar{a}]$ 'let there appear \dots [gifts]!' (Y. 33.7);

YAv. ā dim pər³sat [zara0uštrō] 'Zarathustra asked him' (Y. 9.1).

5.2.4 Lowering of directlindirect object

Lowering, often for metrical reasons, is frequently found with phrases (dir. obj., double dir. objs., indir. obj.) consisting of noun + determinative or sequences of nouns:

OAv. $i\theta \bar{a} \, \bar{a} \underline{i} \, yazama' d\bar{e} \, [ahur a mazd qm]$ 'thus, in this manner we are sacrificing [to Ahura Mazdā]' (Y. 37.1);

YAv. yat kər'naot aijhe xša0rāda / a-maršanta [pasu vira] [8 + 8 syllables] ... that he (= Yima) made during his reign / imperishable [cattle and men]' (Y. 9.4);

OPers. *yadiy imam dipim vaināhay [imai]-vā [patikarā]* 'if you see this inscription or [these pictures]...' (DB 4.72–73).

5.2.5 Lowering of adverbial complements

YAv. *mā ząm vaēnōit [ašibiia]* 'may he not see the earth [with (his evil) eyes]!' (Y. 9.29);

OPers. *avam kāram*... *adam a-janam [vasiy]* 'I smashed that army [greatly]' (DB 1.88–89).

5.3 Special types of clauses

Regular positive statements are of the common Indo-Iranian type. Following are remarks on special clauses.

5.3.1 Questions

Explicit questions are introduced by interrogative pronouns or particles. When they are not, they are, obviously, sometimes difficult to identify. The mood in questions is often the deliberative subjunctive (see section 7.2.1.1):

• without interrogative particle:

OAv. vīdušē zī nā mruiiāţ 'for may a man tell the knowing one?' (Y. 51.8);

• with interrogative pronouns:

OAv. [kā] vā ašā āfraštā [kā] spəņtā ārmaⁱtiš '[who] has either consulted with Order, (and) [with whom] (has) life-giving Humility (consulted)? (Y. 51.11); YAv. [kuua] hē aošō viņdāma '[where] shall we find death for him?' (V. 19.46);

• with interrogative particle, including kat and $-n\bar{a}$, approximately 'I wonder':

OAv. [ka1] mõi uruuā isē cahiiā auuaŋhō 'does my soul, I wonder, control anybody's help (at all)?' (Y. 50.1);

kām[-nā] mazdā mauuaⁱtē pāiiūm dadå 'whom, [I wonder], do you, O Mazdā, give as protector to one like me?' (Y. 46.7);

• disjunctive questions:

OAv. [katārəm] ašauuā [vā] drəguuå [vā] vərənauuaⁱtē maziiō l vāduuå vādušē mraotū '[whether] the sustainer of Order [or] the one possessed by the Lie will *retain for himself the greater (reward), let him who knows say to the one who knows!' (Y. 31.17);

YAv. [katārəm] ā0rauua a0a^urunəm [vā] paraüāţ gaē0anąm [vā] aspər³nō auuōiţ 'should the priest go away to (do) priestly studies, [or] should he help as *overseer of the livestock?' (Her. 3).

5.3.2 Exhortations and commands

Exhortations (commands, suggestions, wishes) to 1st, 2nd, and 3rd person are expressed in various ways. Simple commands are expressed by the imperative. Negated commands or exhortations (also to 1st pers.) are expressed by $m\bar{a}$ + inj. (pres. or aor.) or $m\bar{a}$ + opt. (YAv., OPers.).

Wishes are expressed by the optative, negated by OAv. *noit*, YAv., OPers. *mā*. The difference between negated commands and negated wishes is sometimes minimal.

5.3.3 Parenthetical clauses in the nominative

Parenthetical clauses in the nominative are found in Avestan:

OAv. $n\bar{u}$ im vispā [ci $0r\bar{s}$ zī] mazdåŋhō. dūm 'now, (you) all, – [for it (is) brilliant!] – pay attention to it (the announcement?) . . .' (Y. 45.1).

In Young Avestan, we occasionally find descriptive parenthetical phrases in the nominative such as the following:

upa.tacat ar'duuī sūra anāhita ka'nīnō kəhr pa srīraiiå . . . [raēuuat ci0rəm] āzātaiiå 'Arəduuī Sūrā Anāhitā came running in the body of a beautiful young woman -[(her) seed (being) wealthy (= of wealthy seed)] – high-born' (Yt.5.64).

On the Old Persian 'naming phrase', see section 6.4.1.1.

5.3.4 Reported speech

Reported speech is identical with direct speech and may be recognizable by context only: in Avestan as the object of verbs of speaking, thinking, etc., or accompanied by the particle $ut\vec{t}$, in Old Persian introduced by the conjunction *taya* (cf. Schmitt 1995). It is found in the following cases:

object of verbs of speaking, thinking, etc.: OAv. *ōiiā cistī [huuō ptā ašahiiā mazdå]* 'by this insight: [He is the father of Order, the all-knowing one]' (Y. 47.2);

YAv. yat *aēšō yō apər aāiukō... aoxtō vā hē aoxte [*0βat pairi *aŋha] 'when this child... or having been spoken to says to him: [I shall stay with you]!' (Her. 7);

OPers. yadi-mani y \bar{a}^h i y [šiy \bar{a} ta ahani y j \bar{v} a ut \bar{a} marta art \bar{a} v \bar{a} ahani y] 'If you shall think: [Let me be happy both (while) alive, and (after I am) dead let me be blessed!] . . .' (XPh 46–50).

In Old Persian the verb of speaking, thinking, etc., can be embedded in the reported speech:

[taya] amaniyaiy [kunavāniy] ava-maiy visam ucāram āha '[whatever] I thought [I shall do] that all was easy for me' (DSI). The Avestan particle $u^{t}t\tilde{i}$ precedes or follows reported speech:

OAv. yaiiå spaniiå uⁱtī mrauuaţ yām angrəm / [nōiţ nā manå . . . nōiţ daēnå noiţ uruuqnō hacintē] 'of which two the life-giving one **thus** shall say (to him) whom (you know to be) the Evil one:

[Neither our thoughts . . . nor vision-souls, nor souls go together]' (Y. 45.2);

YAv. [ā^ut võ kas-cit mašiiānam]
uⁱti mraot ahurõ mazdå
[āi ašāum zaraθuštra x^var^onō ax^var^otəm isaēta]
'[therefore may each of you men]
- thus said Ahura Mazdā –
[O Orderly Zarathustra, seek the unseizable Fortune!]' (Yt. 19.53).

In Young Avestan, *u'ti* is often found with *aojana-*: *u'ti aojana-*, *u'tiiaojana-* 'thus saying':

yō aoxta ahurāi mazdāi uⁱtiiaojanō [ahura mazda mainiiō spāništa...] 'who said to Ahura Mazdā thus saying: [O Ahura Mazdā, most Life-giving Spirit...]' (Yt. 8.10).

The OAv. particle uitī, apparently, also serves to abbreviate statements:

yōi vaŋhāuš ā manaŋhō šiie'ņtī
yås-cā [uⁱtī]
'the male (deities) who dwell with good thought,
as well as the female ones who ["dwell with good thought"]' (Y. 39.3).

6 SYNTAX II: NOMINALS

6.1 Specificity and reference

There are no articles, but relative clauses and, especially, constructions with relative particles are used to express specificity, and demonstrative pronouns are used for reference to elements of the discourse (the former/latter, the aforementioned/following).

6.1.1 The Young Avestan and Old Persian connecting relative and the relative particle

In Young Avestan and Old Persian, the relative pronoun is frequently used to connect a noun with a nominal (adjective, genitive, etc.). Its function must originally have been 'specifying' or 'delimiting', cf. OPers. *hayā manā taumā* vs. *manā taumā* = 'my family' vs. 'my *family*'.

In these constructions, when the antecedent is in the nominative or accusative, the relative pronoun is usually in the same case.

In Young Avestan, the relative pronoun takes the invariable from nom.-acc. sing. neut. *ya1* when the antecedent is in a case other than the nominative or accusative, occasionally also when it is in the nominative or accusative. In such clauses, the case of the relative pronoun and the predicate noun or adjective is the same as that of the antecedent. 6.1.1.1 Antecedent outside the relative phrase

Nominative-accusative:

YAv. [vīspəm imat yat juiiō aŋhuš]-nom. '[all this, the living existence]' = 'this entire living existence' (H. 2.2);

[0βqm] raṭūm āiiese yešti [yim zaraθuštrəm]-acc. '[you, Zarathustra], I harness by my sacrificing as model' (Vr. 2.4);

yō paoⁱriiō [gā0å] frasrāuuaiia<u>t</u> [yå paņca]-acc. spitāmahe... zara0uštrahe '(Sraoša) who (as) the first made heard [the Gā0ās], [the five] of Spitāma Zarathustra' (Y. 57.8);

haomō [təm-ciţ yim kərəsānīm]-acc. apa.xšaθrəm nišāδaiiaţ 'the haoma set [that Kərəsāni, too], down away from his command' (Y. 9.24);

OPers. [kāra haya manā]-nom. avam [kāram tayam hamiçiyam]-acc. ajd" vasiy '[my army] crushed that [conspiratorial army]' (DB 2.25–26).

6.1.1.1a With invariable yat

YAv.

[*pu*0*rəm yat pourušaspahe*]-acc. '[the son of Pourušaspa]' (Yt. 5.18);

cuuaț [aētaýhå apō yaț armaēštaiiå]-gen. 'how much [of this standing water]?' (V. 6.30).

6.1.1.2 Antecedent inside the relative phrase

YAv. *yat upaŋhacat [yim yiməm xšaētəm huuq0βəm]*-acc. 'that he followed [splendid Yima of good herds]' (Yt. 19.31);

OPers. *imā dahayāva [tayanā manā dātā]-abl.-inst. apariyāya* 'these lands behaved [according to *my* law]' (DB 1.20)

6.2 Number

Singular, plural, and dual are used in the usual ways, with a few noteworthy special features.

6.2.1 Neuter plural

The neuter plural of adjectives and pronouns is commonly used in the sense of 'things':

OAv. [yā] . . . [acištā]-**p**/nt. daņtō / vaxšəņtē 'giving [(those) which] (are) [the worst (things)] / to the blazing (fire)' (Y. 32.4);

YAv. [vaŋhu]-p/nt.-ca [vaŋhås]-p/nt.-ca āfrīnāmi 'I invite as (guest-)friends [good] and [better (things)]' (Y.52.1).

6.2.2 Dual

The dual is used with the numeral dya- 'two' and the pronoun uba- 'both' or alone to indicate a pair of equal items (natural pairs or arbitrary items). Some words have only dual forms (OPers. usi 'hearing, consciousness'). See also section 6.3.2.

Two singular items:

OAv. $a\underline{t} \dots [ahuu\overline{a} \dots fr\overline{n}n\overline{n}n\overline{a}] \dots$ $m\overline{a} uruu\overline{a} g\overline{a}u\underline{s} - c\overline{a} azii\underline{a}$ 'thus, [we two were there presenting ourselves as guest friends]: my soul and that of the fertile cow' (Y. 29.5).

A special form of the dual is the 'elliptical dual':

YAv. [*hāuuanaiiås*]-**du/gen.**-*ca ašaiia* [*frašūtaiiå*] 'and [of the mortar (and pestle) moved forth] in Orderly fashion' (Y. 27.7);

[$duua\bar{e}^i$ biia haca nər"biia duua nara] us.zaiie'nte [plur. for dual]... stri-ca na'riias-ca '[from two men (= a man and woman) two men] are born: female and male' (V. 2.41).

6.3 Grammatical concord

Grammatical concord is of the usual Indo-European/Indo-Iranian type: between nouns and adjectives, pronouns, and numerals; between nouns and appositions and in comparisons introduced by ya0a 'like, than'; and between subject and verb. There are some archaic and novel features:

6.3.1 Gender

Adjectives (including participles), pronouns, and verbs modifying several nouns tend to agree with the nearest one:

OAv. vī. nānāsā [yā-slf. kar^apō. tås- cā-slf. kauuī tås-cā] 'ruined are [what (are) the words kara pan and kauuī]' (Y. 32.15);

[yqm] då... [xšnūtəm hiiat "ruuatəm...] tat nə vaocā '[the *favour-s/f. which you (first) established... the deal-nt. which (you have)]... speak that-nt. to us' (Y. 31.3).

6.3.2 Dual determinants

Dual forms of determinants and verbs may agree with two singular nouns forming a pair:

YAv. staomi [maēyəm]-s/m.-ca [vārəm]-s/m.-ca [yā]-du/m. tē kəhrpəm [vaxšaiiatō]-3du 'I praise [the fog and the rain, which make] your body [grow]' (Y. 10.3). To express 'both X and Y', Avestan uses the construction 'both: (namely) X and Y', where 'both' is OAv., OPers. $ub\bar{a}$, YAv. uua or the invariable pronoun $uua\bar{e}m$ ($< ub^{h}a\bar{a}am$):

OAv. *ubē*-du/f. *ha*"*ruuås*-s/f.-*cā* . . . *amər*"*tatås*-s/f.-*cā* 'both wholeness and immortality' (Y. 34.11);

YAv. *uuaēm x'ar'0əm-s/nt.-ca vastrəm -s/nt.-ca* 'both food and clothing' (Y. 55.2);

OPers. *utā vištāspa-s/m. utā aršāma-s/m. ubā ajīvatam-3*du 'Hystaspes and Arsames were both alive' (XPf 19–21).

6.3.3 Plural subject and singular verb

A neuter plural subject takes a singular verb both in Old and Young Avestan (where we also find plural agreement):

OAv. $[sax^v \bar{a}r^{\bar{a}}]$ -p/nt. . . . $[y\bar{a}]$ -p/nt. $z\bar{i} [v\bar{a}$ -uu $\partial r^v z\bar{o}i]$ -3s . . . $[y\bar{a}]$ -p/nt.- $c\bar{a} [var^v \bar{s}a^t t\bar{e}]$ -3s '[the *verses], namely (those) [which have been produced] and (those) [which will be produced]' (Y. 29.4);

YAv. [vər[°]ziiatąm]-**3**s-ca iδa [vohu vāstriia]-**p**/nt. 'and [let good pastures be produced] here!' (Vr. 15.1), but kuua [tā dā0ra]-**p** paⁱti [hanjasənte]-**3p** 'where [are those gifts *totalled] in turn?' (V. 19.27).

6.4 Uses of the cases

Cases fall into the generic, but not always clearcut, categories of 'grammatical' and 'other' cases. The former, nominative, accusative (DO), genitive, dative, are those required by the syntactical structure of the noun phrase and sentence, while the latter include the vocative (address, invocation) and the 'local' cases: (local) accusative, ablative, instrumental, locative, which are 'free/independent' verb- or sentence-modifying cases and are often accompanied by adpositions.

6.4.1 Nominative

The nominative is used for the subject of any verb and the predicate of 'to be, become' and verbs such as 'to seem; be called, declare (oneself as); be announced, renowned, made/established (as)', as well as appositions to such nominatives:

with copula: OAv. yūžām zəuuištiiåŋhō īšō 'you (all are) the fastest invigorants' (Y. 28.9);

YAv. hapta hənti . . . ratauuō 'seven are the models' (N. 84);

OPers. *hamaranakara a^hmiy ^hušhamaranakara* '(as) a fighter, I am a good fighter' (DNb 34); with verbs of thinking, declaration, etc.:

OAv. *aţ hōi [aojī zaraθuštrō]* 'thus, [I declare myself to him (as) Zarathustra]' (Y. 43.8);

YAv. nmānəm hō [maniiaēta para.da0ō] '[he may think] (of himself as) [giving] a house' (V. 18.28);

OPers. [fratara maniyaiy] afuvāyā '[I consider myself superior] to fear' (DNb 38).

6.4.1.1 The Old Persian nominative naming phrase

In Old Persian, the names of persons and places in narrative passages may be introduced by a name in the nominative $+n\bar{a}m\bar{a}$ 'by name', which agrees in gender with the following noun: name-**nom.** $+n\bar{a}ma$ + masc., neut. $/n\bar{a}m\bar{a}$ + fem. and may be regarded as an adjectival compound. The entire phrase may have any syntactic function and even be governed by a preposition; its function may then be made explicit by an anaphoric pronoun or adverb:

I martiya-s/m. [martiya nāma]-s/m. cī^{*}caxraiš puça-s/m. [kuganakā nāma]-s/nt. vardanam-s/nt. pārsaiy avadā adāraya hauv udapatatā ūvjaiy 'one man [Martiya by name] son of Cincaxri, [Kuganakā by name] a town in Persia, there he was staying, he rose up in Elam' = 'one man called Martiya, son of Cincaxri, who was staying in the town of Kuganakā in Persia, rose up in Elam' (DB 2.8-9);

[kāpišakāniš nāmā]-s/f didā-s/f avadā hamaranam akunava 'Kāpišakāni by name, a fortress, there they fought the battle' = 'they fought the battle at a fortress called Kāpišakāni' (DB 3.60-61);

hacā [pirāva nāma rauta]-s/nt. 'from: [Nile by name, a river]' = 'from the river Nile' (DZc 9).

The construction may be found in Young Avestan, but the examples are too few to be certain:

saošiiąs [vər^o0raja nąma] 'the Revitaliser [Obstruction-smasher by name]' (Yt. 13.129).

6.4.2 Vocative

The vocative is used for address and is often used together with an imperative or in questions:

OAv. [f^{*}rašaoštrā] a θ rā t \bar{u} . . . id \bar{u} '[O Frašaoštra], you, go there!' (Y. 46.16);

YAv. kō [nar[°]] ahī . . . azəm ahmi [zara0uštra] haomō 'who, [O man], are you? . . . I am, [O Zarathustra], the *haoma*' (Y. 9.1–2);

OPers. [martiyā] hayā auramazdāhā framānā hauv-taiy gastā mā θadaya '[O man], do not let Ahuramazdā's command seem evil to you!' (DNa 56-58).

In Young Avestan, a vocative may be introduced by the particle *āi*:

[āi miθra vo"ru.gaoiiaoⁱte] '[O Miθra, who provide wide grazing grounds], ...' (Yt. 10.42).

A 2nd pers. pronoun in the nominative may be followed by a vocative:

tūm [miθra vo"ru.gaoiiaoⁱte] 'you, [O Miθra, who provide wide grazing grounds], ...' (Yt. 10.94);

but one in the acc. by another acc.:

 $\bar{a} [0\beta\bar{a} \ \bar{a}tr \Rightarrow m] g\bar{a}raiiemi$ 'I sing (of) [you, the fire = O fire], a song of praise' ($\bar{A}tas \ Niyayisn 2$).

6.4.3 Accusative

The accusative is used for the direct object and the predicate of the direct object, as well as appositions to these. Two accusatives are found with verbs of calling, asking, taking away, etc. The accusative is used with several prepositions, most of them local with the sense of direction.

6.4.3.1 Direct object and predicate of direct object

OAv. [ratūš] sāņghaⁱtī ārmaⁱtiš 'Humility is announcing [the models]' (Y. 43.6);

[spəntəm] at $[0\beta\bar{a}] \dots m\bar{a}\eta\bar{h}\bar{n}$ 'thus, I (now) think of [you (as) life-giving]' (Y. 43.5);

YAv. ā⁴t yimō [imąm ząm] vī.šāuuaiiat 'then Yima made [this earth] go to the sides' (V. 2.11);

[xšaiiamnəm ašauuanəm] dāiiata' place [in command the sustainer of Order]!' (Y. 8.5);

OPers. dārayavauš imam duvar0im . . . akunauš 'Darius made [this gate]' (XPa 11–13);

[ani yam ušabārim] akunavam '[another] I made [camel-riding]' = 'I made another (cross the river) riding a camel' (DB 1.86–87).

6.4.3.2 Direct objects with nouns and adjectives expressing actions

Nouns and adjectives expressing actions frequently take accusative objects:

OAv. vohū xša0rəm [vaⁱrīm bāgəm] aⁱbī.baⁱrištəm 'the good command (is) **the best bringer of** [a well-deserved portion]' (Y. 51.1); YAv. *sraošō* . . . [*driγum*] *0rātō.təmō* 'Sraoša, **the greatest protector of** [a poor (man)]' (Yt. 11.3);

OPers. *auramazdā [0uvām] dauštā biyā* 'may Ahuramazdā be the one who favours [you]!' (DB 4.54–55).

6.4.3.3 Double accusative

Two accusative objects, one personal and one thing, is found with verbs meaning 'ask for, take away from':

YAv. [yānəm vō] yāsāmi 'I request [from you a request]' (Y. 65.11);

OAv. *duš. sastiš* . . . *apo [mā īštīm]* °*iiaņtā* 'the one of bad announcing . . . **robs** [me of (my) wish]' (Y. 32.9);

OPers. [xšaçam taya] gaumāta . . adīnā [ka^mbūjiyam] '[the royal command (of) which] Gaumāta . . . robbed [Cambyses]' (DB 1.43-48).

The second direct object can be an 'inner object', which may etymologically related to the verb or not:

vībāraēm zara0uštra aom asmanom ...
[yim] mazdå vaste [vaŋhanom]
'I held out yonder sky, O Zarathustra,
[which] Mazdā wears (as) [(his) garment]' (Yt. 13.2–3);

 $y\bar{o} [a\bar{e}\bar{s}m\bar{a}m] \dots [x^*ar\bar{a}m] ja^i nti$ '(Sraoša), who strikes [Wrath a wound]' (Y. 57.10).

6.4.3.4 Accusative with impersonal verbs

The construction of an impersonal verb (or noun + copula) + personal accusative (also known from Latin) is found in Old Persian (cf. MPers. Chapter 4, section 4.3.9.1).

with varnav- 'believe':

māml0uvām naiy varnavataiy 'me/you it does not believe' = 'I/you do not believe';

with kāma ah- 'wish':

[auramazdām] ava0ā [kāma āha] '[to Ahuramazdā] thus [the wish was]' = 'Ahuramazdā wished it thus' (XPf 21–22).

6.4.3.5 Adverbial accusative

The accusative is used to express direction with verbs of motion and calling. In Old Avestan, it can be personal or impersonal. In Old Persian, it is used about place whither, alternating with *abiy*, while persons take the preposition *abiy*:

OAv. [*aēš*^{*}*m*ə*m*] *hāņduuarāņtā* 'they would scramble together [to Wrath]' (Y. 30.6); YAv. (few certain examples):

aⁱrⁱme [gātūm] hē nišhiðaēta **'he should sit down** quietly [in] his [place]' (V. 9.33);

OPers. *avam adam frāišayam [arminam]* 'him I sent [to Armenia]' (DB 2.30) but *adam frāišayam*... [*abiy avam*] 'I sent... [to (= against) him]' (DB 3.12–14).

6.4.3.6 Accusative of length of time, space and measure

OAv. *vīspā aiiār*⁵-**p/nt.** 'for all (his) days' (Y. 43.2);

YAv. *hqminəm-ca zaiianəm-ca* 'throughout both summer and winter' (Y. 65.5 = Yt. 5.5);

[varci⁰im paintcim] azaⁱte '(she = the cow) is driven [along the road of captivity]' (Yt. 10.38);

OPers. [XL arašnīš] baršnā '[forty cubits] in depth' (DSf 26).

6.4.3.7 Accusative 'of respect'

This accusative (like the instrumental) expresses 'with respect to' and is often used with superlatives and in *figura etymologica* (see section 6.4.7.1c).

OAv. *vohū uxšiiā manaŋhā* ... [*tanīm*] 'grow [in body] by good thought!' (Y. 33.10);

YAv. yat as [ašəm] ašauuastəməm 'as he was [in Order] the most Orderly' (Yt. 19.79).

6.4.3.8 Accusative with adposition

Numerous adpositions govern the accusative. When they govern more than one case, the function of the accusative is similar to that of the accusative in general (e.g. motion toward):

Av. $a\delta a^{i}ri$ 'beneath'; -antar', antar'-ca, OPers. $a^{n}tar$ 'between'; $-Av. a^{i}b\overline{i}$, auui, aoi; OPers. abiy 'to', etc.; $-Av. a^{i}p\overline{i}$ 'after, throughout'; - OPers. pariy 'about'; $-paisiy\overline{a}$ 'before'; $-Av. pa^{i}ti$, OPers. patiy (patis) 'on, at, against' etc.; -Av. para 'before'; - OPers. $para^{h}$ 'beyond'; -Av. pasca, OPers. $pas\overline{a}$ 'behind, after'; $-Av. tar\overline{o}$, tarasca 'across, over'; -Av. upa, OPers. $up\overline{a}$ 'in, at, under (during the reign of)'; $-Av. upa^{i}ri$, OPers. upariy 'over, on, above, compared to'.

6.4.3.9 Young Avestan nominative for accusative

In Young Avestan, whole phrases in the nominative, especially plural, often occupy positions in the sentence which would require them to be in the accusative. This is no doubt an effect of the oral transmission:

yat bauuāni a'βi. vaniiå [vispe daēuua mašiiā-ca vispe yātauuō paⁱrikås-ca] for: *[vispā daēuuū mašiiąs-ca vispā yātūš paⁱrikås-ca] 'that I may be an overcomer of = overcome [all old gods and men, all sorcerers and witches]' (Yt. 15.12).

6.4.4 Genitive

The main function of the genitive is 'adnominal'. The main adnominal functions are 'possessive' and 'partitive'. The genitive is also used with verbs and adjectives.

6.4.4.1 Possessive genitive

Possession is expressed by the genitive (also in noun clauses, where gen. + 'to be' = 'to have', see section 7.1.6.3). The use of the possessive genitive ranges from material possession to genitive of definition. A possessive genitive can be coordinated with a possessive pronoun. Series of two or three dependent genitives are common:

OAv. [vaŋhāuš] dazdā [manaŋhō]
[śiiaoθ^ananąm] [aŋhāuš] mazdāi
'(the Model) [of good thought] is established –
(and) [of the actions] [of the (new) existence] – for the All-knowing one' (Y. 27.13; other parsing possible);

YAv. *tum zara0uštrō [nmānahe] [po"rušaspahe]* 'you (are) Zarathustra [of (= belonging to) the house] [of Pourušāspa]' (Y. 9.13);

OPers. [dārayavahauš XŠhayā] vi0iyā 'in the house [of king Darius]' (DPi).

The genitive can be governed by the prior member of a compound:

YAv. [kamarəδō].janō [daēuuanąm] 'the [head]-smasher [of the old gods]' (Y. 57.33).

See also section 10.5 Figura etymologica.

6.4.4.2 Subjective and objective genitive

Subjective and objective genitives represents 'transformations' of sentences of the structure SV or OV > N_{gen} N:

OAv. *aēšē [ašahiiā]* 'in search [of Order]' < 'he seeks order-**DO**' (Y. 28.4);

YAv. [ahe] yasna [yazatanąm] 'by [his]-S/gen. sacrifice [of = to the gods- DO/gen.]' < 'he-S sacrifices to the gods-DO' (Y. 57.3);

OPers. xšāya0iya [dahayūnām] 'king [of/over lands]' < 'king rules the lands' (DNa 8–11). 6.4.4.3 Defining or descriptive genitive

This genitive is used to define or delimit the scope of a noun. Its most common use is to define a crime of which one is guilty or accused, that for which one must pay penalty, or that which one confesses (the 'forensic/legal' gen.), but genitive phrases describing persons or objects are also found:

Descriptive genitive:

YAv. [vīsō sūraiiå] Oraētaonō 'Thraetaona [of a vigorous house]' (Y.9.7);

vazrəm ... [*zarōiš aiiaŋhō*] frahixtəm 'a cudgel ... cast [in tawny bronze]' (Yt. 10.96).

'Forensic' genitive:

OAv. *yadā [aēšąm] kaēnā jamaⁱtī [aēnaŋhaım]* 'when the **retribution** comes [for these sins]' (Y. 30.8);

YAv. hāuuaņta [aētahe śiiao0nahe] vər[•]ziiqn 'they should perform equal (penalties) [for this action]' (V. 15.14).

6.4.4.5 Partitive genitive

The partitive genitive expresses that something is part of a totality or an example of group and is found with nouns (one among, etc.), superlatives or adjectives with implicit superlative meaning (often with $h\bar{a}tqm$ 'among/of (all) those that are'), pronouns, adverbs of place and time, numerals (from 'twenty' and up), and other words expressing quantity. It is often used in expressions of time ('sometime during'), sometimes of place ('somewhere in'):

OAv. [hātąm] huuō aojištō 'he (is) strongest [of/among (all) those who are]' (Y. 29.3);

YAv. yātauuō [mašiiānąm] 'sorcerers [among men]' (Yt. 8.44);

OPers. *VIII manā [taumā yā] tayai y paruvam xšā ya*0*i yā āha* '(there were) eight [of my family] who had been kings before' (DB 1.8–10).

A 'free' partitive genitive (French du, etc.) is found with verbs of giving, bringing, partaking, etc.:

YAv. yat vā mašiiō [mašiianąm xšudranąm] para.gə"ruuaiieⁱti 'or when a man receives [(some) men's semen]' (V. 8.32).

6.4.4.6 Genitive with adjectives and verbs

The genitive with adjectives meaning 'full of, satisfied with' and with verbs meaning 'rule (over), be in command of' is probably a variant of the partitive genitive:

OAv. yōi [a-sruštōiš] pər[•]nåŋhō 'who, full [of refusal to listen]' (Y. 44.13); YAv. *îm zå bauuat pər'na [pasuuqm]-ca* 'this earth became **full** [of sheep] and ...' (V. 2.8);

OPers. *adam[-šām] patiyaxšayaiy* 'I ruled [over them]' (DNa 6).

OAv. kat mõi uruuā isē cahiiā [auuaŋhō] 'does my soul, I wonder, command anyone's [help]?' (Y. 50.1);

YAv. *naēða-ca pascaēta hāu nā* ... *isaēta [frašūtōiš]* 'not **may** that man thereafter **be capable** [of going forth]' (P. 22).

6.4.4.7 Genitive with adpositions

A few adpositions govern the genitive, some of them also other cases:

OPers. *anuv* 'according to'; – Av. $pa^{i}ti$ 'on, with, in return for'; – $par\bar{o}$ 'before, in front of'; – *pasca*, OPers. *pasā*; – OPers. *rādiy* 'on account of'.

6.4.5 Dative

The dative (OPers. gen.-dat.) expresses the indirect object (usually animate or personified inanimate) with transitive verbs, most often accompanying a direct object, in the sense of 'giving sth. to sb.', 'doing sth. for sb.' (*dativus commodi*), but also with intransitive verbs.

6.4.5.1 Indirect object

When accompanied by a direct object, the dative is usually (but not exclusively) a personal dative of the indirect object:

OAv. [kahmāi] **mā** θβar³ždūm '[for whom] have you carved **me**?' (Y. 29.1);

at mā.. [mazōi magāi.ā] paⁱtī.zān^atā 'so... acknowledge me [for the great gift exchange]' (Y. 29.11);

YAv. yā aom pu0rəm baraⁱti [aniiahmāi aršānāi] varštəm [paⁱ0e] upa.baraⁱti '(the evil woman) who bears that son **produced** [for another male] (and then) presents (him) [to (her) husband] (as his)' (Yt. 17.58);

OPers. [aniyahqıyā] asam frānayam '[for another] I brought a horse' (DB 1.87).

This dative can be governed by a compound:

YAv. *vāstrō.bər*^{*}*taheca* [gauue huð**å** ήhe] 'and of the one by whom grass is brought [to the cow giving good gifts]' (Vr. 1.9).

6.4.5.2 Final dative

The dative of inanimate nouns can express purpose (final dative), often in connection with a verb of movement and together with a dative of the person for whose benefit it happens, the *dativus commodi*:

OAv. ku0rā [mər'ždikāi] axštat 'where will (someone) stand by [for (= to show) mercy]?' (Y. 51.4);

ā mõi [raf[°]δrāi] zauuāņg jasatā 'come to (my) calls (acc. of goal of motion) [for support] for me!' (Y. 28.3);

YAv. *ahmāi jasaⁱti [aunaijhe]* 'he comes [for help] **for him**' = 'he comes in order to help him' (Yt. 10.87).

6.4.5.3 Dativus commodi

This dative is found especially with intransitive verbs and is often accompanied by an impersonal dative of purpose:

YAv. ā^t [yimāi] [xša0rāi] 0risatō.z[°]ma hənjasənta 'then [for Yima] [for (his) command] three hundred winters came together' (V. 2.8);

[aⁱβiiō vaŋ^vhibiiō] imå zaoθrå '[for the good waters (are)] these libations' (Y. 22.2);

OPers. *imā dahayāva tayā [manā] *patiyāišd*" 'these (are) the lands which came [to me]' (DB 1.13).

This dative is also used to refer to future time:

parō. asnāi aŋ^she 'for (the duration of his) future existence' (Āfr. 3.7).

6.4.5.4 Dative with nouns and adjectives

The same dative is found with nouns and adjectives ('good for', etc.) and interjections (*ušta* 'wished-for-things, good luck', *nomō* 'reverence/homage to, hail!', *sādrəm* 'bad luck for!', OAv. *auuōi*, YAv. *āuuōiia* 'woe to!'):

OAv. huuō ["rušaēⁱbiiō] spəņtō 'he is life-giving [for the meager ones]' (Y. 29.7);

YAv. *ušta buiiāt [ahmāi na're]* 'may there be wished-for things/good luck [for this man]!' (Y. 62.1).

6.4.5.5 Dative of agent

The dative is found with verbal adjectives in *-iia-*, $-\partial a$ -, or $-\partial \beta a$ - (*-tuua-*), meaning 'which should be done by somebody':

OAv. at tā vaxšiiā išəntō yā mazdādā hiiatcīt [vīdušē] 'thus, I shall speak, O (you) who wish to come, those (words) which should be paid attention to, even when [by someone who knows] (them)' (Y. 30.1);

YAv. *mi*θ*r*ō yō nōiṯ [kahmāi] **aiβi.draoxδō** 'Miθra, who (is) not **to be deceived** [by anybody]' (Yt. 10.17).

6.4.6 Ablative

The ablative expresses separation – movement away from; distance from or point of origin seen from nearby (usually with \bar{a}) – and comparison ('than'). In Old Persian, these functions of the instrumental-ablative require the preposition *hacā*.

6.4.6.1 Ablative of separation

OAv. yā īš **pāt** [dar³sāt] ašahiiā 'which shall keep them [from the sight] of Order' (Y. 32.13);

antar^a vīspāng draguuatō [haxmāng] ^omruitē 1 am banning [from (their) following] all those possessed by the Lie² (Y. 49.3).

Note the special uses of the ablative in the following instances:

YAv. [aētahmāt puθrāt] mimar³xšaŋ^vha 'rid yourself [of this child] by destroying it!' (V. 15.14);

ablative of separation plus $par\bar{o}$ 'before, away from':

YAv. $h\bar{o} n\bar{o}i\underline{t} \dots fr\bar{a}n\bar{a}m\bar{a}'te [0\beta a\bar{e}\bar{s}\bar{a}\underline{t} \{par\bar{o} da\bar{e}uua\bar{e}'b\bar{u}\bar{o}\}]$ 'he does not yield [{before the old gods} to (their) hostility]' (Y. 57.18).

6.4.6.2 Ablative of comparison, difference and preference

This ablative is found with comparatives, with *aniia*- 'other' (tends to become a mere particle 'other than'), and with verbs:

comparison:

YAv. vātō... hubaoⁱ δiš hubaoⁱ δitarō [aniiaēⁱ biiō vātaēⁱ biiō] 'a fragrant wind more fragrant [than other winds]' (H. 2.7);

OPers. *fratara maniyaiy [afuvāyā]* 'I consider myself **superior** [to fear]' (DNb 38);

with *aniia*-:

OAv. anii $\bar{\partial}m$ [$\partial\beta$ ahm $\bar{a}t$ $\bar{a}\partial$ ras- $c\bar{a}$ mana η has- $c\bar{a}$] 'other [than your fire and thought]' (Y. 46.7);

YAv. anii $\bar{o} \left[\theta \beta a t ya t zara \theta u str \bar{a} t \right]$ '(to anybody) other [than you, Zarathustra]' (V. 2.2).

The ablative may be governed by the first member of a compound:

YAv. uyra.zaošå [tbišiiaņbiiō] 'those with strong(er) desires [than those hostile (to us)]' (Yt. 13.31).

6.4.6.3 Ablative of time or place throughout which

In Young Avestan, the ablative can express time or place throughout which or all the way up to, often with the particle -a (see section 3.1.5.3):

[asnā[#]t -ca xšafnā[#]t-ca] . . . āpō auua.barənte '[day and night] . . . the waters pour down' (Yt. 5.15);

drujō [vaēsməṇd-a] azəmnąm 'being led [(all the way) to the entrance hall] of the Lie' (Yt. 10.86; see de Vaan 2001).

6.4.6.4 Ablative with adpositions

Several adpositions govern the ablative, some of them also other cases; the function of the ablative is then similar to that of the ablative in general (e.g. motion away):

OAv. $a^i b\bar{i}$ as far as . . . is concerned, to the extent one can'; – YAv. $a\delta a^i ri$ (just) under'; – OPers. *anuv* 'along, on (river)'; – Av. \bar{a} , YAv. -*a* 'all the way to, at (*chez*), out of, throughout'; – *haca* 'from, in accordance with, on the part of' (also with 'fear'); – OAv. *hanar*' 'without'; – YAv. *mat* 'with'; – *paⁱri* 'from, away from, without'; – *paⁱti* 'from on the top of, at, beside, without'; – Av. *parā* 'before'; – YAv. *parag*²t 'aside from': – Av. *parō*, *parā* 'before, in front of, from, because of'; – YAv. *pasca* 'after'; – *upaⁱri* 'in, throughout'.

6.4.6.5 Young Avestan ablative = genitive

There are few examples in Young Avestan of genitives used as ablatives (other than of a-stems). Whether these are survivals of the old ablative forms or errors cannot be verified:

haca [hauuaiiås[°] tanuuō] 'away from [one's own body]' (V. 10.5) [cf. auui x^{*}aēpaiθiiås[°] tanuuō-**p**/acc. in section. 6.5.4.1];

frąš [aiiaŋhō] frasparat 'he jumped forth (away) [from the metal (pot)]' (Y.9.11).

6.4.7 Instrumental

The instrumental expresses means/instrument and accompaniment.

6.4.7.1 Instrumental of means

This is one of the most common cases in the Avestan texts, and, especially in Old Avestan, it is often difficult to decide which nuance is intended. In Old Avestan, the instrumental of means can also be used of (divine) persons.

This instrumental is also used of space through which (the road along which) on travels; to express reason or cause; measure and price; and as the instrumental of respect:

OAv. $k\bar{\rho} [y\bar{a}] mauxšiie^{i}t\bar{i} n\bar{\rho}r^{3}fsa^{i}t\bar{i} \,\theta\beta at$ 'who (is he) [through whom] the moon is (now) first waxing then waning' (Y. 44.3);

YAv. $y\bar{o} \ a\bar{e}\bar{s}m\bar{a}m$ [st $\bar{o}r^{3}0\beta ata \ sna^{i}\theta i\bar{s}a$] . . . $ja^{i}nti$ 'he who smites Wrath [with a stunning weapon]' (Y. 57.10);

OPers. *imā dahayāva [tayanā] manā [dātā] apariyāya* 'these lands behaved [by/according to (that) which (is)] my [law]' (DB 1.23).

6.4.7.1a Instrumental of space through which

OAv. tām aduuānam . . . daēnå . . . [yā hū.kər³tā] . . . "ruuāxšaţ 'that road . . . [along which, well made], the vision-souls have walked' (Y. 34.13);

YAv. *huuar*[°] [auua pa0a] aēⁱti 'the sun goes [along yonder path]' (Yt. 13.16);

OPers. [vi0biš-cā] tayā-dīš gaumāta haya maguš adīnā adam kāram gā0avā avāstāyam 'and [throughout the houses/towns] which Gaumāta the Magian had taken from them, I settled the people (back) in its place' (DB 1.65-66).

6.4.7.1b Instrumental of reason and cause

OAv. vaŋhāuš [əuuistī] manaŋhō '[on account of not finding] a good thought' (Y. 34.9);

YAv. $y\bar{o} g\bar{a}\theta a asrauuaii\bar{o} [qsta va tar \bar{o}.ma^i ti va] tanum piriieⁱti$ 'he who (goes) without reciting the Gabas [out of evilness or scorn] forfeits his body'(N. 41).

6.4.7.1c Instrumental of respect

This instrumental (like the accusative) expresses 'with respect to' and is often used with superlatives and in *figura etymologica* (cf. section 6.4.3.7):

OAv. *ārma^tiš vaxšt l [utaiiū^ttī təuuīšī]* 'Humility (the earth) has grown [with respect to *texture (and) *tension]' (Y. 34.11);

YAv. [ama] ahmi amauuastəmō '[in force] I am the most forceful' (Yt. 14.3);

OPers. *utā [abiš] nāviyā āha* 'and it (= the Tigris) was *deep [with waters] (= in spate)' (DB 1.85-86).

6.4.7.1d Measure and price

OAv. f^{*}rašām [vasnā] ha'0iiām då ahūm 'you have (now) made the existence "juicy" (filled it with vitalising juices) [in (exchange) value]' (Y. 34.15);

YAv. *imqm zqm vī.šāuuaiiat [aēuua 0rišuua] alumāt masiiehīm* 'he made this earth go apart (to make it) [by one-third] larger' (V. 2.11);

OPers. XL arašnīš [baršnā] 'forty cubits [in depth]' (DSf 26).

Here may also belong the use of the instr.-abl. *raucabiš* 'days' in the Old Persian dating formula:

month name (X) in gen.-dat. + $m\bar{a}h\bar{a}y\bar{a}$ 'of the month' + numeral (Y) + raucabiš Oakatā āha

'of the month of X, by Y days, (the days) had passed' = 'on the Yth of X',

but month name (X) in gen.-dat. + $m\bar{a}h\bar{a}y\bar{a}$ 1 rauca^h 0akatam $\bar{a}ha$ 'of the month of X, one day had passed' = 'on the first of X'.

6.4.7.2 Instrumental of accompaniment and dissociation/deprivation

This instrumental is used with verbs of motion, notably *haca*- (mid.) in the sense of 'be accompanied by, be together with, unite/mingle with', as well as with other verbs and expressions for 'togetherness, union', etc. In Old Persian, this function requires the preposition $had\bar{a}$:

6.4.7.2a Accompaniment

OAv. *a0rā tū [ar'drāiš] idī* 'you, go there [with the (heavenly) arbiters]!' (Y. 46.16);

YAv. [x^xar³0aēⁱbiiō] pascaēta āstaiiaņta 'afterward they should approach [with foods]' (V. 3.18).

6.4.7.2b DissociationIdeprivation

OAv. *parā vå [vīspāiš] °vaox'mā [daēuuāiš]-cā* 'we have (always) said you (are) beyond [others], both [old gods] and ...' (Y. 34.5);

YAv. *vī [daēuuāiš]* . . . *sarəm mruiiē* 'I forswear the company [with the old gods]' (Y. 12.4).

6.4.7.3 Instrumental with adpositions

A few adpositions govern the instrumental, some of them also other cases: Av., OPers. $had\bar{a}lha\delta a$ '(together) with'; $-Av. ha\theta r\bar{a}$ 'in the same place as, together with'; -mat '(together) with'; -pa'ti, OPers. '*patiy* 'at, close to, in, throughout'; -pasca 'after'.

6.4.7.4 Case replacements

In Young Avestan, the instrumental plural commonly takes the dat.-abl. ending -biiō:

yō yu δiieⁱti . . . [haδa daēuuaēⁱbiiō] 'who fights . . . [with the old gods]' (Y. 57.17).

In Young Avestan, the nominative-accusative plural forms of neutre (rl)n-stems commonly take attributes in the instrumental plural (a still unexplained peculiarity of YAv.):

yim [vispāiš]-p/instr. pa'tišmarənte [yāiš] spəntahe mainiiāuš [dāmąn]-p/nom. 'whom [all the creatures] of the Life-giving Spirit recall' (Yt. 8.48).

6.4.8 Locative

The locative indicates time and place in/at which (when?, where?). It also indicates motion into or inside (also 'wishing sth. upon sb.'). A special use of the loc. is the 'loc. of emotion' ('to my sorrow'; see Kellens and Pirart 1990, 43).

6.4.8.1 Locative of place and time

OAv. $[0\beta ahm\bar{i}] \bar{a} [dqm] nip \dot{a} \dot{i} fh\bar{e}$ 'you are (now) guarding (it) there [in your abode]' (Y. 49.10);

YAv. *x^vahmi dam x^vahmi ci0re* 'in his own house, in his own lineage' (Vr. 14.2);

[fraiiaⁱre aiiqn] bauuaⁱti hubaðrō '[On a future day] he becomes lucky' (Aog. 53);

OPers. pasāva-diš auramazdā manā [dastayā] akunauš 'then Ahuramazdā placed them [in] my [hand]' (DB 4.35).

6.4.8.2 Locative of prize won

The locative is used to indicate things to be won in competition, especially with the verbs $z\bar{a}$ - 'to leave (the competitor behind) at = in (the race for) X' and $yu^i \delta iia$ - 'to fight (for)':

OAv. yõi zazənti [vaŋhāu srauuahī] 'who shall be leaving (the others) behind = win [in (the race for) good renown]' (Y. 30.10);

YAv. *zazuš [vīspaēšu vaŋhušu]* 'having won [in (the race for) all good things]' (P. 26);

tå yuⁱδiieⁱnti pəṣanāhu [hauue asahi šōiθraēca] '(the fravashis) fight in battles (each) [for (her) own place and settlement]' (Yt.13.67).

6.4.8.3 Locative with adpositions

A few adpositions govern the locative, some of them also other cases:

OAv. $a^i b\bar{i}$ 'in, on, regarding'; – OAv. \bar{a} 'in, on'; – Av. $\bar{a}ka^*$ 'in the presence of, in view of' (Sk jærvø 2005a: 203–5); – OAv. $pa^i r\bar{i}$ 'among'; – Av. $pa^i t\bar{i}$ 'on; at, in return for'; – YAv. upa 'in'.

6.5 Uses of pronouns and pronominal forms

6.5.1 Personal pronouns

6.5.1.1 1st and 2nd persons, tonic forms

The tonic (independent, stressed) forms of the personal pronouns are used in Old Avestan for emphasis and contrast; in Young Avestan, they are used more liberally; in Old Persian, personal pronouns are rarely omitted, and only in sequences of clauses at least one of which contains the pronoun.

OAv. $[az\bar{\partial}m] - c\bar{l}t \dots [0\beta qm] m\bar{\partial}th\bar{l}n \dots$ '[I] for my part (now) consider $[you] \dots$ ' (Y. 29.10);

YAv. [$t\bar{u}m$] $n\bar{o} \bar{a}\theta raom zaota-ste \dots [az \ni m] \dots$ '[you], O priest, (are ordered) to be our libator . . . (while) [I] . . . '(Vr. 3.7); OPers. [adam] dārayavauš xšāya0iya vazarka '[I] (am) Darius, the great king' (DB 1).

6.5.1.2 3rd person

Of the three 3rd-person pronouns *ha-lta*-, *i*-, and *a*-, the first two have only nom. and acc. forms, the third supplies the other oblique forms. *ha-lta*- is often difficult to distinguish from the far-deictic demonstrative pronouns. The classification of the pronoun *huuo* is often unclear.

6.5.2.2a ha-, ta-

The forms of *ha-lta-* are usually emphatic and are often found in initial position followed by the emphatic $z\bar{i}$, as antecedent to a relative pronoun, and as emphatic anaphoric. They are found in second position mainly in questions and after sentence-initial particles:

OAv. [huuō] [tāng] frō.gå... carat '[he] shall make [them] the lead bulls' (Y. 46.4).

When used as antecedents for relative pronouns, they may be separated from the relative or precede it immediately (see section 8.2.2):

YAv. $[h\bar{o}] z\bar{i} asti... y\bar{o} ahur\bar{o} mazdå$ for [he] is . . ., (he) who (is) Ahura Mazdā' (Vr. 2.7); $k\bar{o} [h\bar{o}] a\eta hat ... y\bar{o} ... [h\bar{o}] b\bar{a} a\eta hat ... y\bar{o}$

'who may [he] be ... who ... will be [he] ... who' (V. 7.78–79).

On OPers. hauvlava-, see section 6.5.3.4.

6.5.2.2b The oblique pronominal stem a-

This pronoun is commonly used as a simple enclitic anaphoric, also reflexive, but it also refers emphatically to an object in contrast to another. In the latter usage it may be difficult to distinguish it from its use as the oblique stem of the near-deictic demonstrative pronoun *ima*:

OAv. [ahmāi]-cā xšaθrā jasaţ 'and [to him/this one] he shall come with command' (Y. 30.7);

YAv. sruuaēna [aēšąm] safåŋhō zaraniia 'benailed are [their] hooves, golden' (Y. 57.27).

6.5.2.2c i-, hi-/ši-, di-

This pronoun can be used proleptically for a noun (pronoun) or for direct speech or anaphorically; the noun may be gapped:

OAv.,

• proleptic:

yōi [īm] f³rašām kər³naon ahūm '(those) who shall make [it] perfect, (this) existence' (Y. 30.9); • anaphoric:

at [hī] [aiiå] frauuar'tā 'but [she] chose among [those two]' (Y. 29.7);

• both proleptic and anaphoric:

nōiţ tā [īm] xšnāuš vaēpiiō... zara@uštrəm...
hiiaţ [hōi] [īm].. zōiš'nū vāzā
'the *trembler did, for (all) that, not favour [him], Zarathustra, when [his] two draught animals (were) *angry at [him]' (Y. 51.12);

YAv. *pascaēta [diš] fraspaiieⁱti mi*0rō 'then Miθra casts [them (masc.)] away' (Yt. 10.43);

OPers. $x \hat{s} a cam$... $a dam[-\hat{s} im] g \bar{a} \theta a v \bar{a} s t \bar{a} y a m$ 'the royal command ... I set [it] down in its place' (DB 1.61–63);

abicarīš... *tayā*[*-dīš*] *gaumāta*... *adīnā* 'the pastures that Gaumāta had taken [from them]' (DB 1.64–66).

OPers. sing. -sim is also used as instr. -abl .:

*kāra[-šim] hacā d***a***ršam atcırsa* 'the army/people feared [him] strongly' (DB 1.43–53).

6.5.1.3 Enclitic pronouns 1st, 2nd and 3rd person

Enclitics commonly follow the first word in a clause or metrical unit ('verse line, halfline'), less commonly they are placed at the end of a metrical unit. In clauses with elements raised into the first position, the enclitic may remain in its place. Several enclitics may follow one another. In Old Persian, the position of enclitics is relatively free.

6.5.1.3a Nominative

OAv. *mīždəm mazdā yehiiā [tū] da0rəm* 'the fee whose depository [you] are, O Mazdā' (Y. 34.13);

at [yūš] daēuuā vīspåŋhō akāt manaŋhō stā ci0rəm 'but [you], O old gods, are all the *seed (issued) from an evil thought' (Y. 32.3);

YAv. ā [tū] mē aētaiiå zao0raiiå fraŋ^vharōiš 'then may [you] partake of this my libation' (Yt. 5.91).

6.5.1.3b Accusative

Accusative forms are distinct from genitive-dative forms in Old Avestan, but Young Avestan uses the genitive-dative forms of the 1p and 2p, occasionally also the 3s, pronouns as accusative. In Young Avestan and Old Persian, the tonic forms of the 1st and 2nd pers. forms are also used as enclitics:

OAv. $a \bar{s} \bar{a} kat [0\beta \bar{a}] dar^{3} s \bar{a} n \bar{i}$ 'shall I see [you] through Order, I wonder' (Y. 28.5) [$a \bar{s} \bar{a}$ raised];

āuuiš [nå] aņtar' hāņtū... *rātaiiō* 'let gifts appear among [us]!' (Y. 33.7) YAv. aoi $[mqm] \dots st\bar{u}\delta i ya0a [m\bar{a}] \dots stauuqn$ 'praise [me] ... like they will praise [me]!' (Y. 9.2);

mā ciš pa^uruuō buⁱõiiaēta [nō] 'may no one notice [us] first!' (Y. 9.21) [octosyllabic verse];

OPers. *mā-taya[-mām] xšnāsātiy* 'lest he recognise [me]' (DB 1.52).

6.5.1.3c Genitive-dative

OAv. sraotā [mõi] mər³ždātā [mõi] 'listen to [my] . . .! be merciful for [my] . . .!' (Y. 33.11);

YAv. ašaiia [nō] pa^ttī.jamiiāţ 'may he in (re)turn come [to us] in Orderly fashion!' (Y. 7.24);

OPers. *vašnā auramazdāha utā[-maiy]* 'by the greatness of Ahuramazdā and [me]' (DB 4.46).

6.5.1.3d Ablative

OAv. $y\bar{\sigma} [0\beta a_{1}]$. asruštīm . . . yazāi apā 'I who shall sacrifice away [from you] lack of listening' (Y. 33.4);

OPers. *tayā hacā[-ma'] atarsa* '... which feared [me]' (DPe 9).

6.5.2 Possessive pronouns

Only Old Avestan has genuine possessive pronouns; in Young Avestan and Old Persian, the genitive of the personal pronouns is used:

OAv. [mā "ruuā] gāuš-cā azii**å** '[my breath-soul] and that of the fertile cow' (Y. 29.5);

nõit [nā manå]... *haciņtē* '[our (= your and my) thoughts] are not in agreement' (Y. 45.2);

tām [alunākāiš azdəbīš]-cā uštānāiš-cā yazamaidē 'to *him* we are sending our sacrifice together with [our bones] and life breaths' (Y. 37.3);

YAv. [yūšmākəm yasnāi]-ca... [ahmākəm hauuaŋ^vhāi]-ca 'for [your sacrifice], for [our] *well-being]' (Y. 14.1).

6.5.3 Demonstrative pronouns

The two demonstrative pronouns *ima*- and *aua*- denote near and far deixis, respectively, that is, what is near the speaker in space and time, both in his immediate surroundings, as opposed to farther away, and to his cosmic place on earth, as opposed to in heaven; the waters and fires on earth, as opposed to those in heaven, etc. The two are often contrasted in the texts:

OAv. [*imā*] raoc**å** bar³zištəm . . . bar³zimanąm [auua<u>t</u>] '[these] lights (= the ritual fire) . . . [yonder] highest of heights (the sun)' (Y. 36.6);

YAv. [imqm]-ca zqm yazama'de [aom]-ca asmanəm yazama'de 'and we sacrifice to [this] earth, and we sacrifice to [yonder] sky' (Yt. 13.153);

OPers. *haya [imām] būmim adā haya [avam] asmānam adā* 'who set in place [this] earth, who set in place [yonder] heaven' (DE 2-4).

6.5.3.1 The near-deictic ima-la-

In addition to its local-temporal deixis referring to objects in the world, this pronoun can refer to on-going, present events, for instance, those taking place in the sacrifice; it is often accompanied by 1st person references. It also refers to the just-mentioned or to the following:

YAv. [iməm] haoməm... äiiese yešti 'by my sacrificing I harness [this] haoma' (Y. 22.1–2);

ušta buiiāt [ahmāi] naⁱre 'may there be wished-for things [for this man]' (Y. 62.1);

antar³-ca druuantom āmrūta [aiia] antar³.uxti 'he forswore the Lieful One with [this] forswearing: ...,' (Y. 19.15);

paⁱti tē... [*imå*] sruuå vaēδaiiemi 'to you I exhibit [these] nails' (V. 17.9);

OPers. mām auramazdā pātuv hacā gastā utā-maiy viθam utā [imām] dah**ņ**yāum 'may Ahuramazdā protect me from evil, both my house and [this] (my) land!' (DNa 51-55);

ava [ahayāyā] dipiyā naiy nipištam 'that is not written in [this] inscription' (DB 4. 47–52).

6.5.3.2 The near deictic aēša-laēta-

In its general use in the ritual and narrative texts, this pronoun overlaps to some degree with *ima-la*:

YAv. [aētahmi] aŋhuuō yat astuua nti 'in [this] bony existence' [the existence of living beings with bones];

[*aēta*] vaca m**a**δaiiaŋ^vha 'intoxicate yourself with [this] word!' (Vr. 8.1).

It is frequently used with 2nd-person deixis:

YAv. [*aēša*] zaoθra paⁱti.jamiiā<u>t</u> tauua ahurāne ahurahe 'may [this] libation (of yours) arrive, yours, O lady of the Lord' (Y. 68.1);

[aētaē]-ca tē vacō 'and [these] words of yours' (Yt. 14.46). The majority of occurrences of this pronoun is in the legal texts. Most of the contexts are of the type 'how should this/these X(s) behave in the case of this Y? The meaning of the pronoun is therefore very often 'the X in question, this X we are discussing, the aforementioned X'. The pronoun seems sometimes to be close to *ha*- in function, cf. $h\bar{o} z\bar{i}$ asti and $a\bar{e}s\bar{s}\bar{o} z\bar{i} asti$, probably with just a slight difference in deixis:

YAv. caiiō $\bar{a}^{t} \underline{t}$ [aēte] raocå aŋhən... yōi auua $\theta a \bar{a}$.raocaiieⁱnte [aētaēšuua] var³fšuua yō yimō kər³nao \underline{t} 'but which were [these] lights that shine hither in that way in [these] *enclosures that Yima made?' (V. 2.39);

OPers. mām auramazdā pātuv . . . [aita] adam auramazdām jadiyāmiy [aita]-maiy auramazdā dadātuv 'may Ahuramazdā protect me . . . [this] I ask Ahuramazdā for; may Ahuramazdā give me [this]!' (DNa 51–55);

contrasting aēta- vs. auua-:

YAv. mā mē [aētaiiå] zaoθraiiå fraŋ 'harəņtu...
nōiţ [auuå] zaoθrå pa 'ti.vīse yå māuuõiia fraŋ 'harəņti
'let them not partake of [this] libation of mine...
I do not accept [those] libations of which they partake for my sake' (Yt. 5.92–93).

6.5.3.3 The demonstrative pronoun huuo, ana-

The pronoun huuō can have 2nd-person deixis (cf. Jamison 1992, Watkins 2000):

OAv. "ruuāzištō [huuō] nå... paⁱtī.jamiiå '[you there], who gladden (us) the most, may you *in return come to us' (Y. 36.2).

The pronominal stem *ana*- may have 2nd-person and 3rd-person deixis, with contextually derogatory reference:

OAv. [anāiš] và nōiţ... ašəm-cā yānāiš zar^anaēmā 'may we not anger you, as well as Order and (your) thought, the best, with [those] requests (to you)' (Y. 28.9);

[anāiš] ā manahīm ahūm mər'ngduiiē 'by [those] actions/utterances [(of yours)] you are destroying (here and now) the existence of thought' (Y. 53.6);

YAv. aθā azām-cīţ... daēuuāiš saram vīmruiiē
yaθā [anāiš] viiāmruuītā
'and thus do I too renounce union with the old gods,
like (Zarathustra) used to renounce (union) [with them]' (Y. 12.6).

6.5.3.4 The far-deictic auua-

In addition to its local-temporal deixis (see on *ima*- and $a\bar{e}ta$ -, above), this pronoun can refer to well-known facts in the other world. In Old Persian, it also serves as emphatic or anaphoric 3rd-person pronoun (see also section 6.4.1.1):

OAv. vīduuå [auuąm] yā īm aŋhaţ apāmā 'knowing [yonder] (requital) that shall be the last (to reach?) him' (Y. 44.19);

YAv. [hāu] . . . huraoða jasā'ti '(then) [she] shall come, well-shaped' (V. 19.30);

[aom] gaⁱrīm yazamaide yim ušadam ušidar'nəm 'we sacrifice to [yonder] mountain: the ridge Crack of Dawn' (Yt. 1.28).

OPers. hauv/ava- is both far-deictic and anaphoric, possibly with emphasis:

utā pārsam utā mādam . . . [hauv] āyasatā '(it was) [he] (who) took both Persia and Media' (DB 1.46.-47);

tayaiy paruvā xšāya0iyā yātā āha [avaišām] avā naiy astiy kartam ya0ā manā... kartam 'the former kings, for as long as they were – [they] have not done as much as I have done' (DB 4.50-52).

6.5.4 Reflexive pronouns

Examples:

OAv. $y \bar{s} ng [x^{s} \bar{s}]$ "ruuā $[x^{s} a \bar{e}] - c \bar{a} xraodat da \bar{e} n \bar{a}$ 'whom [their own] breath-soul and [their own] vision soul will make *shudder' (Y. 46.11);

YAv. [x^vā] daēna nisⁱrinuiiāt acištāi aŋ^vhe 'may [his own] vision soul give him over to the worst existence!' (V. 5.62);

aoi nmānəm yim [x^vaē paⁱ0im] 'to [(my) own] house' (Yt. 5.63);

OPers. [uvaipašiyahayā] daršam xšayamna a^hmiy 'I am firmly in command [of myself]' (DNb 14–15);

utā pārsam utā mādam . . . [uvāipašiyam] aku^utā 'he made both Persia and Media [his own]' (DB 1.46-47).

6.5.4.1 Use of tanū- 'body' as 'self'

In all three languages, tani- 'body' is used in the sense of 'own body, self':

OAv. auuaēnatā... āuuar'nå vīci0ahiiā narām narām [x^vaxiiāi tanuiiē] 'observe... the *preferences of discrimination (made) man-by-man [for his own body]!';

YAv. *auui [x^{*}aēpaⁱθiiås' tanuuō]* 'upon [(their) own bodies]' (Yt. 10.23);

OPers. *dārayavauš haya manā pitā pasā [tanūm] mām ma*0ištam akunauš 'my father, Darius, made me the greatest after [(him)self]' (XPf 30-32).

6.5.5 Reciprocal expressions and 'other'

Reciprocity is usually expressed by repeating *aniia*- 'one . . . (an-/the) other' (cf. Jamison 1997; see also section 4.6.10):

OAv. ašā vā [aniiō a'nim] vūuuaņghatū '(travelling) through Order, let [one] of you *illuminate/overcome [the other]!= [one another]!' (Y. 53.5);

YAv. *yaēšąm [aniiō aniiehe] uruuānəm aiβi.vaēnaⁱti* 'of whom [one] looks at the soul [of the other]' (Yt. 13.84);

OPers. [aniya aniyam] naiy ja"tiy '[the one] does not kill [the other]' = 'they do not kill one another' (DSe 35–36);

[ani yam] ušabārim akunavam [aniyahṛ.yā] asam frāna yam '[the one = some] I mounted on camels, [for the other = for some] I brought a horse' (DB 1.85-87).

6.5.6 Interrogative pronouns

Examples:

OAv. [ciš] ahī [kahiiā] ahī '[who] are you? [whose] are you?' (Y. 43.7);

YAv. [kō] mam yazāⁱte... [kahmāi] tanuuō druuatātəm azəm baxšāni '[who] will sacrifice to me? [to whom] shall I give health of (his) body?' (Yt. 10.108).

6.5.7 Indefinite pronouns

Examples:

OAv. at huuo... [kas-cīt] ašā huzāņtuš 'thus, he there ... [whoever] by (his) Order (is) of good lineage' (Y. 49.5);

YAv. [kqm-cit] vā hubao'ditəmanqm "ruuaranqm 'or [whichever] of most fragrant plants' (V. 8.2);

[kaýhe kaýhe] apayžāⁱre 'in [each and every] outlet' (Yt. 5.101-2);

[kahe kahiiā-cīt] druuatąm '[of each and everyone] of the ones possessed by the Lie' (Y. 61.4);

pita pu0ras-ca... [*kataras-cit*] 'father and son [each]' = 'both father and son' (Y. 9.5).

With relatives:

OAv. $t\bar{a}c\bar{a}$... $a\bar{s}aun\bar{e}c\bar{o}i\bar{s}$ [$y\bar{a}$] $z\bar{i}$ [$c\bar{c}c\bar{a}$] vahišt \bar{a} 'and **those** (things) you assigned to the sustainer of Order, namely, [whichever] are the best ones' (Y. 47.5); *uštā ahmāi* [yahmāi] uštā [kahmāicīt]... mazd**ā** dāiiāt ahurō 'wished-for (things are) in the wish **for him**, [to whomever] Mazdā Ahura shall give (them)' (Y. 43.1).

Negated:

OAv. *aēšcīm aēnaŋhąm [naē-cīt] vīduut ao jõi* 'of these sins I declare I know [none] (at all)' (Y. 32.7);

[*mā ciš*] at vā... gūštā 'but let [no one] among you keep listening to' (Y. 31.18);

OP. [naiy] āha martiya... [naiy] amāxam taumāyā [kaš-ciy] haya... [kaš-ciy naiy] adaršnauš [ciš-ciy] 0a"stanaiy 'there was no man ... nor anybody of our family, who ... nobody dared say anything' (DB 1.48-49, 53).

Without particle:

OAv. kadā vaēdā yezī [cahiiā] xšaiia0ā 'when shall I know whether you are in command [of anything/anybody]' (Y. 48.9).

6.6 Uses of the numerals

The numerals '100' and higher take the genitive plural of a following noun:

YAv. [cataŋrō parənå] vīðāraiiōiš auui pa0ąm kataras-ciţ 'you should hold out [four feathers] toward each of the (four) roads' (Yt. 14.44);

nauuaitīm [upāzananąm] upāzōiţ aspahe aštraiia 'he shall administer ninety [strokes] with the horse-whip!' (V. passim).

The nom.-acc. sing. of ordinals (in OPers. with *patiy*) is used in the meaning of 'for the -th time':

OAv. $n\bar{o}it [d^{ai}bit\bar{t}m] \dots ah\bar{u}m m \sigma r^{a} \dot{s} \ddot{u} \bar{a}t$ 'not [a second time] should he destroy the existence' (Y. 45.1);

YAv. [paoⁱrīm/bitīm/0ritīm] x^varənō apanəmata '[a first/second/third time] the Fortune turned away' (Yt. 19.35–37);

OPers. [patiy citīyam/duvitīyam] hamiciyā ha"gmatā 'the conspirators having gathered [for the third/second time]' (DB 2.43, 57–58).

6.7 Uses of comparative and superlative

6.7.1 Comparative

Comparison ('than') is expressed by comparative + ablative (see section 6.4.6.2) or comparative + ya0a (see section 8.2.3.6).

6.7.1.1 Comparative + positive in contrasting pairs

The comparative is used together with the positive of another adjective to form a contrasting pair, in which the first member in the comparative is depicted as superior to the second member in the positive: 'X'er and Y' = 'X and, on the other hand/in contrast, (the poorer) Y' (Humbach 1991, I § 15.2.1):

OAv. yaiiå [spaniiå] -comp. *uˈtī mrauuat yām [angrām]-pos. 'of which two, [the life-giving one] shall tell (him), whom (you know as) [the Evil one]' (Y. 45.2);

OPers. *haya [tauvīyā]*-comp. *tayam [skau0im]*-pos. *naiy ja*"*tiy* '[the mighty one] does not kill [the poor one]' (DSe 37-44).

6.7.1.2 Comparative in compounds

The comparative is found in an elliptic type of compounds: '... -er than (those of) X':

YAv. *bāzauua *auruša aspō. [staoiiehīš]* 'arms, white (and) [thicker] (than those) of a horse' (Yt. 5.7).

As the first member of a compound, a comparative may be replaced by the positive, but maintain its rection:

YAv. [uγra].zaoša [tbišiiaδbiio]-abl. '(the fravashis) with [strong(er)] desires [than those hostile] (to us)' (Yt. 13.31);

auuå dāmąn... yå həņti [paoⁱriiō].dāta [paoⁱriiō].fraθβaršta ašnāaṯ-ca apāaṯ-ca 'those creations that (were) those established [first], fashioned forth [first] (= earlier) than the sky, the water ...' (Vr. 7.4) [cf. para, parō 'before' + abl., see section 6.4.6.4].

6.7.2 Superlative

The superlative is most commonly used to present something as possessing a quality in the highest degree, 'the most A', or to single out one thing/person from others of the same class: 'A is the biggest of all A's' (see section 6.4.4.5).

The superlative is also used in contrast to an adjective in the positive or to depict something (in the superlative) as vastly superior to another thing (in the positive; Humbach 1991, $I \S 15.2.2$):

OAv. yə̄ drəguu**å-pos.** acištā vərəziiō l

ašəm maniiuš [spəništō]**-sup.**

'you, [who are possessed by the Lie], would perform the worst (words/actions); [the most life-giving] spirit . . .' (Y. 30.5);

yā vā [kasāuš]-**pos.** aēnaŋhō ā [mazištąm]-**sup.** °iiamaitē būjim 'or (someone) who for a [small] sin shall incur the [greatest] explation' (Y. 31.13).

7 SYNTAX III: THE VERB

The Iranian verb has the categories of tense and aspect, mood, and voice. Finite forms have the categories of number and person, while non-finite forms behave like nouns (infinitives) or adjectives (participles).

The negations, Av. $n\bar{o}it$, OAv. $na\bar{e}d\bar{a}$, YAv. $na\bar{e}\delta a$, nauua, OPers. naiy, mainly negate statements and $m\bar{a}$ ($m\bar{a}\delta a$) commands and exhortations.

7.1 Tenses

The main difference in syntax between Old Avestan, on the one hand, and Young Avestan and Old Persian, on the other, is in the use of the tenses, while that of the moods is largely the same.

The Old Avestan verbal system is based upon the opposition of the present (imperfective) aspect, which is indefinite (durative, repetitive), vs. the aorist (perfective) aspect, which is definite (punctual, ingressive, terminated); that of Young Avestan and Old Persian is based mainly upon the opposition present vs. past.

The common past narrative tense is the present injunctive (augment-less) in Young Avestan and the augmented imperfect in Old Persian.

In Avestan, an action can be characterised as definitely having taken place in the past(?) by the optional use of the augment. In Old Persian, the augment is an intrinsic part of past tenses.

The state reached after a past event is expressed in Avestan by the perfect in its old function of resultative-stative.

In Old Avestan, the aorist expresses, on the one hand, anteriority in relation to the present or preterite, on the other punctual or 'immediate', both incipient and concluding, action vs. ongoing or unfinished action, expressed by the present.

In both Young Avestan and Old Persian, repeated or habitual past action (cf. English 'he would go') can be expressed by the optative. It then takes the augment, regularly in Old Persian and occasionally in Young Avestan (see section 7.2.2.2).

Thus, all three Old Iranian languages possess the following basic tenses:

- present: 'he does, he is doing';
- preterite: 'he did, he was doing';
- perfect: 'he has (always, never) done' or 'he did/it was done/it happened and now is' (present perfect);
- *pluperfect* in the function of preterite of the *present perfect* 'he had done and now was,' etc.

The future is usually expressed by the subjunctive (in Old Avestan by the subjunctive of the present or aorist depending on the aspect), but also by the special future stem in *-hiia-l-šiia-*.

7.1.1 Present indicative

The present indicative is the tense used to describe events that are currently taking place, whether they always take place or only now. It is also the 'performative' tense (especially in the 1s and 1 p), used, notably, in ritual contexts to describe the actions in the process of being performed by the speaker or someone referred to by the speaker.

It is used in main (declarative, interrogative) clauses and subordinate clauses of actions or situations that obtain in general (also eternal truths), but with focus on their current or incipient validity; actions or situations that obtain at the moment of utterance, e.g. during the performance of the ritual; and other actions or situations that are concurrently taking place:

OAv. $k\bar{\rho} y\bar{a} manuta [ux siie't \bar{t} n \rho r^3 f sa't \bar{t}] 0 \beta a t$ 'who (is he) through whom the moon [is (now)] first [waxing] then [waning]' (Y. 44.3);

aēⁱbiiō yōi "ruuātāiš drūjō ašahiiā gaē0å [vīmər^aņcaⁱtē]
... to those who by (their) deals with the Lie [are (now) destroying] the living beings of Order' (Y. 31.1);

ahiiā [yāsā] nəmaŋhā . . . vaŋhāuš xratūm manaŋhō 'in homage to him, I [am (here and now) asking] for the wisdom of good thought' (Y. 28.1);

YAv. vasō. xša0rō [ahi] haoma... ər[°]žuxδəm [pər[°]sahi] vācim '[you are] in command at will, O Haoma... [you are asking] a word correctly spoken' (Y. 9.25);

apąm napås' tå āpō... šōi0rō.baxtå [vī.baxša'ti] 'Apąm Napāt [distributes] those waters distributed by settlements' (Yt. 8.34);

[*nāismī*] daēuuō (for daēuuū) 'I (herewith, by my utterance) [blame/scorn] the old gods' (Y. 12.1);

*aiiaoždiia pascaēta bauua*ⁱnti 'after that they become ritually impure' (V. 3.14);

OPers. sakā tayaiy xaudām tigrām [bara"tiy] 'the Scythians who wear a pointed hat' (DB 5.22);

martiya taya patiy martiyam 0ātiy ava mām [naiy varnavataiy]
yātā ubānām hadugām [āxšnauvaiy]
'I [do not believe] what a man says against (another) man
until I [hear] (= have heard) the testimony of both (of them)' (DNb 21-24) [cf. section 6.4.3.4];

aita adam yānam [jadiyāmiy] auramazdām 'this I [am requesting] of Ahuramazdā (as) a request' (DPd 20-21).

7.1.1.1 Av. present indicative with 'before' = past

OAv. *parā* 'before' and YAv. *pa"ruua*- 'former, earlier' sometimes transfer the action of the present indicative into the past:

OAv. *drūjō āiiesē [hōiš.pi0ā] tamuō [parā]* 'in the *harness of the Lie [you (plur.) *very much fattened] (your) bodies [before = of old]' (Y. 53.6) (*hōiš.pi0ā*: intensive *hai-špī- < spī-* 'fatten'?);

YAv. *yōi [pa"ruua] miθrəm [družiņti]* 'who [betrayed] Miθra [before]' (Yt. 10.45). 7.1.1.2 Young Avestan, Old Persian present asti for imperfect

In both Young Avestan and Old Persian, *asti* is occasionally used instead of the (rare) imperfect:

YAv. kauuaēm x^varənō... yazamaⁱde... yat [asti] ahurahe mazdå ya0a dāman da0at 'we sacrifice to the Fortune of the poets... which [was] Ahura Mazdā's when he set in place the creations (Yt. 19.9–10);

OPers. ya0ā taya adam xšāya0iya abavam [astiy] aⁿtar aitā dah**a**yāva . . . ayauda 'when I became king there [were] among these lands (some that) were in turmoil' (XPh 29–32).

7.1.1.3 Old Persian present for continuing state

In Old Persian, the present is found with adverbs denoting time in the past to express states that still obtain in the present:

hacā paruviyata^h āmātā [a^hmahay] 'from the beginning [we have been] distinguished' (DB 1.7–8).

7.1.2 Present in junctive and imperfect

7.1.2.1 Present injunctive

In Old Avestan, the present injunctive is used for general (durative or iterative) actions or states typically taking place either in the divine or the human sphere, mostly without specific time reference ('does' or 'would do, used to do'):

mazdå [dadāt] ahurō hauruuatō amər^{*}tātas-cā l būrōiš ā . . . 'Ahura Mazdā [(always) gives] out of (his) plenty of wholeness and immortality' (Y. 31.21);

adā tašā gāuš [pər'sat] ašəm 'then the fashioner of the cow [will (usually) ask] (or: asked?) Order' (Y. 29.2);

tā [dəb³naotā] mašīm hujiiātōiš 'thereby [you (plur.) deceive] mortal man of good living' (Y. 32.5).

7.1.2.2 Narrative past

The common past narrative tense is the present injunctive (augment-less imperfect) in Young Avestan and the augmented imperfect in Old Persian. It also provides the background description for actions in the present injunctive. The Old Avestan texts contain too few examples of the augmented imperfect to give a precise idea of its use, but it may simply transpose descriptive and repetitive present indicative actions and states into the past. Evidence in Old Avestan for the use of the present injunctive as past narrative tense is uncertain:

OAv. kadā [ajān] mū θ rəm ahiiā madahiiā 'when [did] the urine of his intoxication [(use to) smash] . . .? (Y. 48.10); *0βōi [as] ārmaⁱtiš* 'Humility [was] with you' (Y. 31.9);

YAv. yō [as] vər³0rająstəmō 'who [was] the most obstruction-smashing' (Y. 9.15);

 $\bar{a}^{t} \underline{t} [mrao \underline{t}] ahur \bar{o} maz da$ 'then Ahura Mazdā [said]'.

In Old Persian, the (augmented) imperfect is a narrative tense referring to actions and events in the past, both successive actions and events and actions and events anterior to other actions and events in the past:

*iyam gaumāta haya maguš [a-durujiya] ava*0ā [a-0atha] 'this (picture represents) Gaumāta the Magian; he lied (and) said thus' (DBb);

*ya*0ā ka^mbūjiya mudrāyam [a-šiyava] pasāva . . . 'when Cambyses [had gone] to Egypt, then . . .' (DB 1.33);

auramazdā-mai y upastām [a-bara] yātā ima xšaçam [ham-a-dārayai y] 'A huramazdā [bore] me aid until [I (had) consolidated] this empire' (DB 1.24–26).

7.1.2.3 Negation and prohibition

The negated present injunctive expresses commands and exhortations to all persons, sometimes coordinated with the imperative:

• 1st person:

OPers. *hacā aniyanā [mā tarsam]* '[let me not fear] another!' (DPe 20–21);

• 2nd person:

YAv. [*mā*] dim [pər³sō] yim pərəsahi '[don't ask] him whom you are asking!' (H. 2.17);

OPers. $pa0im tay\bar{a}m r\bar{a}st\bar{a}m [m\bar{a} ava^{ha}rda]$ '[do not leave] the straight path!' (DNa 58–60).

• 3rd person:

OAv. $[m\bar{a}] cis at v\bar{a} dr aguat\bar{o} mq 0 rqs c\bar{a} [g\bar{u}st\bar{a}]$ 'but [let no] one among you [keep listening] to the poems of the one possessed by the Lie!' (Y. 31.18);

[*mā*] əuuīduuå a'pī [d'bāuuaiia1] '[may no] one who does not know [keep deceiving] (us) hereafter!' (Y. 31.17);

YAv. [mā] ciš [bara1] aēuuō ya1ⁱristəm '[let no] one [carry] alone what is dead' (V. 3.14).

7.1.3 Future in -Siia-

The functions of the future are similar to those of the prospective subjunctive, indicating imminent future, intention, or obligation. In Old Avestan, the rare future is found in strophe-initial statements only:

at [frauuaxšiiā] 'and so [I shall proclaim]' (Y. 45.6);

YAv. nõit luiškõ luiškāi [sraēšiiete] 'dry (matter) [shall] not [be mixed] into dry (matter)' (V. 8.34);

The future is often contrasted with the past and present:

YAv. *aēšąm uxδanąm*... *yāiš yauua fra-ca vaoce fra-ca mruiie* [*fra*]*-ca* [*vaxšiiete*] 'of these utterances which (instr. for nom.) have ever been uttered, are being uttered, and [will be uttered]' (Y. 19.10).

Here, Old Avestan uses the aorist subjunctive (see Y. 29.4 in section 6.3.3).

7.1.4 Aorist

7.1.4.1 Aorist indicative

The augmented aorist denotes the immediate, completed, past (Hoffmann 1967, 153–55). The few Old Avestan forms are used about divine utterances, ritual acts and oral tradition, in statements and in questions:

ahurahiiā zī at vā mazdå yasnəm-cā vahməm-cā vahištəm [a-māhmaⁱdī] 'for, thus, [we have thought] (= made up our minds about) the sacrifice and hymn (as) the best (thing) for you (all)' (Y. 35.7);

nū zīt cašmaⁱnī [vii-ā-dar³səm]
'for [I] just now [caught sight] of it in (my) eye' (Y. 45.8);

at tā maniiū pa^uruiiē yā yāmā x^vafnā [a-sruuātəm] 'thus, those two spirits/inspirations in the beginning, who [have been heard of] (as) "the twin sleeps" (= sleeping twin foetuses)' (Y. 30.3).

7.1.4.2 Aorist injunctive

While the temporal reference of the Old Avestan present injunctive is relatively clear, that of the unaugmented aorist injunctive is more difficult to determine. The main problem is whether a given form refers to action already completed at the time of the 'now' or whether it is just starting. The aorist injunctive probably does not refer to an action that took place at a specific moment in the past, but, at most, to an action that took place at an unspecified time in the past, e.g. for the first time, 'aorist of creation'.

It is often accompanied by present indicative or present injunctive or even periphrastic constructions with the present participle, which give the context in which the aorist injunctive took or has taken place.

7.1.4.2a Aorist injunctive expressing anteriority

The function of anteriority (to the main verb) is seen clearly in a few instances in subordiante clauses:

at 0βā māijhī pa"ruuīm mazdā yazūm stōi...
vaŋhāuš p"tarām manaŋhō
hiiat 0βā [hām] cašmaⁱnī [°grabəm]
'thus, I (now have begun to) think-aor.inj. of you as being the first, O Mazdā,...
(yet) youthful, father of the good thought –
since [I have (just now) grasped] -aor.inj. you in (my) eye' (Y. 31.8);

hiiaţ mīždəm zara0uštrō magauuabiiō [cōišt] parā garō d'mānē aluvō mazdå jasaţ pauruiiō 'the fœ which Zarathustra [had assigned]-**aor. inj.** before to the participants in the gift exchange, in the House of Song, Ahura Mazdā (always) comes-**pres. inj.** (forward for/with it as) the first (in line)' (Y. 51.15).

7.1.4.2b Aorist injunctive expressing future

There is one (apparent) instance of an aorist injunctive being accompanied by a future time reference (future perfect):

yastā daēuuāng aparō... [tarā.mąst] '(he) who, on account of that, in the future [shall have despised] the old gods' (Y. 45.11).

7.1.4.2c Contrasting aspects of present and aorist injunctive

In Old Avestan, present injunctive and aorist injunctive forms are often contrasted, with clear aspectual difference:

aiiå nōiį ərəš [vīšiiātā] daēuuā-cinā hiiaį īš d'baomā... upā.jasaį hiiaį vər'nātā acištəm manō 'especially the old gods [did] not (then) [discriminate]-**aor.inj.** correctly between these two, because deception kept coming over-**pres. inj.** them, so that they would prefer-**pres.inj.** the worst thought' (Y. 30.6); aį-cā hōi [scaņtū]... yasnąs-cā

... då ŋhō ər'zūš pa0ō l yqm daēnam ahurō saošiiantō dadāt

'and so [let *them* (now) start pursuing]-**aor. imp.** . . . the sacrifices (to him), (Mazdā,) . . . (which are) the straight paths of the gift

(awaiting) the vision-soul which Ahura (always) establishes-**pres. inj.** (as) that of the revitaliser' (Y. 53.2).

7.1.4.2d Mythical events

The aorist injunctive is used to describe mythical events, as well as human actions in the past. This use of the aorist injunctive is found in cosmological contexts, often to denote the first occurrence of an act, later repeated in the sacrifice:

kas-nā $x^{v} \bar{\partial}ng \ str\bar{\partial}m$ -cā [dāt] aduuān ∂m 'who, I wonder, (first) [established]-aor.inj. the road of the sun and of the stars?' (Y. 44.3);

ya0ā tū ī ahura.mazdā [mānghā]-cā [vaocas]-cā [dås]-cā [varəš]-cā yā vohū l a0ā tõi dad³mahī-**pres. ind.** 'in the same way that you, O Ahura Mazdā, (for the first time?) [thought] them [spoke], [established], and [produced]-**aor.inj.** (those) which (are) good (thoughts, etc.), in that way we are (here and now) establishing-**pres. ind.** them for you' (Y. 39.4).

7.1.4.3 Negated aorist injunctive to express prohibition

The aorist injunctive is used with the prohibitive negation $m\bar{a}$ to express 'do not (start)!', often coordinated with the imperative:

OAv. huxša0rā xšāņtam [mā] nā duš^o. xša0rā [xšāņtā] 'let (now)] those of good command command-**aor. imp.** (us)! [let not] those of bad command [(now) command]-**aor. inj.** us!' (Y. 48.5).

7.1.4.4 Young Avestan and Old Persian aorist

The Young Avestan and Old Persian examples of a orist indicative and a orist injunctive may be imitations of Old Avestan:

YAv. ā^at [mąsta] yimō 'then Yima [thought]-aor.inj.' (V. 2.31);

OPers. baga vazarka auramazdā haya imām būmim [a-dā] haya avam asmānam [a-dā] 'Ahuramazdā is a great god, (he) who [set in place]-**aor.ind.** this earth, who [set in place] yonder heaven' (DE 1–11);

imā dahayāva tayā adam [a-daršiy]-aor.inj. 'these lands that I [got hold of]' (DPe 5-10).

7.1.5 Perfect

The function of the perfect in the oldest Indo-European languages was to express the state obtaining from a past action or event. In Avestan, this function is found with verbs of perception and verbs of state, as well as of transitive verbs.

The perfect has a few subjunctive forms, as well as a pluperfect. The optative forms are commonly used in conditions contrary to fact (see sections 8.2.2.6, 8.2.4.2c).

7.1.5.1 Perfects without present

The two perfects ad- 'say' (OInd. ah-) and vaed- have no corresponding presents:

OAv. at tõi vīspāņg aņgrāņg ašāunō [ādar^ā] 'thus, [they say/claim] (that) all the evil ones (are) followers of Order' (Y. 43.15); YAv. naēciš ida zaraduštra sūš yadā hīm [ādar³] mašiiāka 'there is no "vitalisation" here, O Zarathustra, (such) as humans [say] it (= refer to it)' (FrD. 3, see Hoffmann 1968);

[vaēθā]-ca taţ *cikaēθa-ca āi ašāum zaraθuštra mana xraθβā-ca cisti-ca 'I [know] and am aware of that, O Orderly Zarathustra, by my wisdom and insight' (Yt. 1.26).

7.1.5.2 Perfect expressing resulting state

The perfect indicative is used to indicate the result of a preceding action or state and is often used in 'ever/never' statements.

Perfect of intransitive and medio-passive verbs:

OAv. $y\bar{o}i \dots [n\bar{o}it]$ frasaiiā vaņhāuš [cāxnar³ (< kan-)] manaņhō 'those who ... [have never taken pleasure] in the questioning of (their) good thought?' (Y. 44.13);

YAv. *frāna åŋhąm nasunąm yå paⁱti āiia z³mā [ⁱrīri0ar³ (<rai0-)] 'on account of the great quantity of the corpses that [have (ever) died (and now lie dead) all over this earth' (V. 5.4).

Perfect of transitive verbs:

OAv. ā mā aēš^omō hazas-cā rəmō [^ohišāiiā (< hai-)] 'wrath and violence, restraint [have bound] me (and now keep me bound)' (Y. 29.1);

YAv. $y\bar{o} n\bar{o} [da\delta a] y\bar{o} [tataša] y\bar{o} [tu0ruiie]$ '(he) who [has made] us, who [has fashioned] us, who [has *compiled] us' (Y. 1.1);

yō [nōiț] pascaēta [huš x^{*}afa (for *hu-šuafa < huap)]
yaţ maniiū dāmąn daⁱbītəm
'(Sraoša . . .) who [has never slept]
(ever) since the two spirits would set in place (their) creations' (Y. 57.17).

7.1.5.4 The past perfect/pluperfect

OAv. $ta\bar{e}c\bar{i}t \dots y\bar{o}i dr \partial guuat\bar{o} mazb\bar{i}s [ci-k\bar{o}it-\partial r^{\partial}s (< kait-)]$ 'those too . . . who [had (always) distinguished] those possessed by the Lie with great (brilliant gifts?)' (Y. 32.11) [see Jasanoff 1997];

YAv. niš tat paⁱti druxš nāšāⁱte yabāt aⁱ β icit [ja- γ m-at (< gam-)] 'the lie will be dispelled and destroyed there to the very place whence [it had come]' (Yt. 19.12).

7.1.6 The verb 'to be' and noun clauses

Both the subject and predicate of 'to be' are typically in the nominative:

YAv. mošu tat [ās] nõit dar'yəm 'quickly that [was], not long' (Yt. 5.65);

Occasionally, adverbs can be used as predicates with 'to be' (see Hoffmann 1952):

OPers. kāra pārsa... [kamnam āha] 'the Persian army... [was] (just) a few] (men)' (DB 2.18–19).

7.1.6.1 The copula

A 3rd singular copula is often gapped, sometimes also the 3rd plural or infinitive, occasionally other persons when the subject is an expressed pronoun:

OAv. *huuō zī drəguuå* 'for that one (is) possessed by the Lie' (Y. 46.6);

kat vā xša0rəm 'what (is) your command?' (Y. 34.5);

YAv. kaiia aıjhå ratauuō 'which (are) its models?' (Y. 19.18);

OPers. *tayaiy paruvam xšāya0iyā āha* 'who had been kings before' (DB 1.9–10).

7.1.6.2 The existential verb

This present indicative *asti* usually expresses existence, but is also used in contexts where it could not easily be omitted or is emphatic. In Young Avestan, it is found in the following instances: fronted, in relative-subordinate and interrogative clauses, in some expressions with superlatives, after fronted demonstrative pronoun or adverb (many of these after $z\bar{i}$), and occasionally elsewhere. The use of the 3p *hanti* is similar.

7.1.6.3 Possession

The existential verb can take a genitive to express possession:

OAv. *ciš ahī [kahiiā] ahī* 'Who are you? [Whose] are you?' (Y. 43.7);

YAv. [yeijhe] vaēm mahi '[whose] we are' = 'to whom we belong' (Vr. 11.13);

OP. manā auramazdā [COP.] auramazdāha adam [COP.] 'mine (is) Ahuramazdā, Ahuramazdā's (am) I' (DSk);

[dārayavahauš] puçā aniyai-ciy [āha"tā] '[Darius's were] other sons, too' = 'Darius had other sons, too' (XPf 28–29).

7.2 Moods

The Old Iranian moods were used much as in other ancient Indo-European languages. The principal innovation was the use of the optative to denote habitual past action in Young Avestan and Old Persian. In both Young Avestan and Old Persian, 'irrealis' is expressed by the perfect optative.

7.2.1 Subjunctive present and aorist

The subjunctive is the tense used to refer to the future, and so denotes intention, prospective action and exhortation. In general, the deliberative subjunctive is used in questions and in a variety of subordinate clauses. The aorist subjunctive has the same functions as the present subjunctive, but with the difference in aspect. The negations are $n\bar{o}it$ and $m\bar{a}$ (negative instructions). On the use of the subjunctive in subordinate clauses, see section 8.2.2.1 (relative clauses) and section 8.2.3 (adverbial clauses).

7.2.1.1 The subjunctive in main clauses

7.2.1.1a 1st person

The 1st person subjunctive usually means 'I/we want to do, may I/we do, let me/us do', indicating intention or impending action:

present:

OAv. *yauuõi vīspāi fraēštåŋhō [åŋhāmā]* 'for an entire lifespan [let us be] (your) dearest friends!' (Y. 49.8).

aorist:

```
tat nā nūcīt [var³šānē]
'that [I am about to produce] for us' (Y. 51.1);
```

ašā kat 0βā [dar³sānī] '[shall I see] you through Order, I wonder?' (Y. 28.5);

YAv.

present:

azəm tē gaēθå [frāδαiieni] azəm tē gaēθå [var³δaiieni] 'I [shall further] your herds, I [shall make] your herds [grow]' (V. 2.5);

aorist:

aša sraēšta [dar^{}sāma] 0***\$***ā haxma* '[shall we (now get to) see] company with you, O haoma, through most beautiful Order?' (Y. 60.12).

OPers.

present:

šiyāta [ahaniy] jīva utā marta artāvā [ahaniy] '[let me] be happy (while) alive and blessed (after I am) dead!' (XPh 47-48).

7.2.1.1b 2nd and 3rd persons

The 2nd and 3rd person subjunctive refer to the future in various modes: present:

OAv. $h\bar{a} n\bar{o} [a\eta hat]$ 'she [shall be = belong] to us' (Y. 32.2);

kadā yauuā huuō [aŋhat] 'when [shall he ever be] (there)?' (Y. 29.9);

YAv. auua0a tē [aŋhat] vaŋ́hō 'thus for you [shall be] the better (reward)' (V. 18.7);

aorist:

OAv. kōi... rāmąm [dåņtē < da'antai)] kāņg ā vaŋhāuš [jimat < jam-lgam-] manaŋhō cistiš 'who [will obtain] peace? to whom [will come] the insight of good thought?' (Y. 48.11);

YAv. [bun (< bu'an)] gaē0å amaršaņtiš 'the creatures [shall become] indestructible' (Yt. 19.12);

mā ciš mē åŋhąm zao0ranąm [fraŋ^vharā1] yō nō11... '[let] **not** anyone [consume] these libations of mine who is not...' (Yt. 10.122).

7.2.2 Optative present and aorist

The optative is the mood of the imaginary and thus mainly expresses wishes, prescriptions, imaginary comparisons or examples, and irreal conditions and comparisons. The optative of the aorist is used like that of the present, but with the difference in aspect. For the use of the optative perfect, see 8.2.2.4, 8.2.4.2c.

On the use of the optative in subordinate clauses, see sections 8.2.1 (*that*-clauses), 8.2.2.1 (relative clauses) and 8.2.3 (adverbial clauses).

7.2.2.1 Optative in main clauses

The optative in main clauses expresses wishes and exhortations. These are distinguished when negated: $n\bar{o}it$ negates wishes and $m\bar{a}$ exhortations. In questions, the optative expresses ability, potentiality, and permission:

present:

OAv. $a\theta \bar{a} t \bar{u} n \bar{\sigma} gaiias - c \bar{a} ast \bar{\sigma} n t ast - c \bar{a} [xii a]$ 'and so [may you be] our life and boniness!' (Y. 41.3);

noit d^{ai} bitīm duš.sastiš ahūm [mər^ašiiāt]
'[may] the one of bad announcing not [destroy] a second time (this) existence!'
(Y. 45.1).

OAv. ka0ā mazdā rāniiō. skər³ⁱtīm gqm [iš^asōit] 'how [might] he, O Mazdā, [try to obtain] (by prayer?) a joy-bringing cow?' (Y. 50.2);

YAv. vasō.xša0rō [hiiā1] ašauua '[may] the Orderly [have] command at will!' (Y. 8.6); *mā-ca pascaēta mazdaiiasna tąm ząm [kāraiiən]* (for *-aiiaēn*) *mā āpō [hər^{*}zaiiən]* 'afterward the Mazdayasnians [shall **not** plough] that earth **nor** [release] water (upon it)' (V. 6.2);

OPers. auramazdām [yadaišā] '[you should sacrifice] to Ahuramazdā!' (XPh 50-51);

daivā mā [yadiyaiša] 'the *daivas* [shall **not** be sacrificed to]!' (XPh 38–39);

aorist:

OAv. *"ruuāzištō huuō nå*... [*paⁱtī.jamiiå*] '(you) there, who gladden (us) the most, [may you] *in return [come] to us' (Y. 36.2);

kaθā ašāi drujām [diiąm] zastaiiō 'how [might I deliver] the Lie into the hands of Order?' (Y. 44.14);

YAv. vasas-ca tū . . . [xšaēša] hauuanqm dāmanqm 'and at will [may] you [rule over] your own creations' (Y. 8.5);

[buiiama] $t\bar{e} \ s\bar{o}i\theta r\bar{o}.p\bar{a}n\bar{o}$ $m\bar{a}$ [buiiama] $s\bar{o}i\theta r\bar{o}.ric\bar{o}$ '[let us be] for you those who stay in the settlements! [let us **not** be] those who leave the settlements!' (Yt. 10.75);

OPers. auramazdā-taiy ja^utā [biyā'] utā-taiy taumā mā [biyā'] '[may] Ahuramazdā [be] your striker (= strike you), and [may] there not [be] family to you (= may you have no family)!' (DB 4.55–59).

7.2.2.2 Optative of past action in Young Avestan and Old Persian

The optative is used in Young Avestan (with or without augment) and Old Persian to express habitual or repeated action in the past (see Hoffmann 1976: 605–19):

YAv. zara0uštrō ahunəm vaⁱrim [frasrāuuaiiōit]...
āpō vaŋ^vhiš [frāiiazaēta]...
daēnam māzdaiiasnim [fraor³naēta]
'Zarathustra [would (= used to) recite] the Ahuna Vairiia...
He [would sacrifice] to the good waters...
He [would choose] the vision-soul of those who sacrifice to Ahura Mazdā'
(V. 19.2);

yō bāδa... [a-uuarōit] vācim (< a-barait) 'who at times [would lift up] his voice' (Yt. 10.73);

OPers. $ya0\bar{a}$ - $s\bar{a}m$ hac \bar{a} -ma a0aha, ya $ava0\bar{a}$ [a-kunavayaⁿ $t\bar{a}$] (thematic optative) 'as was said to them by me, thus they would do' (DB 1.17–24);

kāram vasiy [avājani yā'] (<*ava-a-*) 'he [would kill] the people in large numbers' (DB 1.50–53).

7.2.3 Imperative

The imperative is used only in positive statements to express a command or an exhortation. The person the command or exhortation is addressed to is frequently in the vocative. In Old Avestan, a distinction is made between the present imperative: 'keep doing!' and aorist imperative: 'stop/start doing!'.

Negative commands or wishes are expressed with the injunctive (see section 7.1.2.1) and the optative (see section 7.2.2.1).

aorist:

OAv. vohū [ga'dī] manaŋhā [dā'dī] ašā då (<da'ah) dar'gāiiū '[come (now)] with good thought! [give (now)] with Order the gift of a long lifespan!' (Y. 28.6);

present:

OAv. ā īţ [°uuaēnā] ahurā '[keep looking] hither at it, O Ahura!' (Y. 46.2);

dužuuar''šnaŋhō... [hāṇtū]... [xraosəṇtąm upā]... [īratū] īš duuafšō... mošucā [astū] '[let them be] (men) of bad virility! [let them be *howled upon]!... [let] *torment [huddle] them off, and [let it be] soon!' (Y. 53.8);

YAv. [apa] druxš [nase] (< nasiia) [apa] druxš [duuara] [apa] druxš [vīnase] '[disappear], O Lie! [run away], O Lie! [lose yourself], O Lie!' (V. 8.21);

[x^varata] narō aētəm miiazdəm '[eat], O men, this myazda!' (Y. 8.2);

 $x^{*}ar^{*}\partial anqm h\bar{e} [*bar antqm]$ '[let] (some) of the (best) foods [be brought] to him!' (H. 2.18);

mā hē auui pāδəm [auua.hišta] *mā* gātūm [nipaⁱδiiaŋ^sha] '[do not direct] (your) foot in her direction! [do not lie down] on (her) bed!' (Yt. 17.57);

mā cim gər'zānå [pāra-iiaņtu] haca ahmāţ nmānāţ '[let them not leave] this house complaining about anybody' (Yt. 13.157);

OPers. [para-idiylpara-itā] avam kāram [jadiyljatā] 'go forth! crush that army!' (2s/2p imp.) (DB 2.20–21, 3.14–15);

ava-taiy auramazdā ^hucāram [kunautuv]... ava-taiy auramazdā [nika"tuv] '[let] Ahuramazdā [make] that easy for you!... [let] Ahuramazdā [destroy] that for you!' (DB 4.76, 79–80).

7.3 Middle, passive, causative

7.3.1 Middle

The middle of transitive verbs most often has passive meaning: YAv. *aza*-, act. 'leads, takes (away)', mid.: 'is led, taken away'; *vaēna*- act. 'sees' vs. mid. 'is seen', etc.).

More rarely, the middle denotes that the action is being performed in the interest of the subject (e.g. *paca*-, act. 'cook (for someone else)', mid.: 'cook for oneself'; *var'δaiia*- act.: 'increase (trans.), enlarge', mid.: 'increase (intrans.), grow'.

Note the intrans. hista-, act. 'go and stand', mid. 'stand, be standing'.

Middle with passive function:

OAv. at tā maniiū pa[#]ruiiē yā yāmā x'afnā [asruuātəm] 'thus, those two spirits/inspirations in the beginning, which [have been heard of (aor. du. 3p)] (as) "the twin sleeps"' (Y. 30.3);

YAv. *imcm tanum yā mē [vaēna te] huraoδa* 'this body, which [is seen] to me (to be) beautiful' (Y. 11.10);

[vər³züatąm]-ca iδa vohu vāstriia 'and [let] good pastures [be produced]-pres. imp. 3s here!' (Vr. 15.1) [cf. section 5.3.3];

OPers. *ima frašam taya [vainataiy]* 'this perfection that [is seen]' (DNb 1–2);

middle with reflexive, etc., function:

YAv. aiβi vastra [yåŋhaiiaŋ'ha] frā zasta [snaiiaŋ'ha] '[put on your (sing.)] clothes! [wash your (sing.)] hands!' (V. 18.19);

zam caxrom [kor'nauuāne] '[I shall make] the earth [my] wheel' (Yt. 19.43);

ā't azəm tanūm [aguze] 'then [I hid]-aor. 1s mid. [my] body' (Yt. 17.55)';

OPers. *ava0ā xšaçam [agạrbāyatā]* 'thus [he took] the royal command [for himself]' (DB 1.42-43).

7.3.2 Passive

The passive, including passive middle forms, passives in -iia, and 3s aor. in -i, is almost exclusively used when the sentence has no agent or the agent of the sentence is not expressed:

YAv. ya0a aniie yazatåŋhō [yazinte] 'the way (the) other deities [are sacrificed to]' (Yt. 8.11);

kahe nō iδa nąma [āγaⁱriiāţ] 'whose name among us [will be welcomed] here in song?' (Yt. 13.50);

OPers. vayam haxāmanišiyā [0ahayāmahay] 'we [are called] Achaemenids' (DB 1.7); yakā hacā gd"dārā [ābariya] (or: a-bariya) 'the sisso wood [was brought (or: carried)] from Gandhara and Carmania' (DSf 34–35).

3s passive in -i:

OAv. vahištā īštiš [srāuuī] zara0uštrahē / spitāmahiiā 'the best *ritual [has been heard of] (= become renowned) (as that) of Zarathustra / Spitama' (Y. 53.1);

YAv. *yat turō ja'ni fraŋrase* 'when the Turian Frangrasiian was struck (down)' (Yt. 19.93).

7.3.2.1 Passive with agent

Very occasionally, passives are construed with agents (see also section 7.4.2.2 on the past participle).

OAv. passive with agent in the instrumental or with preposition hacā:

yā zī [vāuuər^ozōi... daēuuāiš-cā mašiiāiš-cā] 'yes, those that [have been produced ... by old gods and men]' (Y. 29.4);

yå išudō [dadəntē] dā0ranąm [hacā aṣāunō] / 'the *dues in gifts that [shall be given] [on the part of (= by?) the sustainer of Order]' (Y. 31.14).

In Old Persian, the agent is expressed by (one repeated example of each) the genitivedative, by the preposition $hac\bar{a}$, or (possibly) by the postposition $r\bar{a}diy$ (see Sk jærvø 1985: 215):

utā-[šām] auramazdā nai y [ayadiya] 'and Ahuramazdā [was not sacrificed to by them]' (DB 5.15–16);

taya-šām [hacā-ma a0ahiya] ava akunava" 'what [was announced] to them [from (= by) me]; that they did' (XPh 17–18), cf. **taya-šām adam a0aham ava akunava"* 'what I said to them, that they did' (DNa 36–37);

nai-mā kāma taya skau0iš [tunuva"tahyā rādiy mi0a kariyaiš] 'it is not my desire that a weak (man) [should be done wrong on account of/by a mighty (one)]' (DNb 8–9).

7.3.2.2 Old Persian alternatives to passive with agent

In Old Persian, passive with agent is avoided by using impersonal 3rd person plural constructions (cf. Middle Persian, Ch. 4, section 4.3.5.3):

OPers. *utā ciça"taxmam [agarbāya" ānaya"] abi y mām* 'and [they seized] Ciçantaxma (and) [brought] him to me' (DB 2.87–88), cf. *hauv āçina basta [ānayatā] abiy mām* 'that Āçina [was brought] bound to me' (DB 1.82–83).

Alternatively, the agent can be circumscribed:

taya ištiš [ajaniya] kāra haya bābiruviya hauv akunauš 'that the brick [was pounded] (into shape): the Babylonian contingent, it did (it)' (DSf 29–30).

7.4 Participles

Participles are construed as adjectives, usually attributive or in apposition, sometimes as predicates.

7.4.1 Present, future, aorist, and perfect participles

The present and aorist participles differ only in aspect.

7.4.1.1 Present participles

OAv. yā vā [xšaiiąs] a-dąs drītā [aiiantəm]... vīcīrō [hąs] 'or (he) who (because) [being in command], (by) having placed (him) there (in his home)

would keep (someone) [coming] to (him) . . . [being] discriminating . . .' (Y. 46.5);

fraēšiiāmahī . . . [s"runuuatas]-cā [a-s"runuuatas]-cā [xšaiiantas]-cā [a-xšaiiantas]-cā 'we send (our *presentations) forth, both toward [those who listen] and toward [those who do not listen], toward [those being in command] and toward [those not being in command] (Y. 35.4);

YAv. ātarəm; . . . yazama'de taxməm [həntəm] ra0aēštārəm 'we sacrifice to the fire, [being] a firm charioteer' (Y. 62.8);

OPers. X māhayā [jiyamnam] patiy 'of the month of X at [the waning] (= on the last day)' (DB 2.62).

The present participles can be used with 'to be(come)' (see also section 8.2.4.2e):

OAv. at ... ahuuā ... [frīnəmnā] ahurāi ā 'thus, we two were there [presenting ourselves as guest-friends] to the Ahura' (Y. 29.5);

YAv. nõit dim yauua azəm... bitim vācim [paiti.pər³səmnõ] bauua 'I shall never be [asking] him another word' (V. 18.29);

OPers. manahā uvaipašiyahayā daršam [xšayamna] **a^tmiy** 'by (my) mind I am strongly [controlling] myself' (DNb 14-15).

In Young Avestan, present participles in apposition with the subject are used with maniia-, sadaiia-:

nmānəm hō maniiaēta [para.daθō] 'he may think (of himself) [(as) having given] a house' (V. 18.28); *ā dim vātō [upa.vāuuō] saδaiieⁱti* 'then a wind seems (to be) [blowing toward] him' (H. 2.7).

7.4.1.2 Other participles

Aorist:

OAv. acištā [daņtō] '(even) [giving] what are the worst (things)' (Y. 32.4);

YAv. fraša hąm.rāzaiiata ātarš... uⁱti auua0a [maŋhānō] 'he stretched himself forward, the fire, (suddenly) [thinking] as follows' (Yt. 19.47);

future:

YAv. haomanqm-ca [har³šiiamnanqm] yõi har³šiiente 'and of the haoma (plants) [being about to be filtered], which are being filtered' (Vr. 12.1);

perfect:

OAv. [vīduuå] [vīdušē] mraotū mā [ə-uuīduuå] a'pī d⁵bāuuaiia<u>t</u> 'let him [who knows] say [to the one who knows]! may no one [who does not know] keep deceiving (us) hereafter!' (Y. 31.17);

yehiiā "ruuā xraodaitī... ašahiiā [nąsuuå] (<*na-ns-*) *pa0ō* 'whose soul will *shudder, [having lost] the paths of Order' (Y. 51.13);

yas-tē... zbaiiā... [apānō] ($\langle \bar{a}p \rangle$) dar³gō.jiiāⁱtīm '(I), who shall be invoking you... [having obtained] long life' (Y. 33.5);

YAv. *vispaēⁱbiiō haca ar³zaēⁱbiiō [vauuanuuå] paⁱti jasaⁱti* 'he returns, [having won], from all battles' (Y. 57.11–12);

ańhe haxaiiō frāiieņte... naēða.cit *mi0ō [vaox^våŋhō] (< uak-luac-) 'his companions will go forth, [having] never [said] anything wrong' (Yt. 19.95);

šātəm da0ā'ti "ruuānəm ašaonō ['rīri0ānahe] (<rai0-) 'he makes happy the soul of the Orderly one [who has died]' (P. 23);

*narəm aşauuanəm [da*drānəm] (< dar-) humatəmca . . . 'the Orderly man, [who has held up] his well-thought (thought) and . . .' (Vr. 2.5);

perfect participle contrasting with the present and past participles:

OAv. . . . *hu-uar³štanąm* . . . *vər*²*ziiamnanąm- cā vāuuər*²*zanąm-cā* 'of (deeds) well done, both those being performed and [those having been performed]' (Y. 35.2).

7.4.2 Past participles in -ta-

The past participle in -ta- is commonly used in Young Avestan as apposition, in which case it refers to an action that was completed before the action or state indicated by the

main verb of the clause or by present participles. Also when used as an adjective, it sometimes retains this temporal function:

YAv. [fra-stər'tā1] pa'ti bar'smən
[uz-dātā1] pa'ti haomā1 raociņtā1 pa'ti ā0ra1 srāuuaiiamnā1 pa'ti ahunā1 va'riiā1 'beside the barsom [spread out],
beside the haoma [set up],
beside the blazing fire,
beside the Ahuna Vairiia being recited' (Yt. 10.91, Āfr. 4.5);

auuat... hanjamanəm... bar[°]šnuuō auuaŋ́he ašnō [y[°]matəm] ... yazamaide

'to yonder gathering [having come (together)] upon the height of yonder sky ... we sacrifice' (G. 2.8);

OPers. *duvarayā-maiy [basta] adāriya* 'he was held [bound] at my gate' (DB 2.75, 89–90);

hamiçiyā [ha"-gmatā] [para-itā] . . . hamaranam akunava 'the conspirators, [having come together] and [gone off] . . . fought the battle' (DB 2.37–39).

7.4.2.1 Medial-reflexive function of the participle in -ta-

The past participle sometimes has medial-reflexive function and can take a direct (inner) object:

YAv. $[\bar{a}-st\bar{u}tas]-c\bar{a}$ [fra-uuar'tas]-c \bar{a} āstuiiē humatəm mano '[having assigned myself by my praise] and [having made my choice] (having spoken the *āstuiiē* and the frauuarānē) I assign myself by my praise to well-thought thought' (Y. 12.8) [<ā-stau- and fra-uar-, both middle];

upa. tacat... ao0ra [paiti.šmuxta] 'she came running, [shod] in shoes' (Yt. 5.64).

A past participle is frequently combined with a verb from the same root, see section 10.5 Figura etymologica.

7.4.2.2 Past participle with copula

In Young Avestan, the past participles are occasionally used with the copula and sometimes with a personal pronoun (rarely a noun) in the genitive indicating the agent:

YAv. ka δa n \bar{o} i δa a $\bar{s}\bar{a}um$ [agat \bar{o} (< \bar{a} -gam-)] a' θ iiaja η h θ m ahum \bar{a} 'how [have you come], O Orderly one, to us, to (this) existence without danger?' (V. 19.31); *cuuantəm zruuānəm maniiauua stiš [dāta as]* 'for how long [had] the existence in the world of thought [been established]?' (FrV. 2.19);

mānaiiən ahe ya0a nā satəm-ca... *paršanąm [ni-jatəm hiiāt]* 'just as if a hundred and ... ears of grain [were to be (lying) smashed down]' (Yt. 13.71);

with agent:

YAv. yat [mē] auuauuat daēuuaiiasnanąm [ni-jatəm]
ya0a sārəm-a varsanąm barāmi
'that [by me is smashed down = I have smashed down]
as many sacrificers to the old gods as I carry hairs on the head' (Yt. 5.77);

yezica $[h\bar{e}]$ aniia aya śiiao0na [fra-uuaršta] paⁱtita hē ci0a 'if [for/by him are performed = he has performed] other evil deeds, (then) the penalty for it (is) absolved' (V. 3.21);

agent with attributive past participle:

yōi kaⁱnina (for kaⁱninō) [an-upaēta (<upa-i-) mašiiānam] 'the girls [not yet approached by men]' (Yt. 17.55).

7.4.3 The Old Persian perfect

In Old Persian, the old perfect indicative appears to have been lost and been replaced by constructions of past participle and copula with agents. This new perfect, like the old perfect, expresses the result seen in the present of a past action or event. It is often used to 'sum up' past events told in the imperfect (see Lazard 1976: 184–86, Sk jærvø 1985).

There are forms of both transitive and intransitive verbs. As the past participle of transitive verbs has a passive meaning ('done, killed'), the perfect construction in these instances is formally passive.

There is no *active* perfect *construction* corresponding to the *passive* one, so the construction corresponds to both active and passive constructions in the present and imperfect.

7.4.3.1 Without agent

When the past participle is from an intransitive verb, the perfect corresponds to an active imperfect; when it is from a transitive verb and the agent is not expressed, it corresponds to a passive imperfect:

intransitive verb:

pārsahayā martiyahayā dūraiy arštiš [parā-gmatā] 'the Persian man's spear has gone far away' (DNa 43-45);

transitive verb:

ava ahayāyā dipiyā naiy [ni-pištam] 'that [has] not [been written (is not written)] in this inscription' (DB 4.47); paruv frašam [fra-mātam] paruv frašam [kartam] 'much perfect work [had been ordered], much [has been made]' (DSf 56–57);

aniyaš-ciy vasiy [astiy kartam] 'much else too [has been done]' (DB 4. 46-47);

pluperfect:

xšaçam taya... [*parā-bartam āha*] *ava adam patipadam akunavam* 'I redressed the command that [had been taken away]' (DB 1.61–62).

7.4.3.2 With agent

If an agent (noun or pronoun) is expressed, it is in the genitive-dative, and the perfect corresponds to an active imperfect. The only examples are with *karta* 'done, made', and the construction is formally identical with possessive constructions in which *karta* means 'work, achievement' (there may have been a difference in word order):

taya[-maiy kartam] utā taya-maiy [piça dārayavahauš XŠhayā kartam] 'what [I have done] and what my [father King Darius has done]' = 'what [has been done by me] and what [has been done by my father King Darius]' (XPc 13-14);

[avaišām] avā [naiy astiy kartam] ya0ā [manā] . . . hamahayāyā 0arda [kartam] '[they have not done] as much as [I have done] in one and the same year' ('their achievement is not as much as what I achieved in one and the same year') (DB 4. 51–52).

7.4.4 The Old Persian potential construction

There are a few verbal constructions in Old Persian involving a past participle + forms of kar- 'do' and bau- 'become' that express either completion of a past event or the feasability of a past event. These constructions are commonly referred to as 'potential' constructions (see also section 8.2.2.6 Conditional relative clauses):

active:

yātā [kartam akunavam] 'until [I had finished (doing)]' (DNa 51, XPf 45-46);

passive:

ya0ā [ka"tam abava] 'when it had finished being dug (DSf 25).

7.5 Infinitives

7.5.1 Infinitive with intentional verbs

Infinitives either depend upon a verb or are used independently to express the purpose of an utterance or an action. They are used with *vas*- 'wish', $v\bar{s}a$ - 'be ready', *hācaiia*- 'induce', verbs meaning 'order', etc.:

OAv. huuō nā... vaštī. car[•]kər[•]0rā [srāuuaiieŋ́hē] 'he wishes [to make heard] for us poems of praise' (Y. 29.8);

YAv. ya0a azəm hācaiiene . . . zara0uštrəm [anu-matāe] daēnaiiāi 'that I shall induce . . . Zarathustra [to help] the vision-soul [along with his thought]' (Yt. 5.18);

OPers. *utā-diš atāvayam [bartanaiy]* 'and I was able [to bear] them' (DNb 46-47);

ima stānam hauv niyaštāya [ka"tanaiy]... *pasāva adam niyaštāyam imām dipim [ni-paištanaiy]* 'and he gave the order [to dig] this niche. then I gave the order [to write] this inscription' (XV 20-25).

7.5.2 Infinite with verbs of speaking and thinking

Verbs meaning 'think, speak, see' can take a direct object plus infinitive ('accusative with infinitive') as the transformation of a S + V clause; the infinitive of 'to be' can then also take an accusative predicate (see also Gippert 1985):

OAv. at 0βā mā ήhī... yazūm [stōi] 'thus, I think of you [to be = as being] youthful' (Y. 31.8) [< 'I think: you are young'];

YAv. ašauuanom tē [āfueˈdoiiāi] mraomi
'I tell you a sustainer of Order [(is) to be obtained] (from a sustainer of Order)'
(Y. 71.13) [< 'I tell you: a sustainer of Order is obtained'].

7.5.3 Independent use

Infinitives are used independently to express purpose, in which case the subject/direct object of such an infinitive may be in the dative:

OAv. tat mõi [vī-cidiiāi] vaocā... [vīduiiē]... [māņ]-cā [da diiāi] 'speak that to me [for (it) to be discriminated], [for (me) to know] (it),... and [for (it) to be kept in (my) mind]' (Y. 31.5);

YAv. frā gauue-dat. [vər³ndiiāi]...ā hīm vaēbaiiamahī 'in order for the cow [to be chosen], we make her known to (you)' (Vr. 4.2);

OPers. *āiš hadā kārā*... *hamaranam [cartanaiy]* 'he came with an army [in order to do] battle' (DB 2.67).

7.6 Verbal adjectives of necessity/gerundives

See Dative of agent (section 6.4.5.5).

8 SYNTAX IV: COMPLEX SENTENCES

8.1 Coordination

The usual method of coordination is by way of conjunctions. The most common exceptions are various kinds of parataxis and repetition.

8.1.1 Parataxis

Both coordination and, in Old Persian, subordination can be expressed by parataxis:

YAv. $v\bar{i}sa^{i}ti dim fra\gamma r\bar{a}raii\bar{o} - n\bar{o}it * fra\gamma r\bar{a}raiie^{i}ti$ 'he declares himself ready to wake him (and then, but) does not wake him' (N. 1);

OPers. *avaiy mā dauštā bi yā* -- hufraštā-dīš parsā'you should not favour them (and = but) punish them well!' (DB 4.69).

With existential verb:

utā ani yaš-ca āha - duškartam akariya 'and there was other matter as well (and it = that) had been made badly' (XPh 41-42);

astiy a"*tar aitā dahayāva* . . . - *ayauda* 'there were among these lands (and they = some that) were in turmoil' (XPh 29–32).

In Old Persian and 'post-Old Persian', the verbs 'to send' and 'to command, order to do' can be construed with an unmarked clause:

pasāva adam frāišayam ūvjam – hauv āçina basta ānayatā abiy mām 'then I sent (an order) to Elam (and) that Āçina was brought bound to me' (DB 1.82–83);

niyaštāyam – hauv araxa utā martiyā... uzmayā-patiy akariya"tā 'I issued (an order) (and) that Araxa and the men ... were impaled' (DB 3.91-92).

8.1.2 Repetition

In Avestan, nominals, verbs, preverbs, prepositions and negations are often repeated instead of being coordinated by conjunctions (frequent in incantations): adjectives:

YAv. asista nū aijhat haca vīsat gāuš builāt asistəm ašəm asistəm narš ašaonō aojō asistō āhūiriš tkaēšō 'may the cow now be not cut off from this town, (not cut off =) nor the Order, nor the strength of the Orderly man, nor the *guidance of Ahura Mazdā!' (Y. 60.3);

verbs:

nase *daⁱuui druxš nase daēuuō.ci0re nase daēuuō.frakaršte nase daēuuō.fradāⁱte apa druxš nase apa druxš duuara apa druxš vī-nase apāxəðre apa-nasiiehe Get lost, deceiving Lie! Get lost, you demon-spawn! Get lost, you demon-dragged-forth! Get lost, you demon-made! Disappear, O Lie! Run away, O Lie! (Run) away and lose yourself, O Lie! You disappear in the northern (direction).

pronouns:

OAv. kat tõi rāzar³ kat vašī kat vā stūtō kat vā yasnahiiā 'what (is) a *straight utterance for you? what do you want: what of praise or sacrifice?' (Y. 34.12);

YAv. *imat võ āpõ jaⁱdiiemi imat z[°]mõ imat "ruuarå imat aməšå sp ənta* 'this I request from you, O waters, and from you, O earths, O plants, and O Life-giving Immortals' (Y. 65.12);

preverbs:

nī tē zāⁱre maôəm mruiiē
nī aməm nī vər³Oraynəm (etc.)
nī tat ya0a... vasō.xša0rō fracarāne...
nī tat ya0a ta^uruuaiieni...
'I call down your intoxication, O tawny one,
your strength, and obstruction-smashing...
(I call it) down so that I may go forth commanding at will...
and so that I may overcome...' (Y. 9.17–18);

prepositions:

para auuaýhe ašnō dåŋhōit
para āpō para z³mō para "ruuaraiiå (etc.)
'before the establishment of yonder sky,
of the water, of the earth, and of the plant . . .' (Y. 19.8);

negations:

OAv. nõit nā manå / nõit sõnghā nõit xratauuō / naēdā var"nā / nõit uxðā naēdā šiiao0"nā / nõit daēnå / nõit "ruuqnō . . . haciņtē 'neither our thoughts, announcements, guiding thoughts, preferences, utterances, actions, vision-souls, nor breath-souls go together' (Y. 45.2);

YAv. mā buiiama šõiθrō. 'ricō... māδa yaţ nō uyra.bāzāuš niuuānāţ 'may we not be those who leave the settlements... nor indeed (may it happen) that a strong-armed one should *conquer us' (Yt. 10.75);

OPers. nai y āha marti ya nai y pārsa nai y māda nai y amā xam taumā yā kaš-ci y 'there was **no** man, **either** Persian **or** Mede **or** indeed any of Our family' (DB 1.48-49);

abiy imām dahayāum **mā** ājamiyā **mā** hainā **mā** dušiyāram **mā** drauga 'against this land may there **not** come an enemy army, famine, **or** the lie!' (DPd 18–20).

8.1.3 Conjunctions

8.1.3.1 Coordination

The coordinating conjunctions are $ut\bar{a}$ and enclitic $-c\bar{a}$ 'and, as well', which coordinate words (and their epithets), clauses or sentences. Common coordinations include the sequences A B-ca and its extension A B...C-ca and uta A uta B. Combinations include $uta \dots -ca, uta \dots uta \dots -ca, -ca \dots ca \dots uta$ 'and also, as well'. For Old Persian, see Klein 1988.

Connecting sentences:

YAv. vaŋhuš sraoš $\bar{o} \dots h\bar{\sigma}$ -ca i δa y $\bar{o}i\theta\beta\bar{a}$ astu 'good Sraoša ... and let him have taken up his position here' (Y. 27.6);

OPers. manā auramazdā upastām baratuv . . . **utā** imām dahayāum auramazdā pātuv 'let Ahuramazdā bear me aid, **and** let Ahuramazdā protect this land!' (DPd 13–16).

In Old Avestan, the form A $Bc\bar{a} \# C$ may be possible at the cesura:

ā mā [aēš'mō hazas-cā # rəmō] °hišāiiā '[Wrath and violence, (as well as) restraint] keep me tied up' (Y. 29.1).

The sequence A-ca... B-ca can take an adjective or a pronoun, or it can itself be the subject or direct object of a verb or be governed by adpositions:

OAv. atcā hōi scaņtū manaŋhā uxdāiš šiao0anāišcā . . . [kauuacā vīštāspō zara0uštriš spitāmō f[°]rašaoštrascā] 'and so let them follow with thought, utterances, and actions . . . [Kauui Vištāspa, a Zarathustra-follower (and) Spitamid, and Fraša-uštra]!' (Y. 53.2);

YAv. *imą* [haomąs-ca miiazdąs-ca zao0rås-ca] 'these [haomas, myazdas, libations]' (Y. 4.1);

antar[°] [måŋhəm-ca huuar[°]-ca] **'between** [the moon and the sun]' (Yt. 6.5);

OP. *aita-maiy aruvastam upariy [manaš-cā ušī-cā]* 'This is my ability **in** [thought and understanding]' (DNb 31–32).

Occasionally OPers. $ut\bar{a}$ introduces a main clause after a subordinate clause with the function of accommodating an enclitic pronoun:

OPers. *imā uvnarā tayā*... **utā-**diš atāvayam bartanaiy 'these (are) talents which ... (and) I was able to carry them' (DNb 45-47).

8.1.3.2 Disjunction

The disjunctive conjunctions are enclitic $v\bar{a}$ 'or' and tonic $a\underline{t} v\bar{a}$ 'or else', negated YAv. *nauua* 'or not', 'nor'.

The sequence A B- $v\bar{a}$ (A B- $v\bar{a}$ C- $v\bar{a}$) is most common with clauses, but relatively seldom found with single words. Other sequences include A $v\bar{a}$ B $v\bar{a}$ (C $v\bar{a}$), X $v\bar{a}$ A B $v\bar{a}$, A $v\bar{a}$ $a\bar{t}$ $v\bar{a}$ B (see also section 5.3.1 Questions):

OAv. vanaⁱntī vā vānghən vā vaonar' vā '(who) are winning, shall (now) win, or have (always) won' (Y. 39.2);

yō ašaonē vahištō # x°aētū vā at vā vər°zōniiō l
aⁱriiamnā vā
'(he) who is best for the sustainer of Order #
either through (his) *family or else (as) a member of the *household
or by (his) *community' (Y. 33.3);

YAv. *us vā hištō nī vā pa^lõiiamnō* 'standing up **or** lying down' (Yt. 1.17);

OPers. *yadiy imām dipim vaināhay imai-vā patikarā* 'if you see this inscription **or** these images' (DB 4.72–73);

negated:

uzgər[°]ptāţ paⁱti draonāţ nauua uzgər[°]ptāţ 'at the drōn lifted up or not lifted up' (V. 5.26);

 $k\bar{a}h\bar{e}$ asti ci0a . . . **nauua** $h\bar{e}$ asti ci0a **nauua** $h\bar{e}$ asti $\bar{a}ppr^{3}ti\bar{s}$ 'what is the penalty (etc.) for it? . . . there is **neither** penalty for it, **nor** is there explation for it' (V. 3.38–39).

8.1.4 Coordinating particles

These are sentence-initial, -medial and -final.

8.1.4.1 Sentence-introductory $a_{\ell}, \tilde{a}'_{\ell}$

These are the two most common particles in Old and Young Avestan and, according to the context, may be rendered as 'and, then, but', and similar. They can be followed by a temporal clause introduced by OAv. *hiiat*, *yadā*, YAv. *yat* 'when'. Enclitic *at* is typical of the *Yasna Haptaŋhāiti* (Y. 35–41). They are also used as adversative particles:

OAv. sraotā gēuš.āiš... at tā maniiū pa"ruiiē... at-cā hiiat tā hēm maniiū jasaētem... 'listen with your ears... Then, those two spirits in the beginning... and then, when those two spirits come together' (Y. 30.2-4); at-cā 'as well as', at vā 'or else':

 $\int \delta r \bar{\delta} i \dots p a^{i} \partial i i a \bar{e} - c \bar{a} v \bar{a} strii a \bar{e}^{i} b i i \bar{\delta} a \underline{t} - c \bar{a} x^{v} a \bar{e} t a u u \bar{e}$ 'to (her) father and husband, to the foragers, as well as the *family' (Y. 53.4);

yasnəm... xšmāuuatō at vā ašā staomilā vacå 'the sacrifice to one like you (pl.), or else, by (my) Order, words of praise' (Y. 33.8);

enclitic *at*:

 $ap\bar{o}$ at yazama' $d\bar{e}$ 'and so we sacrifice (to) the waters' (Y. 38.3);

sraēštąm at tõi kəhr pām kəlır pąm āuuaēdaiiamahī **'thus**, as your form, the most beautiful of forms, we are making known . . .' (Y. 36.6).

YAv. ā"t:

ā^{*a*}*t* yat miθrəm . . . frādaδąm . . . ā^{*a*}*t* dim daδąm 'then, when I brought forth Miθra . . . then I established him' (Yt. 10.1);

adversative at, ā't:

In Old Avestan, all examples of at introducing a second 'half-line' and several introducing 'verse lines' (exc. at $v\bar{a}$, at- $c\bar{a}$) appear to have adversative function, occasionally also when enclitic. YAv. $\bar{a}'t$ often has adversative function, notably in conditional clauses introduced by $\bar{a}'t$ yezi (Vid.), yezi $\bar{a}'t$ (Nir.):

OAv. acištō drəguuatąm # at aṣāunē vahištəm manō 'the worst (existence will be that) of those possessed by the Lie # but for the sustainer of Order (there will be) best thought' (Y. 30.4);

YAv. vispe zī aniie maδåŋhō aēšma haciņte...
ā"t hō yō haomahe maδō aša haca'te
'for all other intoxications are followed by Wrath (i.e. darkness and night),
but the intoxication of the haoma is followed by Order (i.e. light and day)' (Y. 10.8);

mā ciš baraţ aēuuō yaţ 'ristəm
ā^aţ yezi šē barāţ
'let no one carry alone what is dead;
but if he carries alone something that is dead . . .' (V. 3.14);

 $y \bar{o} g \bar{a} 0 a sr \bar{a} uuaiie'ti ...$ $yezi hauua\bar{e}^i biia u sibiia a^i \beta i.s'' runuua^i ti ratufris'$ $yezi \bar{a}^a \underline{t} n \bar{o} i \underline{t} hauua \bar{e}^i biia u sibiia ...$ 'he who recites the $G \bar{a} \theta \bar{a} \bar{s} ...$ if he can hear (them) with his own ears, (then) he satisfies the (ritual) models, but if he cannot hear (them) with his own ears ...' (N. 8).

8.1.4.2 Emphatic particles

These include Av. $\bar{\iota}t$ (combines with various other particles for emphasis); Av. $-c\bar{\iota}t$, OPers. -ciy 'even, -self, just, exactly' (OAv., YAv. $a\underline{t}$ - $c\bar{\iota}\underline{t}$, $a\underline{t}$ -ci \underline{t} , OPers. aciy 'even then, so'); Av. -cin \bar{a} (<-cana) 'especially, even'; $t\bar{u}$ (used with imperative and optative); and $v\bar{o}i$ '*definitely':

OAv..., yazama'dē vaŋhūš-cā $i\underline{t}$ vaŋ'hīš-cā $i\underline{t}$ '... we are sacrificing to **both** the good male ones **and** the good female ones' (Y. 39.3);

YAv. *a0ā a0ā cōiţ* (< *ca-iţ*) *zara0uštrō* ... *viiāmruuīta* 'and in that **very** manner, Zarathustra would renounce ...' (Y. 12.6);

vīspəm ā ahmāţ yaδōiţ (*yaδa-iţ*) *upa.jasōiţ* ⁱ*ristąm tanūm* 'just until when he might come upon the dead body' (V. 6.27);

OAv. *azəm-cīţ* 'I for my part' (Y. 29.10);

tat nā nū-cīt var³šānē 'that best (action/command) I am **just** now about to produce for us' (Y. 51.1);

OPers. *ya0ā paruvam-ciy* 'just like before' (DB 1.63);

OAv. *at-cīt aē'biiō vahištā yōi*... '**but also** as the best things to those who ...' (Y. 31.1);

YAv. *yat-cit tanūm apaiieⁱti at-cit dim nõit rāšaiieņte* 'even when it reaches the body, even then it does not harm him' (Yt. 10.2);

utā vištāspa utā aršāma ubā ajīvatam **āciy**... *dārayavaum*... *xšāya0iyam akunauš* 'both Vištāspa and Aršāma were (still) alive. but, ***even so**, he made Darius king' (XPf 19–24);

OAv. aiiå nõit ər³š vīšiiātā daēuuā-cinā 'especially the old gods did not discriminate rightly between these two' (Y. 30.6);

YAv. *mā ada ka0a-cina † pa'ti.jime* 'may *I not come up against any such at all!' (Vr. 22.2);

OAv. huxša0rastū nā nā vā nāⁱrī vā xšaētā 'may a man or a woman of good command command us!' (Y. 41.2);

ātarš või mazdå ahurahiiā ahī 'you are **definitely** "the fire of Mazdā Ahura"'(Y. 36.3).

8.1.4.3 zī 'for'

The enclitic particle $z\bar{i}$ is an explanatory particle used in main, subordinate, and parenthetical clauses with the general meaning of 'for, namely'. Av. *yezī*, which in Young Avestan is in complementary distribution with *yeiôi* $z\bar{i}$, may be from **yat* $z\bar{i}$ (see section 8.2.4 Conditional clauses):

OAv. $at t \bar{o}i a \eta h a \eta \dots t \bar{o}i \bar{a} d \bar{a} t \bar{a} hama \bar{e} s t \bar{a} r \bar{o}$ 'and they shall be ... for they (have been) made/established as opponents' (Y. 48.12);

 $n\bar{u} \ z\bar{i}\underline{t} \ (\langle z\bar{i} \ \bar{i}\underline{t} \rangle) \dots \ vii\bar{a}dar$ som 'for I just now caught sight of' (Y. 45.8).

YAv. *nõiţ zī ahmi paⁱti naⁱri duua maniiu rīna auuaståŋhaţ* '**for** not shall over this man the two spirits take up a firm stance (of competition)' (V. 7.51–52).

See also section 5.3.3 Parenthetical clauses.

8.1.4.4 Responsive bā, bōiţ

The particle is found once in the *Yasna Haptaŋhāiti*, but more frequently in Young Avestan, where it is often used in answers to questions or as emphasis:

OAv. $hux \dot{s}a \theta r \bar{o}.t \partial m \bar{a}i \, b \bar{a} \, at \, x \dot{s}a \theta r \partial m \dots$ dad mahi- $c \bar{a}$ 'yes, for (you) having the greatest command, we then establish the command' (Y. 35.5);

YAv. ci0ra võ buiiār³š masānå... ci0rəm **bōiţ** (<bā īţ) yūžəm-ciţ x^{*}ar³nō... 'may your *greatnesses be brilliant!... yes, and may you, too, give brilliant munificence...!' (Ny.3.11).

8.1.4.5 OAv. $\partial \beta at$, YAv. $b\bar{a}\delta a$ '*sometimes, *again and again'

OAv. $k \bar{s} y \bar{a} m a^{\dagger} u x \bar{s} i i e i t \bar{t} n \bar{s} r \bar{s} f s a i t \bar{t} \theta \beta a t$ 'who (is he) through whom the moon is (now) first waxing then waning (is again and again waxing and waning?)' (Y. 44.3);

YAv. hənti bāða māuuaiiacit ca 0β ārō aršāna 'even I have ***again and again/at times**(?) four males' (V. 18.31).

8.1.4.6 Interjections

The interjections are *uštā* 'hail! good luck!', *nəmō* 'hail!', OAv. *auuōi*, YAv. *āuuōiia*, *bāuuōiia*, and *sādrəm* 'woe!', which take the dative, and YAv. *āi* 'O!', which takes the vocative.

8.2 Subordination

Subordinate conjunctions are usually derived from the relative pronominal stems (OAv. *hiia-*, *ya-*; YAv. *ya-*; OP. *ya-*, *taya*).

8.2.1 Substantival that-clauses

These function typically as the subject or direct object or appositions to the subject or direct object. The mood is according to the meaning:

OAv. at zī tōi vaxšiiā... [hiiat akōiiā drəguuāⁱtē] 'for thus I shall tell you ... [that for the one possessed by the Lie (it will end) in an evil (turn)]-**DO'** (Y. 51.8);

tat at var^o*md dī*... [*hiiat ī ma*^{*i*}*nima*^{*i*}*di*-*cā*] 'thus, we (now) prefer **that**: [**that** we may think them and ...]-**DO'** (Y. 35.3);

YAv. tat alımāi jasat āiiaptəm [yat hē pu0rō us.zaiiata] 'that prize came to him [that a son was born to him]-S' (Y. 9.4);

OPers. *kārahayā naiy azdā abava [taya bardiya avajata]* 'it did not become known to the army [that Smerdis had been killed]-S' (DB 1.31-32);

ava adam akunavam... [yaθā aniya aniyam naiy ja"tiy] 'that I accomplished: [that they no longer kill one another]-DO' (DSe 34–36);

utā [*taya* būmiš akaniya fravata]... kāra haya bābiruviya hauv akunauš 'and [(the fact) **that** the earth was dug down]-**DO**, the Babylonian people did (it)' (DSf 28-30) [or: *nominativus pendens*];

nai-mā kāma
[taya skau0iš tunuva"tahyā rādiy mi0a^h kariyaiš]
'it is not my desire
[that a weak (man) should be done wrong by a mighty (one)]-S' (DNb 8–9) [kariyaiš: optative of wish].

8.2.2 Relative clauses

Relative clauses are the most frequent subordinate clauses in Old Avestan and probably in Young Avestan and Old Persian. They are adjectival and are often coordinated with adjectives.

A relative clause can precede, follow, or include its antecedent, which can be overt (explicit) or gapped (omitted) or just implied by the verb. It can be next to the antecedent or separated from it. The antecedent can be a noun or a (personal, demonstrative, interrogative, indefinite) pronoun. The antecedent and the relative pronoun can be in the same case or in different cases, the antecedent usually being in the case demanded by the syntax of the main clause and the relative pronoun in the case demanded by the syntax of the relative clause, but case 'attraction' (assimilation) also occurs.

Like adjectives, relative clauses can be 'substantivised' and take the place of a noun and so by themselves function as subject, direct object, etc. ('he who'-clauses). An antecedent or resumptive 'dummy' pronoun may be present, which, by its case, shows the syntactic function of the relative clause: 'I saw him who killed the dragon', '(the one) who killed the dragon, **him** I saw'. In Old Persian, the 'he who' clauses were standardised and produced a new relative pronoun *haya*-, *taya*- (cf. Adiego Lajara 2000).

As in other early Indo-European languages, the antecedent of the relative may be located inside the relative clause (included) and may be in the same case as the relative pronoun. Such relative clauses may originate from interrogative or indefinite clauses: 'which man killed the dragon?', 'whichever man killed the dragon' > 'which man killed the dragon went away' (see also Kellens and Pirart 1990, Chapter 2 on relative clauses).

See also section 6.1.1 The Young Avestan and Old Persian connecting relative and the relative particle.

8.2.2.1 The use of moods and tenses in relative clauses

All tenses and moods are used in relative clauses, but the functions of the moods can differ slightly from those in main clauses:

subjunctive present:

OAv. [və̄ vå mazdā ahurā **paⁱrijasāi**] voluī manaŋhā (I) [who shall circumambulate you (pl.)], O Mazdā Ahura, with (my) good thought' (Y. 28.2);

YAv. at-cā tōi vaēm xiiāmā [yōi īm f^arašām kər^anaon] ahūm 'thus, also: may we be those [who shall make it perfect], (this) existence' (Y. 30.9);

subjunctive aorist:

OAv. hātam huuō aojištō [yahmāi zauuāņg jimā *kərəduš ā] 'he is strongest of (all) who are [for whom I shall come ($\langle \bar{a} | jam \rangle$) to (his) calls (even if they are) weak]' (Y. 29.3);

optative present:

OAv. [yā hīm ahmāi vāstrauuaⁱtīm stoi usiiāt] '(someone) [who might wish her and (her) pasture to be for him]' (Y. 50.2);

optative aorist:

tat ahiiā [yā tat upā.jamiiāmā] tauua-cā haxəmā 'that of this (one) [by which we may come to that], (namely) your company and ...' (Y. 40.2).

8.2.2.2 Old Avestan relative clauses

The Old Avestan realative clauses are particularly difficult to parse, partly because of the poetic word order and partly because of frequent ellipsis of antecedent, verb, etc.

8.2.2.2a Relative clause precedes the main clause

Antecedent implicit in verb with overt resumptive pronoun:

[yā... ašəm nipå ýhē manas-cā vohū yauuaētā tē] | tuuām ... frō mā sīšā '[(you-sing.) who are guarding Order and good thought for the duration of a lifespan,] teach you me!' (Y. 28.11);

[yā frauuaxšiiā] yezī tā a0ā ha'0iiā '(the words) [which I want to pronounce] - for if they (are) true in this manner' (Y. 44.6);

[yā vå...paⁱrijasāi...] maⁱbiiō dāuuōi alnuuå...āiiaptā 'for (you) to give to me, [who shall circumambulate you], the spoils of both existences' (Y. 28.2).

Antecedent implicit in verb without overt resumptive pronoun:

[yōi mōi ahmāi sər**a**ošəm dąn (da'an-**3p**) caiias-cā]-S upā.jimən-**3p** hauruuātā amərətātā '[whosoever shall give readiness to listen to this one of mine], they shall come to wholeness (and) immortality' (Y. 45.5);

[yehitā mōi... vahištəm yesnē paⁱtī]-DO vaēdā mazdå ahurō '(he) [in return for whose sacrifice the best (accrues) to me], Mazdā Ahura knows (him)' (Y. 51.22).

Antecedent included in relative clause with overt resumptive pronoun:

[yā zaotā ašā ərəzuš] huuō... '[the libator who (is) straight by (his) Order], he...' (Y. 33.6);

[yås-cā tōi g'nå ... vaⁱriiå] tå yazamaⁱdē '[and the women who (are) your well-deserved ones], those we are sacrificing (to)' (Y. 38.1).

Antecedent included in relative clause without overt resumptive:

[$y\bar{\sigma}$ mathera vacom ... bara ti]-S ... zaratustro 'the poet who is lifting (his) voice], ... (he is I/he) Zarathustra' (Y. 50.6);

[hitat mīždəm zara0uštrō magauuabitō cōišt parā]-INSTR ... ahurō mazdå jasat pauruitō '[the fee which Zarathustra assigned before to the masters of the gift-exchange], (with that) Ahura Mazdā comes (forward as) the first (in line)' (Y. 51.15).

8.2.2.2b Relative clause follows the main clause

Overt antecedent preceding the main clause:

 $k\bar{\rho}$ [yā må uxšiieitī nərəfsaitī $\theta\beta at$] 'who (is he) [through whom the moon is (now) first waxing then waning]?' (Y. 44.3);

aēm mõi idā vistō [yā nā aēuuō sāsnå gūšatā]
'this one (is the one) found by me [who alone has listened to our ordinances]'
(Y. 29.8);

sraotū mazdå ahurō [yehitā vahmē vohū frašī manaŋhā] 'let Ahura Mazdā listen, [in whose hymn I have (now) asked my good thought]' (Y. 45.6).

Antecedent overt and included:

xša@rəm-cā... [yā xša@rā grāhmō hīš⁴sat]
'and (their) command ... [a command by which the *glutton *seeks a seat]'
(Y. 32.12–13).

Without overt antecedent:

hiiat... *uštā [yā ašam dādrē]*-DAT 'that ... wished-for (things for him) [who upholds Order]' (Y. 51.8); *hiiat-cā gāuš ja diiāi mraoī [yā dūraošəm saocaiiat auuō]-AG* 'and when the cow is mistreated to (the point of) being smashed (by him) [who "purifies" (by burning) the *haoma*]' (Y. 32.14).

Antecedent implicit in the verbs:

anāiš vå nõit ... yānāiš zar^anaēmā-1p ... [yōi ... yōi θ ^omā-1p] 'may we not anger you with those requests (to you), [we who have taken our places]' (Y. 28.9);

 $d\bar{a}id\bar{i}$ -2s $m\bar{o}i [y \bar{g} gqm tas\bar{o}$ -2s] 'give me (now), [you who fashioned the cow . . .!]' (Y. 51.7);

var³štąm-3s [hiiat vasnā frašō.təməm (COP 3s)] 'let (that) be produced [which is most perfect in exchange value]!' (Y. 50.11).

Antecedent included in relative clause:

at yūš daēuuā vīspåŋhō akāt manaŋhō stā ci θ rəm [yas-cā vå maš yazaⁱtē] 'but you, O old gods, are all (of you) the *seed (issued) from an evil thought, and (so is) **[the great one who** is sacrificing to you]' (Y. 32.3);

tąm kauuā vīštāspō... nąsaţ... [yąm cistīm... maņtā] 'Kauui Vištāspa *reached that (insight), [the insight which he thought]' (Y. 51.16).

Relative clause coordinated with noun or adjective:

OAv. $[v\bar{a}strii\bar{a}_{1}v\bar{a}] \bar{a}^{\dagger}t\bar{e} [y\bar{a}v\bar{a}n\bar{a}_{1}t\bar{a}_{1}ha_{1}v\bar{a}_{2}trii\bar{a}_{3}]$ 'to come [to the forager] or (to him) [who shall not be a forager]' (Y. 31.9);

ahuuå [astuuatas-cā hiiat-cā manaŋhō] 'of both worlds, both the one with bones and (the one) which (is) of thought]' (Y. 28.2).

8.2.2.2c Case attraction of relative pronoun

There are a few instances in Old Avestan in which the relative pronoun appears to have been assimilated to the case of its antecedent, which may or not be present. We may distinguish between two cases:

I. The verb comes after the relative clause and may be considered as part of both the main and the relative clause:

vahištəm $\theta \beta \bar{a} \dots [y \bar{\partial} m a \bar{s} \bar{a} vahišt \bar{a} hazao \bar{s} \bar{\partial} m ahurəm] y \bar{a} s \bar{a}$ 'you the best-DO (one), [whom-DO of the same pleasure as the best Order, (you) the Ahura-DO] I ask for \dots '(Y. 28.8).

2. A verb may be supplied in the relative clause, e.g. 'whom (I know as)', 'whom (X said to be):

yaiiå spaniiå *uⁱtī mrauua<u>t</u> [**yām** aņgrəm]

'of which two the life-giving one shall tell (him) [whom (you know/said to be) the Evil one]' (Y. 45.2),

cf. [yāng...võistā...dā0āng] '(those) [whom you know to follow the established rules]' (Y. 28.10);

tām aduuānam . . . [yām mõi mraoš vaijhāuš manaŋhō] '(teach us) that road [which you . . . tell me (is that) of good thought]' (Y. 34.13).

8.2.2.3 Young Avestan relative clauses

The Young Avestan relative clauses show several of the general features of the Old Avestan ones, although, on the whole, they are less complex. They may precede or follow the main clause, and the antecedent and resumptive may be overt or not.

8.2.2.3a Relative clause precedes main clause

Antecedent included in relative clause:

[yqm ašauua vaŋ 'him ašaiiqm va $\bar{e}\delta a$] tqm druuå əuui δuu '[the Orderly fashion which the Orderly one knows to be good], (of) that the Lieful one is ignorant' (Vr. 22.2).

8.2.2.3b Relative clause follows the main clause

Overt antecedent outside relative clause:

cit auuat vacō ās ahura mazda [yat mē frāuuaocō] 'which was yonder word, Ahura Mazdā, [which you said forth to me]?' (Y. 19.1).

Antecedent not overt:

təm aoi tbaēšā īša paⁱtiiaņtu
¹0iiejā īša [yō ī daδa]
¹0iiejā yaņtu [yō dī daδa]
¹by (this) invigorant let the hostilities go back against him [who has established them]
(and), by (this) invigorant the dangers (against him) [who has established them]!
let the dangers go (to him) [who has established them]!' (Y. 65.8).

Antecedent included in relative clause:

r = nja' ti haomahe ma $\delta \bar{o} [y\bar{o} \dots haom am vanda' te ma<math>\bar{s}ii\bar{o}$] 'the intoxication of the haoma energises [the man who honors the haoma]' (Y. 10.8).

8.2.2.3c asti ya- 'here islsome of which'

Young Avestan relative clauses with *asti* (*asti* $y\bar{o}$, etc.) express 'some ... others' (cf. Middle Persian *ast* \bar{i} , Ch. 4, sections 5.2.2.8 and 5.3.4):

hazaŋrəm *0anuuaninqm asti yō gauuasnahe snāuuiia jiia . . . hazaŋrəm *išunqm . . . asti yā aŋhaēna spar"ya 'a thousand *bows, well-made, some of which have strings made of sinews of gazelles . . .

a thousand arrows . . . some of which have stems made of bone' (Yt. 10.128-29).

8.2.2.4 Old Persian relative clauses

In Old Persian, the relative clause most often follows its antecedent and is often embedded in the main clause:

daraniyam hacā spardā utā hacā bāxtrīyā abariya [taya idā akariya] 'the gold [that was wrought here] was carried from Sardis and from Bactria' (DSf 35– 37).

Resumptive not overt:

martiyā [*tayai-šaiy fratamā anušiyā āhatā*] *avāja* 'the men [who were his foremost followers] (those) he killed' (DB 3.74–75).

Resumptive overt:

dārayavaum [*haya manā pita*] *avam xšāya*0*iyam akunauš* 'Darius, [who (was) my father], him he made king' (XPf 22–24).

Antecedent nominativus pendens:

imā dahayāva [tayā adam agarbāyam]...adam-šām patiyaxšayaiy 'these countries [which I seized ...] I ruled over them' (DNa 16–19).

See section 6.1.1 The Young Avestan and Old Persian connecting relative and the relative particle.

8.2.2.5 Indefinite relative clauses

Indefinite relative clauses are introduced by indefinite pronouns or a combination of relative and indefinite pronouns. The relationships between pronouns and antecedents are the same as for relative clauses:

OAv. *maniiūm zara0uštrō vər[°]ntē*... [yastē ciš-cā spāništō] 'Zarathustra chooses the inspiration [whichever is your most life-giving]' = '... whichever inspiration ...' (Y. 43.16);

[yōi mōi ahmāi s'raošəm dan caiias-cā] upā.jimən . . . '[whosoever shall give readiness to listen to this one of mine], they shall (now) come to . . .' (Y. 45.5);

at huuō . . . [kas-cīt ašā huzāņtuš] 'thus, he there is . . . [whoever by (his) Order (is) of good lineage]' (Y. 49.5);

uštā ahmāi [yahmāi uštā kahmāicīţ ... mazdå dāiiāţ ahurō] 'wished-for (things are) in the wish for him, [to whomever Mazdā Ahura shall give (them)]' (Y. 43.1).

8.2.2.6 Conditional relative clauses

The only example (OPers.) has the perfect optative potential:

OP. naiy āha martiya . . . [kaš-ciy haya avam gaumātam . . . xšaçam dītam caxriyā-3s-perf. opt.] 'there was no man at all ...

[who could have taken the royal command from that Gaumāta]' (DB 1.48-49, 53).

See also section 8.2.4.2c Conditions contrary to fact.

8.2.3 Adverbial clauses

Adverbial clauses typically function like adverbs, modifying a verb or a clause. Most of them are introduced by adverbial forms of the relative *ya*: OAv. *hiia1*, YAv. *ya1*, OPers. *taya* and *ya0\ddot{a}* 'as, how' (most common); local Av. *ya0r\ddot{a}* 'where', OPers. *yad\bar{a}-taya*; temporal OAv. *yad\bar{a}* 'when', YAv. *ya6a*, and others.

8.2.3.1 Clauses of time

The conjunctions are OAv. *hiiat*, *parā hiiat* 'before', YAv. *yat*, *para*... *yat*, \bar{a} ... *yat* 'till', *wspəm ā alumāt yat* 'until', *yadoīt*, OPers. *yadiy* and *yadā* 'when'; OAv. *yadā* 'when', *hakaram* 'once', and others.

Tenses and moods are mostly as in main clauses:

8.2.3.1a Old Avestan

at-cā [hiiat tā hām maniiū jasaētəm-pres. inj.] pa"ruuīm dazdē 'thus, also: [whenever the two spirits **come together**], (then) one *receives for the first time' (Y. 30.4);

[hiiat us...naptiiaēšū nafšucā...°jān-aor.inj.]... (< gan-t < gam-t) '[when he has come up among the *great-grandchildren and grandchildren]...' (Y. 46.12);

OAv. [yadā aēšam kaēnā jamaⁱtī] ... 'when the retribution has come for these (sins)' (Y. 30.8).

Note the verb-less time clauses; whether the gapped verb is the copula cannot be verified:

yā mazdā0ā [hiiaţ-cīţ vīdušē] '(the words) to which attention should be paid, [even **when** (it is) by a knowing (man)]' (Y. 30.1);

 $ya\theta \bar{a} t a a \eta h a [h \bar{a} n k a r^{3} t \bar{a} h i a t]$ 'how those shall be [when (they are) at the *accounting ($\langle h \bar{a} n k a r^{3} t i - \rangle$]' (Y. 31.14).

8.2.3.1b Young Avestan

[yat-cit ahi-pres. ind. rašnuuō ašāum upa karšuuar^o yat ar^ozahi] . . . '[O Orderly Rašnu, just when you are over the continent (of) Arozahi] . . .' (Yt. 12.9);

išauuas-ciţ...*ašəmnō.vī*δō *bauuainti [yaθa graņtō...**miθnāⁱti** miθrō] 'even the arrows will not find their targets [when Miθra **dwells** angered]' (Yt. 10.39); yauuata gaiia juuāuua-pres. ind. 'as long as we two live' (Yt. 15.40).

[yat astuuat. ər³tō fraxštāⁱte-pres.subj. haca apat kasaoiiāt]... 'when Astuuat. ər³ta shall stand forth from the Kasaoiia Sea...' (Yt. 19.92);

nõiţ vaýhō ahmāţ šiiao0nəm vər 'ziie'ti [*yaδōiţ pu0rahe*...**frā** naēzəm nasūm **pacāṯ-press.subj.**] 'he performs a deed no better than [when one **cooks** the corpse of one's son on a spit]' (V. 16.17);

tam yazata pāuruuō...
[yat dim usca uzduuqnaiiat-inj.... 0raētaonō]
'to her Pāuruuō sacrificed
[when Øraētaona tossed him up in the air]' (Yt. 5.61).

Preterital optative:

[yat tum aⁱnim auuaēnoiš] . . . \vec{a} t tum niš. hi $\delta \bar{o}$ iš [whenever you would see . . .] then you would sit down' (H. 2.13);

...[yauuata **xšaiiõiṯ** huuq0βō yimō]

'... [for as long as Yima ruled]' (Y. 9.5).

8.2.3.1c Old Persian

[hakaram-maiy ušī yā gā0avā hištataiy-pres. ind.] . . . adakaiy fratara maniyaiy afuvāyā [yadiy vāināmiy-pres.ind. hamiçiyam] ya0ā [yadiy naiy vaināmiy-pres.ind.] '[once it stands (firmly) in place in my mind] . . . then I feel more beyond fear [when I see something conspiratorial than [when I do not see (it)]' (DNb 34-40);

*utā-[taiy yāvā taumā ahatiy-*pres. subj.] *auramazdā-taiy dauštā biyā* 'and, [for as long as **there is** strength to you = you have strength], may Ahuramazdā favour you' (DB 4.71–79);

auramazdā [ya0ā avaina-impf. imām būmim]... 'Ahuramazdā, [when **he saw** this earth]...' (DNa 31–32);

[ya0ā taya adam xšāya0iya **abavam-impf.**] astiy ... [see section 7.1.1.3] '[when I became king], there was ...' (XPh 29–32);

viyaxanahayā māha[yā] XIV raucabiš 0akatā āha [yadiy udapatatā-impf.] 'it was on the 14th of the month of Viyaxana [when **he rose up**]' (DB 1.38);

[yātā adam bābirauv **āham-impf.**]... '[while **I was** in Babylon]...' (DB 2.6);

[ya0ā ka^mbūjiya bardiyam avāja-impf. (< ava-a-ja^m). '[when Cambyses had killed Smerdis]...' (DB 1.31-32).

8.2.3.2 Clauses of place

The usual conjunction is Av. $ya0r\bar{a}$; YAv. also $yat \dots paiti$ 'where'; OPers. $yad\bar{a}$ -taya and $yad\bar{a}y\bar{a}$ (for * $yad\bar{a}yad\bar{a}$ acc. to Schmitt 1994) 'where'. Indefinite clauses are introduced by YAv. $ya\delta\bar{o}it$ 'wherever' (often indistinguishable from 'whenever'):

OAv. hiiat a'bī.g'mən [ya0rā cinuuatō pər'tuš] 'when they have come to [where the Ford of the Accountant (is)]' (Y. 46.11);

YAv. nasiieⁱti... ahmat haca nmānāt āhitiš...
[ya0ra bāδa upastaoⁱti haomahe... baēšazəm]
'pollution disappears from this house
[where he ever and again praises... the healing of the haoma]' (Y. 10.7);

[yaðōiţ dim bāˈðištəm auua.zanqn -subj. sūnō] (sūnō-acc. for spānō-nom.) '[wherever most often dogs will notice him]' (V. 6.45);

OPers. *utā a"tar aitā dahāyāva āha* [*yadā-taya*... *daivā ayadiya*-impf.]... [*yadāyā paruvam daivā ayadiya*-impf.] *avadā*... 'and among these lands, there was (one) [where old gods had been sacrificed to]... [wherever the old gods were sacrificed to], there ...' (XPh 35–41).

8.2.3.3 Clauses of purpose

The conjunctions are OAv. *hiiat*, YAv. *yat* and *ya0a*, OPers. negated $m\bar{a}$ -taya 'lest'. The mood is the subjunctive:

OAv. vaxšiiā vā... [hiiat dā0āng vīcaiia0ā-2p-subj. adā0qs-cā] 'I shall tell you, [so that you may sort out those according to the rules and those not]' (Y. 46.15);

YAv. [ya0a azəm ta"ruuaiieni- subj. vīspe yātauuō pa'rikås-ca] [yat mam naēciš ta"ruuaiiāt-subj.]
'[so that I shall overcome all sorcerers and witches],
[so that no one shall overcome me]' (Yt. 1.6);

OPers. avahaya-rādi y kāram avājani yā [mā-taya-mām xšnāsāti y-subj.] (xšnāsā" ti y?) 'therefore he would kill the people/army: [so that it (they?) will not recognize-subj. me]' (DB 1.51–53).

8.2.3.4 Clauses of result

The conjunctions are OAv. hiiat, YAv. yat, OPers. taya. The mood is the indicative:

OAv. hiiat īš d'baomā pər'smanāng upā.jasat [hiiat vər'nātā-pres. ind. acištəm manō] 'because deception would come over them as they were discussing, [so that they would prefer the worst thought]' (Y. 30.6); YAv. tå hē ta"ruuaiiatəm tbaēšå... [yat nõit āpō takāiš staiiat-pres. inj.] 'those two overcame his hostilities, [so that he did not stem the waters from (their) courses'] (Yt. 13.78);

OPers. *drauga-diš* *hamiçiyā akunauš [taya imai y kāram ad^urujiyaš-impf.] 'the Lie made them conspiratorial [so that they lied to the people/army]' (DB 4.34-35).

8.2.3.5 Clauses of cause

The conjunctions are OAv. *hiiat*, YAv. *yat* and *ya0a*, OPers. *taya* and *ya0ā*. The mood is according to sense:

YAv. [yat asti-pres. ind. baβriš sraēšta] '[because the female beaver is the most beautiful there is]' (Yt. 5.129);

auua0a saošiicąs [ya0a vīspəm ahūm astuuaņtəm sāuuaiiāt-pres.subj.] 'thus (he is called) 'Revitaliser,' [because he will revitalise the entire bony existence]' (Yt. 13.129);

OPers. avahaya-rādi-maiy auramazdā upastām abara... [ya0ā naiy a^hrīka āham-**impf**.] 'for this reason Ahuramazdā... because I was not on the Evil One's side' (DB 4.62–63).

In Old Avestan, a causal clause may be correlated with an instrumental of cause/ reason:

OAv. vaēdā tat yā ahmī mazdā anaēšō mā kannafšuuā [hiiat-cā kamnānā ahmī] 'I know that on account of which (= the reason why) I am weak, O Mazdā: (it is) because of my lack of cattle [and because I have few men]' (Y. 46.2).

8.2.3.6 Clauses of manner, degree and comparison

The common conjunction is $ya0\bar{a}$ 'as, how, than'. Degree is expressed by Av. yauuat 'to the extent that, as long as, until', mānaiiən ahe ya0a 'as if', etc.; OAv. $y\bar{a}t$ and $y\bar{a}.t\bar{a}$ 'to the degree that, as far as'. The moods are as in main clauses.

Manner:

OAv. $k\bar{a} \,\bar{i} \,\bar{s} t \,\bar{i} \,\bar{s} \dots [ya 0 \bar{a} \,v \bar{a} \,hahm \bar{i}$ -pres. ind.] 'what (is your) wish ... [or (for how I sleep]?' (Y. 34.5);

[$ya0\bar{a} t\bar{u} \bar{i} \dots m\bar{a}ngh\bar{a}-c\bar{a}$ -aor.inj.] '[in the same way that you . . . and have thought them]' (Y. 39.4);

 $t\bar{a} \ 0\beta\bar{a} \ p \Rightarrow r \Rightarrow s\bar{a} \dots [ya0\bar{a} \ t\dot{a} \ a\etah \Rightarrow n-pres. subj.]$ 'I ask you ... [how those shall be]' (Y. 31.14);

YAv. [yaθa vaši-pres. ind.] . . . iδa aŋhō ašauua '[as you desire] . . . here you shall be Orderly' (Y. 71.16); *uzjamiiqn*... [*ya*0*a hīš frada*0*a***t**-**pres. inj.**] 'may they come up ... as he brought them forth' (Y. 55.3);

OPers. [ya0ā-šām hacā-ma a0ahaya-impf.] ava0ā akunavaya[#]tā [as was said to them by me], thus they would do (preterital opt.)' (DB 1.123-24).

Indefinite manner:

YAv. [ya0a ka0a-ca hē zaošō] '[howsoever his pleasure (may be)]' (Yt. 4.7).

Comparison:

YAv. yå yāskər³starå ahmāţ [ya0a vaca framrauuāⁱre-pres.ind.]] 'who are more effective at the audition [than they can be said forth with words (to be)]' (Yt. 13.64).

'As if'-clauses take the optative:

[mānaiiān ahe ya0a hazaŋrəm narqm ōim narəm ādər³zaiiōi**t**-pres.opt.] '[as if 1000 men were to fetter a single man]' (Yt. 8.55).

Degree:

auuat [$y\bar{a}t$ huuar³ auu $\bar{a}c\bar{i}$ -aor. pass.] 'as (high) [as the sun has been said (to be)]' (Y. 36.6).

Indefinite degree clauses take the subjunctive:

OAv. [yauuat ašā tauuā-subj.-cā isāi-subj.-cā] '[to the extent I by the Order (of my ritual) can and am able]' (Y. 50.11);

[yauuat cuuat-ca hē zastaēⁱbiia haņgə["]ruuaiiqn-subj.] aētauuat ... '[however much of it they can grasp by the hands], this much ...' (V. 6.29).

8.2.4 Conditional clauses

The conjunctions are OAv. *hiiat, yezī*, YAv. *yat, yezī* (*yeiõi* before *zī*), OPers. *yadiy*. Real conditions are expressed by various combinations of indicative, subjunctive, optative and imperative. The order of protasis (if-clause) and apodosis (then-clause) is irrelevant. See also Panaino 1989–90.

8.2.4.1 Conditional clauses in Old Avestan

The Old Avestan $yez\bar{i}$ clauses seem to be 'truth-tests': 'if something is/was/will be true, then . . .'. The apodosis either contains a statement about the current state of the world or a request for knowledge, rewards or similar in the imperative:

yā frauuaxšiiā [yezī tā a0ā haⁱ0iiā (COP)] ašəm šiiao0^anāiš d³bązaⁱtī-**pres. ind.** ārmaⁱtiš '(the words) which I want to pronounce, [if they (are) indeed true in this manner], (then, clearly), by (her) actions, Ārmaiti is *thickening Order' (Y. 44.6); [yezī a0ā stā-pres. ind. ha'0īm] mazdā ... at tat mõi daxštəm dātā-imp. '[if you are (all) truly in that way], O Mazdā ... then make that a *(permanent?) mark for me!' (Y. 34.6);

[yezī adāiš ašā drujəm vānghaⁱtī-**aor.-subj.**] ... at tāi sauuāiš vahməm vaxšat-**aor.-subj.** ahurā '[if he shall indeed overcome the Lie with (his) ..., by his Order] ... then he will magnify (his) hymn with life-giving strengths for you, O Ahura' (Y. 48.1).

8.2.4.2 Conditional clauses in Young Avestan

8.2.4.2a yezi-clauses: simple conditions

These take the present indicative or subjunctive and the perfect indicative in 'if ever' conditions:

[yezi vaši-**pres. ind.** . . . auuå tbaēšå ta[#]ruuaiiō] . . . a0a imå nāmānīš . . . fra.mrauua-**pres. imp.** (thematic form) '[if you wish to overcome yon hostilities] . . . then say forth these names!' (Yt. 1.10–11);

yå ahurahe *xšaiiantō dašinąm upa yuⁱδiieⁱnti-pres. ind. [yezi aēm bauuaⁱti-pres. ind. ašauua-xšnus] '... who fight at the right side of the ruling lord [if (= whenever) he satisfies the Orderly ones]' (Yt. 13.63);

hazaŋrəm azəm tē zao0ranqm . . . barāni-**pres. subj.** [yezi jum (<juu̯am) frapaiieni-**pres. subj.** aoi zqm] 'I shall bring you a thousand libations . . . [if I reach alive the earth]' (Yt. 5.63);

[yezi 0βā diduuaēša-perf. ind.]... ā tē aýhe fra-ca stuiie-pres. ind. 'if I have (ever) antagonised you, for this I am assigning myself by my praise (ā-stuiie?) to you and utter your praise (fra-stuiie)' (Y. 1.21).

Alternate conditions are expressed by *yezi*...*nauuāt* 'if ... or if not':

[yezi tat yaiiata-perf. ind. nauuāt tat yaiiata-perf. ind.] '[if he has taken up his position or not taken up his position] ...' (Āfr. 3.3).

8.2.4.2b yezi-clauses: hypothetical conditions

These take the optative in the protasis:

[yezi-ca hō nā paⁱti.hincōit-pres. opt.] yō... ku0a aētat druxš pər^onāⁱte-pres. subj. (aētat druxš for aētam drujim) '[and if that man were to pour] who is ... how shall he overcome this lie-demon?' (V. 9.47).

8.2.4.2c Conditions contrary to fact

Conditions contrary to fact (irrealis) take the perfect or present optative in the protasis and the perfect optative in the apodosis:

[ye'δi zī azəm nõiţ da'δiiqm-perf. opt. . . . aom stārəm] . . . hāu pa'rika . . . aŋhuucım anua.hisiðiiāţ-perf. opt. '[for if I had not set in place yonder star] . . . (then) . . . that witch would have cut off the *thread of life' (Yt. 8.52–54);

[yebi zī mā mašiiāka . . . yazaiiaņta-pres. opt.] . . . frā *nuruiiō ašauuaoiiō . . . šušuiiąm-perf. opt. '[for if men were to sacrifice to me], (then) I would have gone forth for the Orderly men' (Yt. 8.11).

See also section 8.2.2.6 Conditional relative clauses.

8.2.4.2d yat-clauses

In Young Avestan, conditional *yat*-clauses are sometimes difficult to distinguish from temporal clauses:

[yat anusō vifiieⁱti-**pres. ind.**] . . . kā hē asti ci0a '[if/when someone is buggered unwillingly], what is the penalty for that?' (V. 8.26);

[yat alımi mnāne . . . nāⁱrika daxštauuaⁱti aŋhat-**pres. subj.**] '[if/when in this house a woman becomes menstruant]' (V. 5.59);

abda-ca iδa... *saδaiiāţ*-**pres. subj.** [*yaţ iδa pasāuš anumaiiehe paδəm vaēnāⁱte*-**pres. subj.**] 'and wondrous it will seem [if the footprint of a sheep should be seen here]' (V. 2.24).

8.2.4.2e Periphrasis with present participle

Presumably because not all verbs had perfect optative forms, a periphrasis was used consisting of a present participle feminine accusative [!] + perfect optative of 'to be':

[yezi-ca aēte nasāuuō... nasuš narəm āstāraiieiņtim åýhāt-perf opt.] išar³.štā^ttiia mē vīspō aŋhuš astuuå... (no verb) 'and if these corpses... (if this) corpse would have rendered a man guilty, then, pronto, my entire bony existence (would be...)' (V. 5.4).

8.2.4.3 Conditional clauses in Old Persian

In Old Persian, only the future condition type is attested:

yadiy imām dipim vaināhay-**pres. subj.** *imai-vā patikarā]* '[if you see this inscription or these images], (then) . . . ' (DB 4.72–73).

See also section 8.2.2.6 Conditional relative clauses.

9 LEXIS

9.1 Word formation

Words can be derived in a variety of manners: by prefixes and suffixes and by composition, of which the following is a selection.

9.1.1 Derivation

9.1.1.1 Suffixes

Among the more common, even productive, Old Iranian suffixes are the following:

-a-: Among its many uses, this suffix makes adjectives from nouns (including derived nouns and compounds), often accompanied by full or lengthened grade of the first syllable (*vriddhi*); when the first syllable has a long vowel, the adjective will be identical with the noun from which it is derived: Av. *maniiauua*- 'belonging in the other world' <*maniiu-*; *haozq0βa*- 'being of good lineage' <*huzantu*- 'of good lineage'; *āpa*- 'water-logged' <*āp*- 'water'; *upa'ri-z'ma*- 'who live upon the earth' <*zam*-; *hazaŋrō.zima*- 'a thousand-year period' <*ziiam*-; – OPers. ^huvāipašiya- 'own' < ^huvaipašiya- 'self'; *mārgava*- 'person from Margiana' <*margu*- 'Margiana'; *pārsa* 'Persia'.

-*i*-, -*ia*-: The suffix -*i*- and its thematicised form -*ia*- are used to form adjectives denoting various kinds of appurtenance, notably geographical; they are often accompanied by lengthened grade in the first syllable (*vriddhi*): YAv. $\bar{a}h\bar{u}'ri$ - 'pertaining to/ belonging to Ahura (Mazdā); $h\bar{a}uuani$ - '(time of day) pertaining to the haoma pressing (*hauuana*-)'; $v\bar{a}r'\partial rayni$ - 'victorious' < $var'\partial rayna$ - 'victory, god of victory'; – OPers. $b\bar{a}gay\bar{a}di$ - month name < baga- 'god' + $y\bar{a}da$ -, cf. yada- 'to sacrifice'; – YAv. ra0 β iia-'according to the ratu'; $t\bar{u}'riia$ - 'Turian' < tura- 'id.'; *hupa0maniia*- 'the fact of having good flights (*pa0man-)'; – OPers. māniya- '(servant?) belonging to one's house (māna-)'; *0anuvaniya*- 'connected with/using a bow (< 0anuarln-); a0uriya- 'Assyrian' < a0urā-'Assyria', maciya- 'Makranian' < maka- 'Makran'. – A special use of this suffix is to denote someone in charge of: YAv. pasuš.hasti-, sb. in charge of, owner of the sheep-pen (pasuš.hasta-)'. – The suffix -*i*- is also used to make patronymics: Av. zara0uštri- 'son/ follower of Zarathustra (zara0uštra-)'; also -āna-, -āni-: YAv. jāmāspana- 'son of Jāmāspa'; $\bar{a}0\betaiiani$ - 'son of $\bar{A}0\betaiia$ '.

-ka-, -aka-: This is the most productive suffix in Iranian, but is still relatively rare in Avestan and Old Persian: YAv. $ja'nik\bar{a} < ja'ni$ - 'woman'; $ma \$ ii $\bar{a}ka$ - > $ma \$ ii \bar{a} - 'man, mortal'; pasuka- 'sheep and goats' < pasu-; $ap \$ or' $n\bar{a}iiuka$ - = $ap \$ or' $n\bar{a}iiu$ - 'minor child' (<a $por'na-\bar{a}iiu$ - 'who has not filled his age'); - OPers. vazarka- < vazar/n- 'greatness'; $ar \$ stika-(or $\bar{a}r \$ stika-) 'spear-man' < * $cr \$ sti- 'spear'; karnuvaka- 'workman, artisan' < karnau- 'do, make'.

-*na*-, -*ana*-: These suffixes produce various kinds of nouns and adjectives from verb roots: Av. *yasna*- 'sacrifice' < yaz-; x^vafna - 'sleep' $< x^vap$ -; *hanjamana*- 'assembly, gathering' < ham-gam- 'come together'; *pacina*- 'cooked meal' < pac- 'cook'; – OPers. °stāna-, stāna- 'place (for . . .)' $< st\bar{a}$ -; *āvahana*- 'settlement, town' $< \bar{a}$ -vah-; *draujana*- 'liar, deceiver' < drauj-; *hamarana*- 'battle' < ham-ar- 'form ordered (battle) lines'.

-uant- (-mant- after u): This is a very common suffix meaning 'full of, containing': OAv. aojōŋhuuant- 'strong' (< ao jah-uant-); - YAv. xratu-mant- 'wise'.

- $t\bar{a}t$ -: This is a productive suffix making abstract nouns from adjectives. It is also used to 'quote' or refer to words: Av. $ha^{\mu}ruua-t\bar{a}t$ - 'wholeness' $< ha^{\mu}ruua$ -; $upara-t\bar{a}t$ - 'superiority'; OAv. $k \Rightarrow uui-t\bar{a}t$ - 'being a kauui, the word kauui' (cf. abstract suffix MPers.

 $-i\hbar$, Ch. 4, section 6.1.2.1); YAv. yauuaē-tat- 'that which is yauuaē "forever"; 'ri $\partial iiaqs$ -tat-'fact of being 'ri $\partial iiant$ - "dying" (mortal)'. In Old Persian, this suffix may have been replaced by -ta- (OPers. arš-tā- vs. YAv. arš-tāt- 'rectitude').

9.1.1.2 Prefixation

Some prefixes are also preverbs, others are used with nominal forms only.

9.1.1.2a Preverbs used as prefixes

Preverbs used as prefixes typically have slightly different meanings from those of the preverbs, e.g.:

apa 'in the back, backward' (preverb: 'back, backward'): *apa-kauua-* 'with hump in the back, humpback';

fra 'in front' (preverb: 'forward, forth:): *fra-bāzu-* '(the length of) the arm held forward', *fra-xšnu-* 'with knees sticking out, knobbly-kneed';

 $v\bar{i}$ 'to the side(s), away' (preverb: 'to the sides, far and wide:): $v\bar{i}$ - $b\bar{a}zu$ - '(the length of) the arms held to the sides', $v\bar{i}$ - $da\bar{e}uua$ - 'keeping the demons away, discarding the demons', $v\bar{i}$ - $xr\bar{u}mant$ - '(a blow) that causes blood to flow out'.

9.1.1.2b Nominal prefixes

Exclusively nominal prefixes include:

a- (*an*- before vowel) 'not, non-, lacking', used to negate nouns and adjectives (including those made from verbs) and to make adjectives meaning 'lacking sth.': OAv. *adrujiiant*- 'non-deceiving', YAv. *an-ašauuan*- 'not Orderly', *ə-uuista*-, *ə-uuisti*- 'unfound; lack of finding' (*a*- + *vista-lvisti*-), *a-ŋhaošəmna*- 'not drying out', *a-karana*- 'limitless';

hu- 'good' and *duš*-, *duž*- 'bad, evil': OAv. *hu-šiti*- 'good dwelling', *dušiti*- 'bad dwelling' ($< duš-s^{\circ}$), x^{v} -*īti*- 'good/easy going' (< hu-*iti*-), *duž-iti*- 'bad/difficult going'; *hu-mata*- 'well thought'; OPers. ^huv-asa- 'having good horses' (< hu-asa-); *duš-ⁱyāra*- 'bad season, famine'.

9.1.2 Compounding

Compounds, as well as their individual elements, can be all kinds of words (nouns, adjectives, adverbs, other compounds): YAv. *daifhu-pa'ti-* 'landlord', *vəroOra-jan-* 'obstruction-smasher'; – OPers. *daiva-dāna-* 'idol-repository'; *tigra-xauda-* 'pointed-hat = wearing pointed hat', *hamarana-kara-* 'battle-doer = battle-fighter'.

Possessive adjectival compounds (*bahuvrīhi*) are especially common: *bar'smō.zasta-*'barsom-hand = with barsom in the hand', *hu-xša0ra-* 'having good command'.

If one member of the compound is a word that usually contains two parts, only one part can normally be used in the compound: $ahura \cdot \delta \bar{a}ta$ · 'Ahura-placed = set in place by Ahura Mazdā', *mazda-iiasna* · 'Mazdā-sacrifice = someone who sacrifices to Ahura Mazdā; compounds consisting of more than two members are probably not of an inherited type: YAv. [draoyo vāxš]. draojišta · 'who lies [with lying words] the most'.

9.1.2.1 Form of first and second members of compounds

The final vowel of the first member usually becomes \bar{o} , whether it as an *a*-, \bar{a} -, or *an*-stem or an invariable in -*a*: $da\bar{e}uu\bar{o}.d\bar{a}ta$ - 'demon-established' (< $da\bar{e}uua$ -), *zruu* $\bar{o}.d\bar{a}ta$ - 'time-

established (< zruuan-); haptō.karšuua'rī- '(the earth) having seven continents (< hapta 'seven').

Some adjectives use an *i*-stem as the first member of a compound, e.g. $x \bar{s}uui\beta i.i \bar{s}u$ -'(shooting) vibrating/fast arrows' ($\langle x \bar{s}uui\beta ra$ - 'vibrating'), $b \partial r^{2} z i.g \bar{a} \partial ra$ - 'with loud singing' ($\langle b \partial r^{2} z a \eta t$ - 'high, loud').

Nouns as second members of compounds are sometimes in the zero grade, e.g. $fr\bar{a}da\underline{t}.f\breve{s}u$ - 'cattle-furthering' (< pasu- 'sheep and goats'), $\partial r^{2}duua-f\breve{s}n\ddot{i}$ - 'with high bosom' (< $f\breve{s}t\bar{a}na$ - 'breat'), spitāma- 'with fattened (increased) strength' < *spita-Hma- < ama-).

Sometimes, the first member of a compound is in a case form:

- nom.: YAv. afš.tacin- '(mountains) where water flows' (<āfš 'water' nom. sing.), kər³fš.x^sar- 'body-eating, carrion (bird)' (< kṛp-šu̯ar- < hu̯ar-?);
- acc.: OAv. ahūm.biš- 'world-healer', vər'0rām.jan- 'obstruction-smasher'; YAv. ašəm.stut- 'praising Order';
- gen .: z^{*}mas. ci0ra- 'earth-seed, having the seed of the earth';
- dat.: yauuaē-sū- 'forever benefiting';
- loc.: YAv. maⁱδiiōi.šad- 'sitting in the middle'.

9.1.2.2 Adverbial āmredita compounds

The so-called *āmredita* compounds are adverbial phrases consisting of repeated words: OAv. *narām narəm* 'man after man'; YAv. *nmāne nmāne* 'in house after house'.

9.1.2.3 'Dual' or 'open dvandvas'

These denote a pair consisting of two different objects, which may be singular, e.g. 'firewood and incense', 'Frašaoštra and Jāmāspa', or (generic) plural, e.g. 'cattle and men'. In these expressions both nouns are in the dual, so that the expression looks like '2 firewoods, 2 incenses', etc.: OAv. gāuuā azī 'a bull and a (fertile) cow'; YAv. āpa uruua're 'waters and plants', sanhauuāci ar'nauuāci 'the two (sisters) Sanhauuācī and Arnauuācī'.

If one of the items consists of two words, one word is usually dropped: $mi0ra \ ahura$ 'Mi θ ra and Ahura (Mazdā)', *ahuna* * a^i riiamana 'the (prayers) Ahuna (Vairiia) and Airiiaman (Išii \overline{o})'.

10 STYLISTIC FEATURES

Both in the Old Avestan complex metres and in the Young Avestan octosyllabic metre, syntactic units are frequently confined within a metrical unit, but clauses commonly continue through several units.

10.1 Old Avestan poetic word order

The Gathic metre is characterised by strophes divided into 3-5 metrical units ('verselines' ... / ...) split into two smaller units ('half-lines') by a caesura (... # ...).

The most common departure from 'normal' word order involves the splitting up of small syntactic units, for instance, the separation of determinants from their nouns: noun + adj.:

[gāuš] vər^ozānē [aziiå] '[cow] in *household [fertile]' = 'in the *household of the fertile cow' (Y. 34.14); [ahurō] vaēdā | [mazdå] '[Ahura] knows [Mazdā]' = 'Ahura Mazdā knows' (Y. 31.2);

adj./pron. + noun:

[0βahmī] mazdā [vīci0ōi] '[your] Mazdā [in discrimination]' = 'in your discrimination, O Mazdā' (Y. 32.8);

noun + gen.:

[ratūm] ahurō vaēdā | mazdå [aiiå qsaiiå] '[model] Ahura knows Mazdā [of these two premiums]' = 'Ahura Mazdā knows the model of these two premiums' (Y. 31.2).

Often a small syntactic unit, such as noun + adjective/genitive, verb + direct object, or even preverb + verb, is split between two half-lines or lines, especially in $G\bar{a}0\bar{a}s$ 2–3, which have first 'half-lines' of only four syllables. The split can take various forms: the terms can remain adjacent to one another, occupy parallel positions, be mirrored, or other; and they can be split between half-lines or verse-lines (enjambement).

Split between half-lines:

adā tašā gāuš [pər³sat # ašəm] 'then the fashioner of the cow [asks # Order]' (Y. 29.2);

```
hiiat dā0āng vī # caiia0ā adā0qs-cā
```

'so that you can [dis # criminate] (between those) who are according to the rules and those who are not' (Y. 46.15).

Enjambement:

maibiiō dāuuōi [aluuů # . . . | āiiaptā] 'for (you) to give to me [of the two existences # . . . / the spoils]' (Y. 28.2).

'Inverse enjambement' (new clause – or smaller syntactic unit – begins with a single word at the end of a verse-line):

xšiiō / darəgām āiiū təmaŋhō 'lamentations, / a long lifespan of darkness' (Y. 31.20);

valuštā | gauuōi vər³ziiātąm 'let the best (things/pastures) be produced for the cow!' (Y. 48.5).

10.2 Parallelism and chiasmus

Sequences of similar groups of words can be arranged in parallel (A_1, B_1, A_2, B_2) or chiastically (A_1, B_1, B_2, A_2) .

10.2.1 Parallelism

Parallelism occurs within or between metrical units $(A_1 \dots B_1 // A_2 \dots B_2, etc.)$ and is found in all three languages:

OAv. $[kat] v\bar{a} \{x\bar{s}a\theta r\bar{s}m\} [k\bar{a}] \{\bar{i}\bar{s}t\bar{i}\bar{s}\} \#$ 'what (is) your command? what (is your) wish?' (Y. 34.5);

 $y\bar{a}s\bar{a}\dots I$ [manii $\bar{a}u\bar{s}$] \dots { $pa^{\mu}ruu\bar{u}m$ } # [$sp\bar{a}ntahii\bar{a}$] \dots { $v\bar{s}p\bar{a}ng$ } 'I ask [of inspiration] \dots {the first} # [life-giving] \dots {all}' = 'I ask (you) all for the first (existence) of the life-giving inspiration' (Y. 28.1);

hiiat [$h\bar{a}m$] {*vohii*} #... [*fraštā*] {*manaŋhā*} 'when [con-] {with good} # [sulted] {thought}' 'when he has consulted with (his) good thought' (Y. 47.3);

YAv. $[xr\bar{u}m\bar{n}m] \{g\bar{a}u\bar{s}\ y\bar{a}\ capragh\bar{a}x\bar{s}\} / [vard@im\ pantum] \{aza^{i}te\}$ '[bloody] {cow the grazing} / [of captivity road] {is driven}' = 'the grazing cow is driven along the bloody road (the road which makes her bleed) of captivity' (Yt. 10.38);

OPers. *utā [avam vahayazdātam] {agarbāya''} utā [martiyā]*... {*agarbāya''}* 'and [Vahayazdāta] {they seized} and [the men] {they seized}' = 'and they seized that Vahayazdāta, and they seized the men' (DB 3.47-49).

10.2.2 Chiasmus

In this case, the elements of parallel phrases are arranged in opposite order, 'crossed', as it were.

Verb + predicate/direct object, predicate/direct object + verb:

OAv. $[ahm\bar{i}] \dots \{ana\bar{e}s\bar{o} \mid \dots kamn\bar{a}n\bar{a}\} [ahm\bar{i}]$ '[I am] {weak ... / few-menn'ed} [I am]' = 'I am weak and have few men' (Y. 46.2).

Adjective/genitive + noun vs. noun + adjective/genitive:

OAv. $k\bar{u}$ [spantā] { $\bar{a}rma^{t}is$ } / $ku0r\bar{a}$ { $man\bar{o}$ } [vahišt am] 'where (is) [life-giving] {Humility}? / where (is) {thought} [the best]?' (Y. 51.4).

10.2.3 Combined parallelism and chiasmus

OAv. {amər³tātā ha^uruuātā} # [spāništā <maniiū>] ... l {təuuīšī utaiiūⁱtī} # [<manaŋhā> vohū] '(give me) {immortality and wholeness} [by (your) most life-giving <inspiration>], {*tension and *texture} [by (your?) <thought> the good]' (Y. 51.7).

10.3 Ellipsis in Old Avestan poetry

The omission of key words, mostly verbs, is one of the most intriguing, frustrating, and tantalising aspects of the Old Avestan poetry. The omitted words can sometimes be supplied from the context itself, but very often they must be supplied from the larger context of the poet-sacrificer's world, as manifested elsewhere in his poetry. If the omitted word is to be supplied from a still more general context, we cannot do it.

Repeated verb:

at kəhrpəm utaiiūⁱtiš dadāt ārmaⁱtiš anmā 'thus, *texture **gives** (him) form, Humility (the earth) (gives him) breathing' (Y. 30.7);

yas-tā maņtā pa[#]ruiiō.../ huuō xra0βā... ašəm '(he) who **thought** those (thoughts) the first.../ he, by (his) wisdom, (thought [= produced by his thought]) Order' (Y. 31.7), cf. yā maņtā ašəm '(he) who thought Order' (Y. 31.19).

Repeated noun and verb:

kat tõi ašā zbaiieņtē auuaŋhō /
... kat tõi vohū manaŋhā
'What help do you have for him when he invokes (you) with Order?
What (help) do you have (for him when he invokes you?) with good thought?'
(Y. 49.12).

Close context:

nū īm vīspā # ci0rā zī mazdåŋhō.dūm / nōiţ d^{ai}bitīm # duš.sastiš ahūm mər^ašiiāţ 'now, all, pay attention to *it* (sāṇghəm 'the (good) announcement'?), for it (is) brilliant! let not a second time the one of bad **announcements** destroy the existence!' (Y. 45.1), cf. nī hīm mər^aždiiāi 0βahiiā mą0rāiš sāṇghahiiā 'in order for it (the Lie) to be wiped out by the (poetic) thoughts of your

announcement' (Y. 44.14).

10.4 Formulaic diction in Old Persian

Old Persian prose is characterised by several of the features described above for Avestan. Word order variation:

ava0ā-šaiy a0aham paraidiy [avam kāram jadiy] {haya manā naiy gaubataiy} 'thus I said to him: "go forth! [crush that army] {which does not call itself mine}!"' (DB 3.14-15),

vs.

ava $\theta \bar{a}$ -šaiy a θ aham paraidiy [kāra] {haya hamiçiya manā naiy gaubataiy} [avam jadiy]

'thus I said to him: 'go forth! {that conspiratorial [army] which does not call itself mine}, [crush it]!" (DB 2.30-31).

Same formula, different syntax:

ima taya adam akunavam [vašnā auramazdāha] {hamahayāyā θarda} pasāva yaθā xšāyaθiya abavam

'this (is) what I did [by the greatness of Ahuramazdā] {in one and the same year} after I became king' (DB 4.3–5),

ima taya adam akunavam [vašnā auramazdāha] {hamahayāyā 0arda} akunavam 'this which I did – [by the greatness of Ahuramazdā] – I did (it) {in one and the same year}' (DB 4.40-41).

10.5 Figura etymologica

This is one of the most common stylistic features especially of Young Avestan and Old Persian and is found in a large variety of forms.

Noun + noun:

VS.

YAv. *baēuuar*³ *dōiθranąm vīdōiθre* 'ten thousand **eyes** for the one whose **eyes** see far and wide' (Yt. 10.82);

cīm haxa haše bara'ti 'what does the **friend** carry to the **friend**?' (Y. 62.8).

With one noun as first or last member of a compound:

daýhāuš daýhu-paⁱtiš 'the landlord of the land' (Yt. 10.83)';

ahmāi darəyąm darəyā jītīm '(give) to him *long long*evity' (Y. 68.11); *šõi0rō.baxtå vī. baxšaⁱti* 'he **distributes** (the waters) **distributed** by settlements' (Yt. 8.34).

Noun + adjective:

YAv. *ama ahmi amauuastəmō* 'in **force I** am the most **force**ful' (Yt. 14.3).

Noun + verb:

YAv. *yānəm võ yāsāmi* 'I am requesting from you a request' (Y. 65.11);

fšābīš...*paⁱti auua.pašāţ* 'one shall ***nail** (him) with ***nails**' (V. 4.51).

With suppletive forms:

YAv. *cim aētaiia paiti. vaca paitiiāmrao<u>t</u>* **what did he **answer** by this **answer**? (Y. 21.4).

Verb + past participle:

YAv. *ha*0*ra*.*taršta* θ*råŋhaiiete* 'he frightens them (so that they are) frightened then and there' (Yt. 10.101);

yō hišta'te maniiu.stātō '(the sky) which stands stood in the world of thought' (Yt. 13.2);

OPers. *haya vināθayatiy anu-dim vinastahayā ava0ā parsāmiy* 'he who does harm, according to the harm done, I punish him' (DNb 25-26). Note expecially expressions for 'doing/treating well/badly', etc.:

YAv. $ya0a hu-bər^{*}t\bar{o} bara^{i}te$ 'when he is carried well-carried = well treated' (Yt. 10.112);

OPers. avam ^hu-bartam abaram ... avam^hu-frastam aparsam ^hhim I carried well-carried (= treated well) ... him I asked well-asked (= punished well)' (DB1.20-22); taya duš-kartam akariya ^that which was done badly-done = had been done badly' (XPh 42-43).

11 SAMPLE TEXTS

11.1 Old Avestan

Yasna 28 is the first poem of the first $G\bar{a}\partial\bar{a}$ (the Ahunauua'tī $G\bar{a}\partial\bar{a}$) and follows the Ahuna vairiia, which is the introductory strophe to the entire collection. The metre of the Ahunanauua'tī $G\bar{a}\partial\bar{a}$ is relatively free compared to those of the other $G\bar{a}\partial\bar{a}$ s: strophes contain three 'verse-lines' divided into two 'half-lines', the first of which, with few exceptions, has seven syllables, while the second varies, mostly between 7 to 9 syllables, but some more or less.

Y. 28.6

vohû ga ⁱ dī manaŋhā dā ⁱ dī aṣ̄ā då (da'ō) dar"gāiiii	7 + 9
ər"šuuāiš tū uxδāiš mazdā zara0uštrāi aojōŋluuaṯ raf °nō	7 + 9
alıma ⁱ biiā-cā alurā yā d ^{ui} bišuuatō duuaēšå ta ^u ruuaiiāma	7 + 10

Come with (your)/on account of (my) good thought! Give through (your)/on account of (my) Order the gift which bestows a long life span! By (your) capacious utterances you, O Mazdā, (gave) support with strength to

Zarathustra.

(So) give to us, too, O Ahura, (support) by which we shall overcome the hostilities of the one hostile (to us = the lord of darkness)!

Y. 28.6a

 $voh\bar{u} < uah-\bar{u} (< uahu-H)$ 'good': *u*-stem adj., instr. sing. neut.

 $ga^{i}d\bar{i} < ga-di (< gm-di)$ 'come!': root aor. imper. 2s act.; pres. stem. jasa- < jaća- for gaća- < gm-ća- < gam-l jam- 'to go, come'.

manaŋhā < *man-ah-ā* 'thought': *ah-stem neut.*, instr. sing.; <*man-* 'to think', cf. *manju-* (Y. 28.11c).

 $d\bar{a}d\bar{a} < d\bar{a}-di$ 'give!': root aor. imper. 2s act.; pres. stem. $dad\bar{a} < d\bar{a} - (< daH)$ 'to give'.

 $da^{\circ} < da^{\circ} = da^{\circ} + ah (< daHah)$ 'gift': ah-stem neut., acc. sing.; $< d\bar{a}$ - 'to give'.

 $dar^{3}g\bar{a}ii\bar{u} < darg\bar{a}iu (< drHga + Hiu)$ 'which bestows a long life span': *u*-stem adj., acc. neut. sing.; adjectival compound < darga- 'long' + *iu*- < u-stem $\bar{a}iu$ - *liau*-*liu*- (H $\bar{a}iu$ -*lHiau*-*lHiu*- 'time, life span, age'.

Y. 28.6b

ər'šuuāiš < *ršų-āiš*: 'capacious': *a*-stem adj., instr. plur. neut.

 $t\bar{u} < t\bar{u}$ 'you': pers. pron. 2s, nom. enclitic; tonic *tuyam* (see Y. 28.11b).

 $ux\delta\bar{a}i\dot{s} < ux0-\bar{a}i\dot{s}$ 'utterance': *a*-stem neut., instr. plur.; <*vak-l vač-* 'speak' (cf. Y. 28.11b).

 $mazd\bar{a}$ ($< mazd^h aH$): 'who places (all) in the mind, the all-knowing one': masc. \bar{a} -stem (*aH*-stem), voc. sing.; adjectival compound < mas (< mns) 'mind' + $d\bar{a}$ - ($< d^h aH$ -) 'to place'.

zara0uštrāi < *jara0uštr-āi* 'to Zarathustra': *a*-stem proper name, dat. sing.; adjectival compound < *zarat*-(?) 'old(?)' + *uštra*- 'camel'; cf. *frašaoštra*- (see Y. 28.8b).

ao jō ŋhuuat < au jah-uat (< au jah-unt) 'strong': uant-stem adj., acc. sing. neut.; < au jah-'(bodily) strength'.

raf 'no < rafn-ah 'support': ah-stem neut., acc. sing.; < rap- 'to support'.

Y. 28.6c

ahma'biiā° < *ahma-bia* 'to us': pers. pron. 1p dat.-abl.; obl. stem *ah-ma-* < nh-, cf. $n\bar{a}$ < *nah* 'us' (gen.-dat. enclitic).

-*ča* 'and, too': enclitic.

ahur-ā 'lord': a-stem, voc. sing.

 $y\bar{a} < \underline{i} - \overline{a}$: rel. pron., instr. sing. neut.

 $d^{ai}bisuuat\bar{o} < duis-uat-ah (<-unt-ah)$ 'hostile': uant-stem adj., gen. sing. masc.; < root noun duis- 'hostility'.

duuaēšå < duaiš-āh 'hostility': ah-stem neut., acc. plur.; < duiš- 'be hostile'; note figura etymologica.

ta"ruuaiiāma < taru-aiā-ma (trHua°) 'we shall overcome': aia-stem pres. subj. 1p; < tar-(< tarH-) 'to pass over, cross', cf. OInd. tū́rva- < trHua-.

Y. 28.8

vahištəm 0βā vahištā	yəm aşā vahistā hazaosəm	7 + 9
ahurəm yāsā vāunuš	narōi f³rašaoštrāi (-ao- = -a-u-) maˈbiiācā	7 + 9
yaē ⁱ biias-cā ī <u>t</u> råŋhaŋ	hōi vīspāi yaoē vaŋhāuš manaŋhō	7 + 9

You the best, (I ask) for the best (things), (the one) whom (I know) has the same taste as best Order,

(you), the Ahura, I ask, (once) having won, for the hero Fraša-uštra and for me, and (for those) to whom you shall give it for the entire life span(?) of (someone of) good thought (or: time span of good thought?).

Y. 28.8a

vahištām < uah-išt-am < uah-u-: superl. acc. sing. masc. $0\beta\bar{a} < 0\mu-\bar{a}$: pers. pron. 2s, acc. enclitic. vahištā < uah+išt-ā 'best (things)': acc. plur. neut. yām < i-am: rel. pron. acc. sing. masc. vahištā < uah+išt-ā: instr. sing. neut.

hazaoš = m < ha-jauš-am 'having the same taste (as)' + instr.: a-stem adj., acc. sing. masc.; adjectival compound < ha- (< hm-) 'same' + jauša- 'taste'.

Y. 28.8b

ahurəm < ahur-am: acc. sing. masc.

 $y\bar{a}s\bar{a} < i\bar{a}c\bar{c}-\bar{a}$ 'ask for, request': *a*-stem pres. ind. 1s; $< i\bar{a}-sc\bar{a}-< i\bar{a}-sc\bar{a}$.

 $v\bar{a}unu\bar{s} < u\bar{a}-un-u-\bar{s}$ 'winner': *u*-stem adj., nom. sing. masc.; adjectival derivative of the perf. stem $u\bar{a}-un- < u\bar{a}n$ - 'to win'.

narōi < nar-ai < nar- 'man': r-stem masc., dat. sing.

 $f^{3}rasaostrāi < frasa-ustr-āi: a$ -stem proper name, dat. sing. masc.; adjectival compound < frasa- 'fat' + ustra- 'camel'.

maⁱbiiā < ma-bia: pers. pron. 1s dat.; cf. OInd. mahya-m.

Y. 28.8c

 $ya\bar{e}^i biias^\circ < \underline{i} - ai - b\underline{i}as^\circ$: rel. pron., dat.-abl. plur. masc. $\overline{u} < i - t$: pers. pron. 3s acc. neut., referring to 'best things' neut. plur. $r^a\eta ha\eta h\bar{o}i < r\bar{a}h$ -a-hai 'you shall give': s-aor. subj. 2s mid.; $< r\bar{a}$ - 'to give'. $v\overline{s}p\overline{a}i < \underline{u}i\underline{c}u$ - $\overline{a}i$ 'all': a-stem pronominal adj., dat. sing. neut. $yao\overline{e} < \underline{i}a\underline{u}$ - $ai < \overline{a}\underline{i}u$ - (see Y. 28.6a) 'time, life span': u-stem neut., dat. sing. $va\eta h\overline{a}u\underline{s} < \underline{u}ah$ -au- $\underline{s} < \underline{u}ahu$ - (see Y. 28.6a): gen.-abl. sing. mana $\eta h\bar{o} < man-ah$ -ah (see Y. 28.6a): gen.-abl. sing.

The three times repeated *vahišta*- 'best' leads up to *vahu*- *manah*- 'good thought' (the divine inspiration, the new sunlit sky, . . .), as the desired result of the ritual; it alliterates with *vaunu*-, implying victory over the forces of darkness. The mention of *fraša-uštra*- alludes to Ahura Mazdā's reward: making the new existence *fraša*- 'filled with the juices of fertility and life'.

Y. 28.9

anāiš vå nōit ahurā mazdā ašəm-cā yānāis zar ^a naēmā	7 + 10
manas-cā hiiaṯ vahištəm yōi və yōiθ³mā das³mē stutąm	7 + 9
yūžām zəuuištiiåŋhō īšō xša0rəm-cā sauuaŋhąm	7 + 9

May we not anger you (pl.), O Ahura Mazdā, and Order with those requests (to you),

and (your) best thought, (we) who have taken up (our) positions at the *fulfillment of (our) obligations* (to you in the form) of praises!

You are the fastest offerings and the command over the life-giving strengths.

Y. 28.9a

 $an\bar{a}i\bar{s} < an-\bar{a}i\bar{s} < ana$ 'those (adressed to you)': dem. pron., instr. plur. neut. $va < \mu\bar{a}h$: pers. pron. 2p acc. enclitic, cf. $v\bar{a}$ (Y. 28.9b). $n\bar{o}i\underline{t} < na-it$ 'not': negation. $a\bar{s}\bar{s}m < art-am$ (see Y. 28.6a): acc. sing.

 $y\bar{a}n\bar{a}i\bar{s} < i\bar{a}n-\bar{a}i\bar{s}$ 'request': *a*-stem neut., instr. plur.; $< i\bar{a}$ - (see Y. 28.8b).

 $zar^a na\bar{e}m\bar{a} < jar-na-\bar{i}-ma$ (< jar-na) 'may we (not) anger': *a*-stem pres. opt. 1p; thematised from $j^har-n\bar{a}-lj^har-n- < j^har-na-H-lj^har-n-H-$ ($< j^harH$ -), cf. OInd. $hr-n(\bar{i})$ -mid.

Y. 28.9b

manas° < *man-ah-* (see Y. 28.6a): acc. sing.

hiiat $\leq h$ -*i*-*at*: rel. pron., nom. sing. neut.

vahištəm < uahišt-am (see Y. 28.8a): nom. sing. neut.

 $y\bar{o}i < \underline{i}$ -ai: rel. pron. nom. plur. masc.

 $v\bar{o} < \mu ah$: pers. pron. 2p gen.-dat. enclitic, cf. va (Y. 28.9a).

 $y\bar{o}i\theta^{n}m\bar{a} < ia-i\theta-ma$ 'we have taken up positions': perf. ind. 1p act.; $< ia-i\theta$.

 $das^{3}m\bar{e} < da\dot{c}mai < da\dot{c}-ma$ 'at the fulfillment of obligations'(?): *a*-stem masc., loc. sing.; $< da\dot{c}$ 'to fulfill one's obligations (to give gifts for gifts)', cf. OInd. $d\bar{a}\dot{s}$ -.

stutqm < stut-a'am < stu-t- 'praise': root noun masc., gen. plur.; < stau-lstu- 'to praise'.

Y. 28.9c

yūžām < jūž-am: pers. pron. 2p nom.

zəuuištii $a\eta h\bar{o} < jau-ištij-\bar{a}hah < jau-ištija- 'most enduring':$ *a*-stem superl., nom. plur.masc.; cf.*zāuuar*^{*} (*zāu-ṛ*) 'strength (of endurance)' (of horses, feet); cf. OInd.*yav-iṣțh-ya-*'youngest'.

 $i s \bar{o} < i s - ah$ '(ritual) offering': root noun masc. nom. plur.

 $x \bar{s}a \partial r \bar{o}m < x \bar{s}a \partial r - am$ 'command': *a*-stem neut., nom. sing.; $< x \bar{s}a$ - (pres. $x \bar{s}a \bar{a}a$ -) 'to be in command, rule'.

sauuaŋhąm < ċauH-ah-a'am 'life-giving strength': ah-stem neut., gen. plur.; ablauting sau-lspā- < ċauH-lċuaH 'swell (with life-giving juices)'; cf. spənta (Y.8.3a below).

Y. 28.11

yā āiš ašəm nipåńhē	manas-cā vohū yauuaētā ⁱ tē	7 + 9
tuuəm mazdā ahurā 🛛	frō mā sīšā 0βahmāṯ vaoca.ģhē	7 + 9
maniiāuš hacā 0βā ā*	yhā yāišā aŋhuš pa"ruiiō bauuaṯ	7 + 9

(You) who with/by these protect your Order and good thought for eternity, you, O Ahura Mazdā, teach me to speak according to your inspiration by your mouth (the words/announcements) by which the first existence

will be here (every time)!

Y. 28.11a

 $y\bar{o} < \underline{i}$ -ah: rel. pron., nom. sing. masc.

 $\bar{a}is < a$ - 'with them/these': pers./dem. pron., instr. plur. masc.

nipanheti fi < ni-pa-hai 'you guard': root pres. ind. 2s mid.; < pa- 'to protect'. vohū < uah-u: acc. sing. neut.

yauuaētāⁱtē < jauai-tāt-ai 'for that which is for a (full) time/life span, forever': tāt-stem fem., dat. sing.; secondary derivative < jauai, dat. of $\bar{a}ju-ljau$ - 'time/life span' (see Y. 28.6a).

Y. 28.11b

 $tuu\bar{o}m < tu-u-am$: pers. pron. 2s nom., cf. $t\bar{u}$ (see Y. 28.6b).

 $fr\bar{o} s\bar{i}s\bar{a} < fra \dot{c}i-(\dot{c})sa$ '*teach': reduplicated *a*-stem pres. imper. 2s; $<\dot{c}ah-l\dot{c}s-(<\dot{c}aHs-l\dot{c}Hs-l\dot{c}Hs-)$, cf. OInd. $\dot{s}as-l\dot{s}iksa-$.

mā: pers. pron. 1s acc. enclitic.

 $0\beta ahm\bar{a}_{\underline{t}} < 0\mu a-hm-\bar{a}_{\underline{t}} < 0\beta a$ - 'your': poss. pron. 2s abl. sing. masc.

 $vaoca \hat{\eta}h\bar{e} < \mu a - u\check{c} - a - hai$ 'to speak': inf. of reduplicated *a*-stem aor. $\mu a - u\check{c}a - < \mu a k | \mu a \check{c}$ -(cf. Y. 28.6b).

Y. 28.11c

 $manii\bar{a}us < mani-s$ 'spirit, inspiration': *u*-stem masc. abl. sing.; <*man*- 'to think', cf. *manah*- (Y. 28.6a); belongs to the other world, 'that of thought'.

 $hac\bar{a} < haca$ 'from, according to': adpos. + abl.

 $0\beta \bar{a} < 0\mu - \bar{a} < 0\mu -$ 'your': poss. pron. 2s, instr. sing. neut.

 $\bar{\sigma}^{a}\eta h\bar{a} < \bar{a}h-\bar{a}$ 'mouth': root noun neut., instr. sing. (see section 2.3.1.2a).

 $y\bar{a}i\check{s} < \underline{i}-\bar{a}i\check{s} < \underline{i}a$: rel. pron., instr. plur. masc./neut.; + gapped noun.

 $\bar{a} \dots bauua_{\underline{l}} < \bar{a} \dots baua_{\underline{l}} < \bar{a} - bau-lb\bar{u}$ - 'to come about, come into existence(?)': *a*-stem pres. subj. 3s; $< b^{h}au-lb^{h}\bar{u}$ - 'become'.

aŋhuš < ahu-š '(new) life, (new) world': *u*-stem masc., nom. sing.

 $pa^{"}ruii\bar{o} < paru-ija-h (< p!Hu-ja-)$ 'first, primordial': *a*-stem adj., nom. sing. masc., cf. $par\bar{o}$ 'before' < p!H-ah, OInd. *puras*.

Y. 53.8

anāiš ā dužuuar°šnaŋhō dafšniiā hāņtū	7 + 5
zaxiiā-cā vīspāņhō xraosəntam upā	7 + 5
huxša()rāiš jān"ram xrūn²ram-cā rāmam-cā āiš dadātū šiie'tibiiō vīz'biiō	8 + 7 + 5
īratū īš duuafšō huuō dər°zā mər°0iiaoš mazištō mošu-cā astū	7 + 7 + 5

On account of those (actions/words of theirs) let them be there (at the judgement as men) of bad virility! (Let them) be duped

and laughable, all (of them)! Let them be booed!

By those of good command (= good rulers) let them be smashed and bled! And (but) let him give peace with these to the settled towns!

Let that greatest torment drive them off with the chain of death! And let it be soon!

Y. 53.8a

anāiš < an-āiš < ana-: dem. pron., instr. plur. masc. (see section 6.5.3.3).

 $\bar{a} \dots h \bar{a} n t \bar{u} < \bar{a} \dots h - antu < \bar{a} - ah$ - 'to be present': root present imper. 3p act.; < ah- 'to be'

dužuuar'snaŋhō < $duž-ursin-ah < \circ ursina-$ or $\circ ursinah$ - 'bad men, unmanned': a-lahstem noun/adj., nom. plur. masc. (- $\bar{a}hah$).

 $daf \check{s}nii\bar{a} < daf \check{s}n-ii-\bar{a}$ (easily) deceivable(?)': *a*-stem adj., nom. plur. masc.; verbal adj. of necessity $< *daf \cdot \check{s} \cdot na - < dab$ 'to deceive' (cf. *yesniia*-, see section 4.6.2); cf. $di\beta \check{z}a$ 'seek to deceive' (see section 4.1.1.1 no. 8).

Y. 53.8b

 $za\dot{x}ii\bar{a} < jah-ii-\bar{a}$ 'laughable': *a*-stem adj., nom. plur. masc.; verbal adj. of necessity < *jah- 'laugh' (not in Avestan), cf. OInd. *has*-.

vīspåŋhō < u̯iću̯-āhah < u̯iću̯a-: nom. plur. masc.

 $xraos = ntqm up\bar{a} < xrausa-nt\bar{a}m upa < upa-xrausa- 'cry at, boo': a-stem pres. imper.$ $3p mid.; < *<math>xraut^{s}$ -sca- < xraud- 'to cry'(?).

Y. 53.8c

 $hux \hat{s}a \partial r \hat{a} \hat{i} \hat{s} < hu-x \hat{s}a \partial r - \hat{a} \hat{i} \hat{s}$ 'who has good command': *a*-stem adj., instr. plur. masc.; possessive adjectival compound (bahuvrihi) < hu- 'good' + $x\hat{s}a \partial ra$ - '(royal) command' (see section 9.1.2).

 $j\bar{\rho}n^{\mu}rqm < jan-r\bar{\alpha}m < jan-$ 'to smash, smite': root stem pres. imper. 3p mid.

xrūn'rąm < xrun-rām < xrunā-lxrun- (< xrū-na-H-lxrū-n-H-) 'to bleed' (trans.) < *xrū-(xruH-): nā-stem pres. imper. 3p mid.; cf. xrūra- 'bloody'.

rāmam < rām-ām 'peace': ā-stem fem., acc. sing.

 $dad\bar{a}t\bar{u} < da-d\bar{a}-tu < d\bar{a}$ - 'to give': reduplicated athem. pres. imper. 3s act.

šiie tibii $\overline{o} < \underline{s}\underline{i}at-\overline{i}-\underline{b}\underline{i}ah < \underline{s}\underline{i}ant-l\underline{s}\underline{i}at- (<\underline{s}\underline{i}\underline{n}t-) < \underline{c}\underline{s}\underline{a}i-l\underline{c}\underline{s}i$ - 'to dwell, inhabit': pres. part. fem. dat.-abl. plur. with medio-passive meaning 'inhabited'.

 $v_{\bar{i}}\bar{z}^{\dagger}bii\bar{o} < vij^{\dagger}b_{\bar{i}}ah < vic^{-}$ 'house': root noun fem., dat.-abl. plur., dat. function.

Y. 53.8d

 $\bar{i}rat\bar{u} < \bar{i}ra-tu < \bar{i}r-a$ - 'to set in motion, send': *a*-stem pres. imper. 3s act.; reduplicated *ii*-*a*-*i*-*i*-*r*-*a* (< *Hi*-*Har*-/*Hi*-*Hr*-*a*-) < *Hṛ*- 'to move', cf. OInd. *iyar*-.

is < i-ns 'them': pers. pron. 3p acc.

 $duuaf \bar{so} < duaf \bar{sa-h}$ '*torment': *a*-stem masc., nom. sing. $huu\bar{o} < hau$ 'that': dem. pron. nom. sing. masc. (see Section 6.5.3.3).

 $d\partial r^{2}z\bar{a} < d^{(h)}rj^{h}-\bar{a}$ 'chain': root noun instr. sing.

 $m \partial r' \partial i i a o \delta < m r \partial j - a u - \delta < m r \partial j u - < m r - t - j u - 'death' < m r - 'die': u-stem masc. gen. sing.$ mazištō < maj-išta-h < majh - < majH - 'big, great': superl. nom. sing. masc.mošu° < mašu 'soon' < mać-š -: adverb, cf. OInd. maksú, Latin mox.

 $ast\bar{u} < as-tu < ah$: root present 3s imper. act.

11.2 Young Avestan

Y.8.2

x^varata narō aētəm miiazdəm yō dim haŋhāne ašā-ca frə̄r°ti-ca

Eat, men, this *myazd*, (he among you) who has gained it for himself by (his) Order and by (his) sending (it) forth(?)!

 $x^{v}arata < huara-ta < huar-a-$ 'to eat': *a*-stem pres. imper. 2p.

 $nar\bar{o} < nar-ah < nar-$ 'man': voc. plur.

aētəm < ait-am < aiša-laita- 'this': dem. pron., acc. sing. masc.

miiazdəm < mijazd-am, a kind of food offering: *a*-stem masc., acc. sing., cf. OInd. *miyédha-*.

dim < di-m 'it': pers. pron. 3rd pers., acc. sing. masc. (see section 3.4.1).

haŋhāne < ha-hẵn-ai < han- 'to gain': perf. 3s mid.

 $fr\bar{\sigma}r'ti^{\circ} < fra_{-rt}\bar{\tau}$ 'sending forth(?)': *i*-stem fem., instr. sing.; action noun in $-ti - < fra_{-r}\bar{\tau}$ 'to set in forward motion'; see section 2.3.1.2.

Y.8.3

aməşa spənta daēne māzdaiiasne vaŋhauuas-ca vaŋ^vhīs-ca zaoθrås-ca yō aēsuua mazdaiiasnaēsuua mazdaiiasnō aojanō aşahe rāθma jīstaiiamnō yāθβa aşahe gaēθå mər°γ°nte auui tū dim disiiata yå apas-ca "ruuarås-ca zaoθrås-ca

O life-giving immortals! O vision-soul of those who sacrifice to (Ahura) Mazdā! O good (gods) and good (goddesses)! O libations! (He) who, among these who sacrifice to (Ahura) Mazdā, (while) representing himself as someone who sacrifices to (Ahura) Mazdā, (as someone) *seeking victory(?) by a *composition of Order (yet) by sorcery destroys the living beings of Order, do point him out, O waters, plants, and libations!

Y.8.3a

 $am a s a < a - m r t - \overline{a}$ 'non-dead, immortal': *a*-stem adj., voc. plur. masc.; adjectival compound < a-, privative prefix + m r t a-, past part. of m r- 'die'.

spanta < cuHanta < cuHanta - 'life-giving': a-stem adj., voc. plur. masc.; < c(u)uHan (OAv. <math>span-) '*swelling' + suffix -ta- 'being provided with' < cuaH- (spa-) 'swell (with the juices of life)' (see Y. 28.9c, above). The amaša spanta 'life-giving immortals' are six beings brought forth by Ahura Mazdā during his cosmogonic sacrifice. When Ahura Mazdā is counted they become the Seven Life-giving Immortals.

 $da\bar{e}ne < da\bar{a}an-ai$ 'vision-soul': \bar{a} -stem fem., voc. sing.; $< d\bar{a}y-d\bar{a} - (< d^{h}aiH - 1d^{h}iH -)$ 'to see', specialised in the meaning of 'seeing' in the world of thought, in the beyond; the vision-soul is also the totality of a person's good or bad thoughts, words, and deeds and is represented as a woman, pretty or ugly, accordingly.

 $m\bar{a}zdaiiasne < m\bar{a}zdaiasn-ai$ 'pertaining to a mazda-iasna-': i-stem adj., voc. sing. fem.; "vriddhi" derivative < mazda-iasna- 'someone who sacrifices to (Ahura) Mazdā', adjectival compound $< (ahura-) mazd\bar{a} + iasna$ - 'sacrifice', cf. yaza- < iaj-a- 'to sacrifice (to), offer up in sacrifice (to)'.

Y.8.3b

vaŋhauuas° < *µah-aµ-as*° < *µah-u*: voc. plur. masc.

 $van^vh\bar{i}s < \mu ah-\mu-\bar{i}-\bar{s} < \mu ah-u-$: derived fem. \bar{i} -stem adj., voc. plur.

 $zao\theta rassian s = jau\theta r a s^{\circ}$ 'libation': \bar{a} -stem fem. pl. of neut. sing. $zao\theta ra$ -, voc. plur.; see section 3.1.1.

Y.8.3c

 $a\bar{e}suua < a\bar{i}-su + \bar{a} < a$: dem. pron., loc. plur. masc.

mazdaiiasnaēšuua < mazda-jasn-aišu + \bar{a} < mazda-jasna-: a-stem masc., loc. plur.

mazdaiiasnō < *mazda-iasn-ah*: nom. sing.

 $aojan\bar{o} < auj-\bar{a}na-h < aug-lauj-$ 'to present oneself as, say': pres. part. mid., nom. sing. masc.

Y.8.3d

ašahe < art-ahia < art-a-: gen. sing.

 $r\bar{a}0ma < r\bar{a}0m\bar{a} < r\bar{a}0-ma$ - '*composition': *a*-stem masc., instr. sing. (uncertain derivation and meaning).

 $j\bar{i}staiiamn\bar{o} < j\bar{i}st-aja-mna-h < j\bar{i}st-aja-$ '*seek life/victory(?)': aja-stem pres. part. mid., nom. sing. masc.; $< j\bar{i}$ - 'live' or $j\bar{i}$ - 'win'(?).

 $y\bar{a}0\beta a < i\bar{a}0\mu-\bar{a} < i\bar{a}0\mu-a$ - 'sorcery': *a*-stem masc./neut.(?), instr. sing.; derivative of $i\bar{a}tu$ 'sorcerer'.

 $ga\bar{e}0a^{a} < gai0-\bar{a}h^{a}$ 'living beings': \bar{a} -stem fem., acc. plur.; derivative of $gai-Ij\bar{i}-(gaiH-IjiH-)$ 'live'.

 $m \sigma r^{3} \gamma^{0} n te < m rng tai (m rnx tai?) < m r-n-k- < m rk- 'to destroy': n-infixed athem. pres.$ indic. 3s mid.; the form appears to be metathesised, but the exact phonetic processes $involved are unclear; the OAv. form would have been * m \sigma r ng⁽³⁾- d \bar{e}.$

Y.8.3e

auui... *disiiata* < *abi*... *dićia-ta* < *abi*... *dić-ja-* 'to point at' < *daić-ldić-* 'point': *ja-* stem pres. imper. act.

 $t\bar{u} < tu$: emphatic enclitic particle; see section 8.1.4.

ya < iahlefta-h: rel. pron., nom. plur. fem.

 $apas^{\circ} < ap-ah < \bar{a}p$ - 'water': root-noun fem., voc. plur.

"ruuarås° <*ruuar-ā*+° <*ruuar-ā*- 'plant': *ā*-stem fem., voc. plur.

Y.8.5

vasas-ca tū ahura mazda uštā-ca xšaēša hauuanąm dāmanąm vasō āpō vasō "ruuarå vasō vīspa vohū ašaci0ra xšaiiamnəm ašauuanəm dāiiata axšaiiamnəm druuaņtəm

May you, O Ahura Mazdā, rule at will and according to wish over your own creations!

(May you rule) at will, O waters, at will, O plants, at will, O all good things whose seed is from Order!

Place the Orderly one in command, the one possessed by the Lie out of command!

Y.8.5a

 $vasas^{\circ} < uaccess a constant a constant$

 $t\bar{u} < t\bar{u}$: pers. pron. 2s voc. enclitic.

ahura: voc. sing.

mazda < mazdā: voc. sing.

 $u \dot{s} t \bar{a}^\circ < u \dot{s} t - \dot{a} < u \dot{s} t - \dot{i} - \dot{v}$ wish' $< u \dot{a} \dot{c} - l \dot{u} \dot{c} - \dot{v}$ to wish': *i*-stem fem., loc. sing., action noun in *-ti*-.

 $x \bar{s} a \bar{e} \bar{s} a < x \bar{s} a \bar{i} - \bar{s} a$: aor. 2s opt., $< x \bar{s} a \bar{i} a$ - to rule (over: + gen.)'; $< x \bar{s} \bar{a}$ -.

hauuanąm < hau-āna'am < hau-a- 'own': poss. refl. pron., gen. plur. neut.

 $d\bar{a}manqm < d\bar{a}man-a'am < d\bar{a}m-an$ - 'creation': *n*-stem neut., gen. plur.; $< d^{h}\bar{a}$ - 'to place'.

Y.8.5b

 $\bar{a}p\bar{o} < \bar{a}p$ -ah: voc. plur. "ruuarå < ruųar-āh: voc. plur. vīspa < uićų-ā: acc. plur. neut. vohū < uah-ū: acc. plur. neut.

 $a \dot{s} a ci \theta r a < arta - \dot{c} i \theta r - \ddot{a}$ 'whose seed is from(?) Order': *a*-stem adj., acc. plur. neut.; adjectival compound $< arta - + \dot{c} i \theta r a$ 'seed'.

Y.8.5c

 $x \bar{s} a \bar{a} a mn - am < x \bar{s} - a \bar{a} a$ 'to rule' $< x \bar{s} \bar{a} - a \bar{s} a$ pres. part. mid., acc. sing. masc.

a sauuan a sauuan

 $d\bar{a}iiata < d\bar{a}_ia + a < d\bar{a}_ia + a < d^h\bar{a}_i$ 'place': *ia*-stem pres. imper. 2p.

 $ax šaiiamn \Rightarrow m < a - x šaja - mn - am$ 'not in command, not ruling': a-stem adj., acc. sing. masc.; adjectival compound < a - + x šaja - mna.

druuant am < druguant am < druguant - (druguant - (drugunt -) 'possessed by the Lie':uant-stem adj., acc. sing. masc.; < drug-ldruj- 'the (cosmic) Lie' (female principle ofdeception), together with the Evil Spirit Ahura Mazdā's principal opponent. Originallyperhaps Chaos. She deceives gods and men as to the true nature of the ordered cosmos.

Y.8.8

rauuas-ca x^vā0rəm-ca āfrīnāmi vīspaiiå ašanonō stōiš azas-ca dužā0rəm-ca āfrīnāmi vīspaiiå druuatō stōiš

I invite the open space and easy breathing of the entire (temporal) existence of the Orderly one.

I invite the constriction and laboured breathing of the entire (temporal) existence of the Orderly one.

Y.8.8a

rauuas° < *rau-ah* 'open space': *ah*-stem neut., acc. sing.

 $x'\bar{a}0r_{2}m < hu-\bar{a}0r_{2}m < hu-\bar{a}0r_{2}-a$ ($< HnH-0r_{a}$ -) 'good breathing (space), easy breathing, comfort': *a*-stem neut., acc. sing.; nominal compound < hu- 'good' + \bar{a} - $0r_{a}$ - < anH- 'to breathe'.

 $\bar{a}fr\bar{n}ami < \bar{a}-fr\bar{n}a-mi < \bar{a}-fr\bar{i}-n\bar{a}-l\bar{a}-fr\bar{i}-n- (<fri-na-H-lfri-n-H-)$ 'to invite as (guest) friend(?)': $n\bar{a}$ -stem athem. pres. ind. 1s act. (performative).

 $v\bar{s}paiia < \mu i c \mu - \bar{a} i - \bar{a}h < \mu i c \mu - a$: fem. sing.

ašaonō < artā-un-alı < artā-uan-lartā-un-: gen. sing. masc.

stois < stai-s < s-ti- '(duration of) being, (temporal) existence': *i*-stem fem., gen. sing.; < ah- 'to be'.

Y.8.8b

qzas° < *anj*-*ah* 'constriction': *ah*-stem neut., acc. sing.; cf. *angst*.

 $du\check{z}\bar{a}\partial r \partial m < du\check{z} - \bar{a}\partial r - am < du\check{z} - \bar{a}\partial r a$ 'bad (constricted) breathing, discomfort': *a*-stem neut., acc. sing.; nominal compound, antonym of $hu - \bar{a}\partial r a$.

druuato < *druguat-ah* < *drug-uant-/drug-uat-*: gen. sing. masc.

Most of the *Young Avesta* is written in a basically octosyllabic metre, of which the following text from the hymn to Mi θ ra is a sample. In Yt.10.12, the first line is hypermetric.

Yt.10.12

mi0rəm vo"ru.gaoiiaoʻtīm yazamaʻde arš. vacaŋhəm viiāxanəm hazaŋra.gaošəm hutāštəm baēuuar³.cašmanəm bər³zaņtəm pər³0u.vaēδaiianəm sūrəm ax^safnəm jayā"ruuåŋhəm

We sacrifice to Mi θ ra with wide grazing grounds, of truthful speech, *eloquent, with a thousand ears, well-fashioned, with ten thousand eyes, tall, with broad outlook, strong, sleepless, waking.

 $mi\partial r \Rightarrow m < mi\partial r - am$ 'Mi θ ra': *a*-stem masc. acc. sing.

 $vo^{"ru.gaoiiao'tīm < uaru-gau-jaut-im 'having wide grazing grounds': i-stem adj., masc. acc. sing.; possessive adjectival compound < uaru- 'broad' and gau-jaut-i- of uncertain exact meaning, cf. OInd. gav-yūti-.$

yazama'de < yaza: pres. ind. 1s mid. (see Y.8.3a).

arš. vacanhom < rš-uacah-am 'of truthful speech': ah-stem adj., masc. acc. sing.; possessive adjectival compound < arš 'straight, truthful(ly) < $Hrj-\check{s}$ (OAv. or 'š).

viiāxanəm < uiiaxan-am (4 sylls.) word of uncertain meaning: *a*-stem adj., masc. acc. sing.

hazaŋra gaošəm < hajahra-gauš-am 'having a thousand ears': a-stem adj., masc. acc. sing., possessive adjectival compound < hajahra- '1000' and gauša- 'ear'.

 $hut\bar{a}stam < hu-tast-am$ 'well-fashioned': *a*-stem adj., masc. acc. sing.; the form with long vowel analogical with the present $t\bar{a}s-ti$ 'he fashions'.

 $ba\bar{e}uuar$ '.cašman $\partial m < baiyar-cašm-an-am$ 'having ten thousand eyes': man-stem adj., masc. acc. sing.; possessive adjectival compound < bai-yar- '10,000' and caš-man- 'eye' (neut.).

bər^əzantəm < brjant-am 'tall': ant-stem adj., masc. acc. sing.

 $p = r^2 \theta u.va \bar{e} \delta a ii a n = m < pr \theta u-u a i d \bar{a} i a n - a m$ 'with broad outlook': *a*-stem adj., masc. acc. sing.; possessive adjectival compound $< pr \theta u$ - (< pr t H - u-) 'broad' and u ai-d \bar{a} i - a n a d e rivative of $u - d \bar{a} y$ - 'see f ar and wide'.

sūrəm < ćūr-am (<ćuH-ra-) 'rich in life-giving strength': a- stem adj., masc. acc. sing. (see Y. 28.9c on sauuai)hqm).

 $ax'afn \partial m$, a-huafn-am 'sleepless': a-stem adj., masc. acc. sing.; from a - + huaf-na-'sleep'.

 $jay\bar{a}^{\mu}ruuanna + ja-gar-\mu\bar{a}h-am$ 'waking': pf. part. act. of $garH-lgr\bar{a}$ - 'wake'; the diphthong $-\bar{a}^{\mu}$ perhaps substituted for $-ao^{\mu}$ (de Vaan 2003, §17.4.2) but perhaps with vowel metathesis, cf. OInd. $j\bar{a}$ -gar-.

Yt. 10.13

- a yō paoⁱriiō maniiauuō yazatō
- b tarō harcım *āsənaoⁱti
- c pa^uruua. naēmāt aməšahe
- d hū yat a"ruuat.aspahe
- e yō paoⁱriiō zaraniiō.pī sō
- f srīrå *bar³šnauuō gər³βnāⁱti:
- g abāt vīspəm ādibāⁱti
- h aⁱriiō. šaiianəm səuuištō

Who as the first in the other world to be sacrificed to rises over Harā, in front of the immortal sun with fleet horses, who, as the first, seizes the gold-adorned, beautiful heights. From there, he surveys the entire settlement of the Aryans, he most rich in life-giving strength.

а

paoⁱriiō < parų-iįa-h (see Y. 28.11c): a-stem adj. masc. nom. sing. maniiauuō < manį-aų-ah 'of the world of thought: a-stem adj., masc. nom.sing.; <manįu- (see Y. 28.11c).

 $yazat\bar{o} < iaj-at-ah$ 'being worthy of sacrifices' < iaja- (cf. Y.8.3a): *a*-stem, masc. nom. sing.

b

 $tar\bar{o} < tar-ah$ 'over, beyond' - 'cross over': prep. + acc. $<math>harqm < har-\bar{a}m$ 'Harā' a mountain: \bar{a} -stem fem. acc. sing. $*\bar{a}spano^{i}ti$ (mss. $\bar{a}snaoiti$) $< \bar{a}$ -sa-nau- 'rise' $< \bar{a}$ -sn-nau-: nau-stem pres. ind. act. 3s.

с

pa"ruua.naēmāt < parua-naim-āt 'from in front of': *a*-stem masc. abl. sing.; compound < *pa"ruua-* 'before' and *naēma-* 'half, side'.

d

 $h\bar{u} < hu\mu a\eta - h < h\bar{u} - \mu ar/n$ - 'sun': $\mu ar/n$ -stem neut. gen. sing. yat: relative particle (see section (6.1.1.1a).

a"*ruuaţ.aspahe* < *aruat-aću-ahia aruat-aćua*- 'having fleet horses: *a*-stem ad j. masc. acc. sing.; possessive adjectival compound < *aruant*- 'fleet' and *aćua*- 'horse'.

e

zaraniiō.pīsō < $j^{h}arania-pić-ah$ 'gold-adorned': cons.-stem adj., fem. nom. plur.; adjectival compound < $j^{h}arania$ - 'gold' and root noun *pić*- 'paint, adorn', cf. OPers. *ni-pi0*- 'write'. f

 $sr\bar{i}rada < cr\bar{i}r-\bar{a}h$ 'beautiful' < craiH-lcriH-: a-stem adj., fem. nom.plur.

*bar'šnauuō (ms. F1 °auua) $< barj^h n$ -au-ah 'height': u-stem fem. nom. plur.; this nom. phrase is used for expected acc.; for the gender and reading, cf. Yt. 18.6 vīspå bar'šnauuō ga'rinam 'all the heights of the mountains'.

 $g \partial r^{\beta} \beta n \bar{a}^{i} t i < grb - n \bar{a} - t i < g^{h} r b^{h} - n \bar{a} - l g^{h} r b^{h} - n$ 'take, seize': $n \bar{a}$ -stem pres. ind. act. 3s.; also $g \partial^{\mu} ruuaiia - \langle grb \bar{a}ya -$, cf. OPers. $garb \bar{a}ya -$ (DNa 15–22b).

g

```
a\delta \bar{a}_{\underline{t}} < ad^{h} - \bar{a}t 'from there';
```

 $\bar{a}di\delta\bar{a}^{i}ti < \bar{a}-di-d\bar{a}-ti$ 'surveys' $< d\bar{a}y - /d\bar{i}$ - (see Y.8.3a): red. pres. ind. act. 3s.

h

 $a^{i}riio. šaiian am < aria-cisajan-am$ 'settlement of the Aryans': a-stem, masc. acc. sing.; compound of arja- 'Aryan, Iranian' and cisaj-ana-, derivative of cisaj- 'dwell, be settled' (see Y.53.8c).

 $s = uui st\bar{o} < cauH-ist-ah$ 'most endowed with life-giving strength' (see Y. 28.9c on sauuaŋham): a-stem superl., masc. nom. sing.

11.3 Old Persian

DNa 15–22

- a *Oātiy dāra yavauš xšāya*0iya
- b vašnā auramazdāha imā dahayāva tayā adam agarbāyam apataram hacā pārsā
- c adam-šām patiyaxšayaiy manā bājim abaraha
- d taya-šām hacā-ma a0ahaya ava akunava
- e dātam ta ya manā ava-dī [š] adārai ya

King Darius announces:

By the greatness of Ahuramazdā, these (are) the lands that I seized further away from Persia.

I ruled over them. They brought me tribute.

Whatever was announced to them from/by me, that they did. My law held them.'

а

 $0\bar{a}tiy < \dot{c}a\eta ha - ti < \dot{c}a\eta ha$ - 'to announce': *a*-stem pres. ind. (performative) 3s act.

 $d\bar{a}rayavau\bar{s} < d\bar{a}ra\bar{a}-vahu-\bar{s}$: u-stem proper name masc., nom. sing.; nominal compound $< d\bar{a}ra\bar{a}$, pres. stem. of dar- 'to (up)hold' and <u>uahu</u>- 'good (things)'.

 $x \bar{s} \bar{a} y a 0 i y a < x \bar{s} \bar{a} i a 0 - i a - h$ 'king': *a*-stem masc., nom. sing.; *ia*-stem 'vriddhi' derivative of * $x \bar{s} a i - a 0 a$ - 'rule' < pres. $x \bar{s} a i a$ - 'to rule'.

b

vašnā < uajnā < *uajar/n- 'greatness': r/n-stem neut., instr. sing.; cf. uajr-ka- (vazarka-) 'great'.

auramazdaha < ahura-mazdah + ah < ahura-mazda-: gen. sing.; the gen. sing. ending -ah has been added to the gen. mazdah < mazdaH-ah.

 $im\bar{a} < im-\bar{a}h$ 'these': dem. pron., acc. plur. fem.

dahçıyāva < *dahij-āuj-ah* < *dahij-au-* 'land': *au-*stem fem., nom. plur.

 $tay\bar{a} < ta + \underline{i}\cdot \overline{a}h$: rel. pron., acc. plur. fem.

adam < ajam 'I': pers. pron. 1s, nom.; Av. azəm.

 $agarb\bar{a}yam < a-grb-\bar{a}ia-m < grb-\bar{a}ia- < g^{h}rab^{h}$ - 'to seize': $\bar{a}ia$ -stem pres., imperf. 1s act.; cf. Yt. 10.13 f.

apataram < apa-tara-m < apa- 'away': adverbial acc. sing. neut., comparative. $hac\bar{a} < haca$ 'from' (+ instr.-abl.).

 $p\bar{a}rs\bar{a} < p\bar{a}rs\bar{a}t < p\bar{a}rsa$ - 'Persia': instr.-abl. sing., abl. function.

с

-sām 'them': pers. pron. 3rd pers. enclitic, gen.-dat. plur., gen. function.

patiyaxšayaiy < pati-a-xšai-ai < pati-xšaia- mid. 'to rule over': *aia-*stem pres., imperf. 1s mid.

manā < mana 'me': pers. pron. 1s gen.-dat., gen. function.

bā jim < bā ji-m 'tribute': *i*-stem (masc./fem.?), acc. sing.

abaraha < a-bara-n (error?) < bara- 'to carry': *a*-stem pres., imperf. 3p; in principle, the form could be read as \bar{a} -bara- 'to bring'.

d

taya < ta+i-at 'that which, what': rel. pron., nom. sing. neut.; see section 3.4.4. -ma < -ma-t 'me': pers. pron. 1s (instr.?)-abl. enclitic, abl. function.

a0ahaya < a-cahia-t < cah-ia- < cnhia- or < canh-ia- 'to be announced': ia-stem passive of canha-, imperf. 3s act.

ava < au-at 'that': dem. pron., acc. sing. neut.

akunava < a-ku-nau-an < kr-nau-lkr-nu- 'to do': nau-pres. stem, imperf. 3p act.; commonly regarded as an 'allegro' form with kun- < krn-, cf. Av. kər"-nau-, but perhaps analogical (rhyming) with forms such as *sru-nau- (Av. s"runao-).

e

 $d\bar{a}tam < d\bar{a}t$ -am 'law': a-stem neut., nom. sing.; substantivised past part. $d\bar{a}ta$ - 'placed, set down' from $d^{h}\bar{a}$ -

 $-d\bar{i}s < di-n\bar{s}$ 'them': pers. pron. 3rd pers., acc. plur. masc.; for **i-nš*.

 $ad\bar{a}raiya < a-d\bar{a}raia-t < d\bar{a}raia-t$ 'to hold (firmly in place)': aia-stem pres., imperf. 3s act.

DNa 31–38

- a auramazdā ya0ā avaina imām būmim *yauda"tīm pasāva-dim manā frābara
- b mām xšāya0iyam akunauš adam xšāya0iya a^hmiy
- c vašnā auramazdāhā adam-šim gā0avā niyašādayam

d *taya-šām adam a0aham ava akunava *ya0ā mām kāma āha

When Ahuramazdā saw this earth being in turmoil, then he gave it to me. He made me king. I am king.

By the greatness of Ahuramazdā, I set it down in its place.

Whatever I announced to them, that they did as was my wish.

auramazdā < ahura-mazdā-h; nom. sing.; Av. ahurō mazdå < ahura-h mazdā-h. $ya0\bar{a} < ia-0a$ 'when': conjunction.

avaina < a + uaina-t < uaina- 'to see': a-stem pres., imperf. 3s act.

imām < *im-ā-m* 'this': dem. pron., acc. sing. fem.

būmim < būm-im 'earth': i-stem fem., acc. sing.; cf. Av. būmī-.

yauda" $t\bar{t}m < \underline{i}au\underline{j}a$ -nt- \bar{t} -m $< \underline{i}au\underline{j}a$ - 'to be in turmoil, be chaotic': pres. part., derived \bar{t} -stem fem., acc. sing.; cf. Av. yaoza-.

 $pas\bar{a}va < pas\acute{c}a + aua-t$ 'afterward, then': adverbial compound $< pas\acute{c}a$ 'after' + aua-t 'that'.

 $-dim < d\tilde{i}m$ 'it': pers. pron. 3rd pers., acc. sing. fem. enclitic; it is not known whether the form had preserved the long \bar{i} , cf. OAv. $h\bar{i}m$.

manā < mana 'me': pers. pron. 1s, gen.-dat., dat. function.

frābara < fra-a-bara-t < fra-bara- 'to proffer, give': *a*-stem pres., imperf. 3s act.

b

mām < *mām* 'me': pers. pron. 1s, acc.

 $x \bar{s} \bar{a} ya \theta i yam < x \bar{s} \bar{a} ja \theta j - am$: acc. sing.

akunaus for a-kunau < a-kunau-t < kunau-t to do, make': nau-pres. stem, imperf. 3s act. $a^{h}miy < ah$ -mi < ah-t to be': pres. ind. 1s act.

с

-šim < -š-tm. pers. pron. 3rd pers., acc. sing. fem. enclitic; cf. OAv. hīm.

 $g\bar{a}\theta av\bar{a} < g\bar{a}\theta au + \bar{a} < g\bar{a}tu$ - $(g\bar{a}\theta u$ -) 'place, platform (throne)': u-stem loc. sing. + postpos. $-\bar{a}$.

 $niyas\bar{a}dayam < ni-a-s\bar{a}da\underline{i}a-m < ni-s\bar{a}da\underline{i}a-$, caus. of ni-sad- < had- 'to sit': $a\underline{i}a$ -stem (caus.) pres., imperf. 1s; the form has been analogically remade from $*ni-a-h\bar{a}da\underline{i}a-$.

d

a0aham < a-0anha-m: imperf. 1s act.

 $k\bar{a}ma < k\bar{a}ma$ -h 'wish': *a*-stem masc., nom. sing.; this noun takes a personal dir. obj.: $m\bar{a}m k\bar{a}ma^{h}$ 'I wish' see section 6.4.3.4.

 $\bar{a}ha < \bar{a}ha-t < ah$ - 'was': imperf. 3s act.; the form is a thematised replacement for $*\bar{a}s-(t)$, which would probably have been reduced to $*\bar{a}$ in OPers.; the long initial $\bar{a}h$ -is < a-Hh-.

DNa 38-47

- a yadi-patiy maniyāhay taya ciyakaram [āha] *avā dahayāva tayā dārayavauš xšāya0iya adāraya
- b patikarā dīdiy tayaiy gā0um bara"tiy
- adā xšnāsāhay ada-tai y azdā bavāti y pārsahayā martiyahayā dūrai y arštiš parāgmatā
- d ada-taiy azdā bavātiy pārsa martiya dūray hacā pārsā parataram patiyajatā

а

If, again, you think – 'How were those lands which King Darius held?' – then look at the pictures (of the men) who carry the throne.

Then you will know, then it will become clear to you that the Persian man's spear has gone far away.

Then it will become clear to you that the Persian man *defended himself far beyond Persia.

а

```
yadi- < yadi 'if': conj.
```

-patiy < -pati 'in addition'(?): enclitic particle.

maniyāhay < man-jā-hai < man- 'to think': ja-stem. pres. subj. mid.

taya < ta + ia - t 'that': conj., here introducing dir. speech.

ciyakaram < cija-kar-am 'how?' (or: 'how many'?): adverbial compound < cija- 'how much(?)' + kara- 'work', i.e. 'of what kind of work is he capable?'.

 $\bar{a}ha < \bar{a}h$ -an < ah- 'to be': imperf. 3p act.

b

patikar \bar{a} < *pati-kar-\bar{a}* 'pictures': *a*-stem masc. acc. plur.; nominal compound < *pati* + *kara*- 'sth. made to reflect'.

 $d\bar{i}diy < d\bar{i}$ -di 'look at!', pres. vaina-: imper. 2s act.; perhaps originally an aor. stem.

tayaiy < *ta+jai* 'who': rel. pron. nom. plur. masc.

 $g\bar{a}0um < g\bar{a}t-u-m < g\bar{a}tu$: acc. sing.; see section 2.3.2.5.

bara"tiy < bara-nti 'to carry': *a*-stem pres. ind. 3p act.

с

 $ad\bar{a} < ada$ 'then': temporal adv.

 $x \sin a \sin a \sin a y < x \sin a c a - h i < x \sin a - s c a - 'to know': pres. subj. 2s act.; <math>x \sin a - s c a - s \sin a - s c a - s \sin a - s c a - s \sin a -$

-*tai y* < -*tai* 'you': pers. pron. 2s, gen.-dat., dat. function. $azd\bar{a} < azd\bar{a}$ 'known, clear' ($< ad^{z}d^{h}\bar{a}$, OInd. $addh\bar{a}$).

 $bav\bar{a}tiy < bau-\bar{a}-ti < bau-lb\bar{u}$ - 'to become': *a*-stem pres. subj. 3s act.

d

 $p\bar{a}rsahay\bar{a} < p\bar{a}rsa-hia$ 'Persian': *a*-stem adj., gen.-dat. sing. masc., gen. function. martiyahay $\bar{a} < martija-hja$ 'man': *a*-stem masc., gen.-dat. sing., gen. function. $d\bar{u}raiy < d\bar{u}rai < d\bar{u}ra$ - 'far': adverbial loc. sing.; see section 3.3.

arštiš < ršti-š 'spear': *i*-stem fem., nom. sing.

parāgmatā < parā-gmatā < parā-gam- 'to go away'(?): intrans. perf. nom. sing. fem. (see section 7.4.3.1); cf. YAv. y^amata-.

e

pārsa < pārsa-h: nom. sing. masc.

martiya < *martija*-*h*: nom. sing.

parataram < para-tar-am < para- 'beyond': adverbial acc. sing. neut., comparative.

 $patiyajat\bar{a} < pati-a-ja-ta < pati-jan-ljn- (< jn-)$ 'to strike back', mid. 'defend onself (?)': imperf. 3s mid.

DNa 48-55

- Oātiy dārayavauš xšāya0iya а
- aita taya kartam ava visam vašnā auramazdāhā akunavam ... b
- с mām auramazdā pātuv hacā gastā utā-maiy vi0am utā imām dahayāum
- aita adam auramazdām jadiyāmiy aita-maiy auramazdā dadātuv d

King Darius announces:

All this that has been done I did by the greatness of Ahuramazdā. Let Ahuramazda protect me from foulness, as well as my house and this land! This I ask Ahuramazdā for. Let Ahuramazdā give me this!

b

aita < aita-t 'this': dem. pron., nom.-acc. sing. neut. kartam < krt-am < kar- 'to do': intrans.-pass. perf., nom.-acc. sing. neut. *visam < uiću-am* 'all': nom.-acc. sing. neut. akunavam < a-kunau-am: imperf. 1s act.

с

 $p\bar{a}tuv < p\bar{a}-tu < p\bar{a}$ - 'to protect': imper. 3s act.; there are no pres. forms attested of this verb, but cf. pati-paya-^huvā (DB 4.38) < pati-paja-hua pres. imper. 2s mid.

 $gast\bar{a} < gast-\bar{a}t < gasta$ 'foulness': a-stem neut.(?) instr.-abl. sing., abl. function; past part. gas-ta- 'foul-smelling' $\leq gnt^{5}$ -ta-, replacing $*gazda - \leq *gnd^{2}$ - $d^{h}a - \leq gand^{h}$ - 'to smell foul'.

```
ut\bar{a}- < uta 'and': conj.
-maiy < -mai 'me': pers. pron. 1s, gen.-dat., gen. function.
vi0am < uić-am 'house': root noun fem.(?), acc. sing.
dahayāum < dahy-āu-m < dahi-au-: acc. sing.
```

d

auramazdām < ahura-mazda-am: acc. sing.; < *mazdaH-am*.

jadiyāmiy < jad-įā-mi < jad-į-a- 'to ask' (+ acc. of pers. + acc. of thing): įa-stem pres. (performative) ind. 1s act.

 $dad\bar{a}tuv < da-d\bar{a}-tu < d\bar{a}$ - 'to give': reduplicated pres. imper. 3s act.

ABBREVIATIONS OF TEXTS

Avestan texts

Āfr.	Āfrīnagān
FrD.	text edited in Hoffmann 1968.

H. Hādōxtnask

- Hērbedistān Her.
- N. Nīrangistān
- V. Videvdad
- Vr. Vispered
- Y. Yasna
- Yt. Yasht

Old Persian texts

- DB Darius at Behistun (Bisutun), large inscription
- DBa ... Darius at Behistun, smaller inscriptions
- DE Darius at Elvand
- DNa, b Darius at Naqsh-e Rostam
- DPa ... Darius at Persepolis
- DSa . . . Darius at Susa
- DZa . . . Darius at Suez
- XPa . . . Xerxes at Persepolis
- XV Xerxes at Lake Van

BIBLIOGRAPHY AND REFERENCES

Linguistic descriptions

The most recent descriptions of phonology, morphology (and some syntax) are Abaev and Bogoliubov (eds) 1979 (I. M. Oranskij: overview; S. N. Sokolov: Avestan and OPers; Abaev: Scythian-Sarmation); Schmitt, 1989 (Schmitt: OPers.; Kellens: Avestan); Hoffmann and Forssman 1996; Skjærvø 2006a (pre-history), 2007b (morphology, morpho-phonology). De Vaan 2003 covers a large section of the phonology. The only complete syntax is still the one in Reichelt 1909. Kellens and Pirart 1990 contains select topics of OAv. syntax. Wackernagel and Debrunner 1896–1964 is still indispensable, notably vol. II, 2 on nominal suffixes.

Bibliographies

A comprehensive bibliography of Avestan up to 1967 is found in Schlerath 1968, additional bibliographies are found in the histories of studies listed below. Hoffmann and Forssman 1996 lists bibliographical items for each chapter. De Vaan 2003 also contains an extensive bibliography. For OPers., see Kent 1953 and Brandenstein and Mayrhofer 1964, as well as Schmitt 1991 and 2000.

- Abaev V. I., M. N. Bogoliubov, V. S. Rastorgueva (1979) (eds) Osnovy iranskogo iazykoznaniia: drevneiranskie iazyki. Moskva: Nauka (= Osnovy I).
- Adiego Lajara, I.-X. (2000) 'Sobre el relativo del antiguo persa', in: B. Forssman and R. Plath (eds) Indoarisch, Iranisch und die Indogermanistik. Arbeitstagung der Indogermanischen Gesellschaft vom 2. bis 5. Oktober 1997 in Erlangen. Wiesbaden: L. Reichert, pp. 1-13.
- Allegri, M., and A. Panaino (1995) 'On the *š*-Ending in OPers. akunauš and Similar Forms. With a Contribution by Ilya Gershevitch', in: B. G. Fragner et al. (eds) Proceedings of the Second European Conference of Iranian Studies. Roma: Istituto Italiano per il Medio e Estremo Oriente, pp. 1–33.
- Bartholomae, Ch. (1895) 'Vorgeschichte der Iranischen Sprachen' and 'Awestasprache und Altpersisch', in: Geiger and Kuhn (eds), pp. 1–151, 152–248.
- (1904) Altiranisches Wörterbuch. Strassburg: K. J. Trübner; repr. Berlin: W. de Gruyter, 1961.
- Beekes, R. S. P. (1981) 'The Neutre Plural and the Vocalization of the Laryngeals in Avestan', *IIJ* 23, pp. 275–87.

(1988) A Grammar of Gatha-Avestan. Leiden: Brill.

Brandenstein, W., and M. Mayrhofer (1964) *Handbuch des Altpersischen*. Wiesbaden: O. Harrassowitz.

Cantera, A. (2001) 'Die Behandlung der Lautfolge (C)rHC- im Iranischen', MSS 61, pp. 7–27.

Darmesteter, J. (1892–1893) Le Zend-Avesta, 3 vols. Paris: E. Leroux; repr. Paris: A. Maisonneuve, 1960.

Duchesne-Guillemin, J. (1936) Les composés de l'Avesta. Liège: Faculté de Philosophie et de Lettres; Paris: E. Droz.

(1962) 'L'étude de l'iranien ancien au vingtième siècle', Kratylos 7, pp. 1–44.

Fortson, B. J. (1996) 'The Double Reflex of *ai in Avestan', IIJ 39, pp. 41-54.

Geiger, W., and E. Kuhn (1895-1901) (eds) Grundriss der Iranischen Philologie, ed. 2 vols. Strassburg: K. J. Trübner; repr. Berlin and New York, 1974.

Gershevitch, I. (1967) The Avestan Hymn to Mithra. Cambridge: Cambridge University Press.

Geldner, Karl Friedrich (1886–96) Avesta the Sacred Books of the Parsis. 3 vols., Stuttgart: W. Kohlhammer.

Gippert, J. (1985) 'Verbum dicendi + Infinitiv im Indoiranischen', MSS 44, pp. 29–57.

Hale, M. (1988) 'OPers. Word Order', *IIJ* 31, pp. 27-40.

(1993) 'Tmesis and Movement in Avestan', *IIJ* 36, pp. 29–43.

Hintze, A. (1994) Zamyād-Yašt. Edition, Übersetzung, Kommentar. Wiesbaden: L. Reichelt.

— (2005) "Indo-Iranian gar 'to raise aloft'. In: G. Schweiger (ed.), INDOGER-MANICA – Festschrift Gert Klingenschmitt: Indische, iranische und indogermanische Studien dem verehrten Jubilar dargebracht zu seinem fuenfundsechzigsten Geburtstag. Taimering (Riekofen): Schweiger VWT, 2005 (Studien zur Iranistik und Indogermanistik; Bd. 3), pp. 237–260.

(2007) A Zoroastrian Liturgy: The Worship in Seven Chapters (Yasna 35-41). Wiesbaden: O. Harrassowitz.

Hinz, W. (1973) Neue Wege im Altpersischen. Wiesbaden: O. Harrassowitz.

Hoffmann, K. (1952) 'Zum prädikativen Adverb', MSS 1, pp. 42–53 (= Aufsätze zur Indoiranistik II, pp. 339–49).

(1958) 'Altiranisch', in: *Handbuch der Orientalistik* I, IV, 1. Leiden and Cologne: Brill, pp. 1–19.

(1965) 'Zu den altiranischen Bruchzahlen', KZ 79, pp. 247-5 (= Aufsätze zur Indoiranistik I, pp. 182-90, and addendum p. 338).

— (1967) Der Injunktiv im Veda. Eine synchronische Funktionsuntersuchung. Heidelberg: C. Winter.

--- (1968) 'The Avesta Fragment FrD. 3', IIJ 10, pp. 282-88 (= Aufsätze zur Indoiranistik I, pp. 221-27).

---- (1970) 'Zur awestischen Textkritik. Der Akk. Pl. mask. der a-Stämme', in: M. Boyce and I. Gershevitch (eds) W. B. Henning Memorial Volume. London: Lund Humphries, pp. 187–200 (= Aufsätze zur Indoiranistik I, pp. 274–87).

----- (1975, 1976, 1992) Aufsätze zur Indoiranistik, 3 vols. Wiesbaden: L. Reichelt.

— (1976) 'Präteritaler Optativ im Altiranischen', in: *Aufsätze zur Indoiranistik* II, pp. 605–19.

(1988) Avestan Language. i. The Avestan Script, ii. The Phonology of Avestan, iii. The Grammar of Avestan', in: *EnIr* III, pp. 47–62.

Hoffmann, K., and B. Forssman (1996) Avestische Laut- und Flexionslehre. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.

Hoffmann, K., and J. Narten (1989) Der Sasanidische Archetypus. Wiesbaden: L. Reichert.

Humbach, H. (1991) The Gāthās of Zarathustra and the Other OAv. Texts, 2 vols. Heidelberg: C. Winter (with the collaboration of J. Elfenbein and P. O. Skjærvø).

Insler, S. (1975) The Gāthās of Zarathustra (= Acta Iranica 8). Tehran and Liège: Brill.

 Jackson, A. V. W. (1892) An Avesta Grammar in Comparison with Sanskrit. Stuttgart: W. Kohlhammer; repr. Darmstadt: Wissenschaftliche Buchgesellschaft, 1968; repr. New York: AMS Press, 1975.

Jamison, S. W. (1983) Function and Form of the -áya-Formations of the Rig Veda and Atharva Veda. Göttingen: Vandenhoeck & Ruprecht.

— (1992) 'Vedic "sá figé". An Inherited Sentence Connective?', Historische Sprachwissenschaft 105: 213–39.

(1997) 'Vedic anyá- 'another, the other': Syntactic Disambiguation', in: A. Lubotsky (ed.) Sound Law and Analogy. Papers in Honor of Robert S. P. Beekes. Amsterdam and Atlanta: Rodopi, pp. 111–18.

Jasanoff, J. H. (1997) 'Gathic Avestan cikoitərəs', in: A. Lubotsky (ed.) Sound Law and Analogy. Papers in Honor of Robert S. P. Beekes. Amsterdam and Atlanta: Rodopi, pp. 119-30.

Kellens, J. (1971) 'L'avestique de 1962 à 1972', Kratylos 16, pp. 1–30.

----- (1973) 'L'avestique de 1962 à 1972. Addenda et corrigenda', *Kratylos* 18, pp. 1–5.

(1974) Les noms-racines de l'Avesta. Wiesbaden: L. Reichert.

——— (1984) Le verbe avestique. Wiesbaden: L. Reichert.

---- (1986) 'Comment faut-il éditer les formes vieil-avestiques de paoirila-?', in Schmitt, R. and Skjærvø, P. O. (eds) Studia Grammatica Iranica: Festschrift für Helmut Humbach, München: R. Kitzinger, pp. 217–226.

(1991) 'L'avestique de 1972 à 1990', *Kratylos* 36, pp. 1–31.

——- (1994) 'Retour à l'infinitif avestique', MSS 55, pp. 45–59.

— (1995) Liste du verbe avestique avec un appendice sur l'orthographe des racines avestiques par Eric Pirart. Wiesbaden: L. Reichert.

(1998) 'Considérations sur l'histoire de l'Avesta', JA 286, pp. 451–519.

Kellens, J., and E. Pirart (1988, 1990, 1991). Les textes vieil-avestiques, 3 vols. Wiesbaden: L. Reichert.

Kent, R. G. (1953) *Old Persian Grammar, Texts, Lexicon*, 2nd rev. ed. New Haven: American Oriental Society.

Klein, J. (1988) 'Coordinate Conjunction in Old Persian', JAOS 108, pp. 387-417.

Lazard, G. (1976) 'Notes de vieux-perse,' BSL 71, pp. 175-92.

— (1984) 'La métrique de l'Avesta récent', in: Orientalia Jacques Duchesne-Guillemin Emerito Oblata, Acta Iranica 23, pp. 283–300.

(1990) 'Composition et métrique dans les *yashts* de l'Avesta', in: G. Gnoli and A. Panaino (eds) *Proceedings of the First European Conference of Iranian Studies held in Turin, September 7th–11th, 1987 by the Societas Iranologica Europaea.* Part 1: *Old and Middle Iranian Studies,* Serie Orientale Roma. Vol. 67.1. Roma: Istituto Italiano per il Medio ed Estremo Oriente, pp. 217–28.

Lühr, R. (1994) 'Zur Interdependenz der Methoden 'Funktionsbestimmung' und 'Rekonstruction' – das Infinitivmorphem indoiran. *-*d^hjāţ*', *MSS* 44, pp. 69–97 [pub. 1995].

Mayrhofer, M. (1980) 'Zu iranischen Reflexen des vrki Typus', in: J. Bingen et al. (eds) Recherches de linguistique. Hommages à Maurice Leroy. Bruxelles: Éditions de l'Université de Bruxelles,), pp. 130-52 (= Ausgewählte Kleine Schriften II, pp. 353-75).

(1981) 'Laryngalreflexe im Indo-Iranischen', Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung 34, pp. 427–38 (= Ausgewählte Kleine Schriften II, pp. 292–303).

— (1996) Ausgewählte Kleine Schriften II. Wiesbaden: L. Reichert.

Morgenstierne, G. (1942) 'Orthography and Sound System of the Avesta', NTS 12, pp. 30–82; repr. in: *Irano-Dardica*, pp. 31–83.

Oettinger, N. (1985) 'Beobachtungen anhand des avestischen Textes Yašt 5, 90–93', MSS 45 (Festgabe für Karl Hoffmann II), pp. 183–95.

---- (1992) 'Zu den Verben auf vedisch -anyá- und hethitisch annie-', MSS 53, pp. 133-54.

Panaino, A. (1989–90) 'Il periodo ipotetico dell'irrealtà in avestico recenziore', Atti del Sodalizio Glottologico Milanese 31, pp. 124-48.

---- (2007) 'Chronologia Avestica: tra cronologia linguistica e storia religiosa (Fililogia e storia del testo avestico, 1.)', in: A. Panaino and V. Sadovski, Disputationes iranologicae Vindobonenses, I, Milan, pp. 7-33.

Pirart, E. (1988) 'L'instrumental des neutres vieil-avestiques en -an-', StIr 17, pp. 141-46.

— (1993) 'Avestique *janiiaoš*', *IIJ* 36, pp. 337–40.

Ravnæs, E. (1981) 'The Development of ə/Interconsonantal Laryngeal in Iranian', *IIJ* 23, pp. 247-73.

Reichelt, H. (1909) Awestisches Elementarbuch. Heidelberg: C. Winter; repr. Darmstadt: Wissenschaftliche Buchgesellschaft, 1967; Heidelberg: C. Winter, 1978.

Schindler, J. (1987) 'Zur avestischen Kompositionslehre: *aš.*- 'groß", in: G. Cardona and N. H. Zide (eds) *Festschrift for Henry Hoenigswald* ... Tübingen: G. Narr, pp. 337–48.

— (1982) 'Zum Nom. sg. m. der *nt*-Partizipien im Jungavestischen', in: E. Neu (ed.) Investigationes Philologicae et Comparativae. Gedenkschrift für Heinz Kronasser. Wiesbaden: O. Harrassowitz, pp. 186–209.

Schlerath, B. (1968) Avesta-Wörterbuch. Vorarbeiten, 2 vols. Wiesbaden: O. Harrassowitz.

Schmitt, R. (1980) 'Altpersischforschung in den Siebzigerjahren', *Kratylos* 25, pp. 1–66.

—–(1989) (ed.) Compendium Linguarum Iranicarum. Wiesbaden: L. Reichert.

— (1991) The Bisitun Inscriptions of Darius the Great, Corpus Inscriptionum Iranicarum I, I, Texts I. London: Corpus Inscriptionum Iranicarum. — (1994) 'Altpersisch /yadā/ "wo"', in: P. Cipriano, P. di Giovine, and

— (1994) 'Altpersisch /yadā/ "wo"', in: P. Cipriano, P. di Giovine, and M. Mancini (eds) *Miscellanea di studi linguistici in onore di Walter Belardi*. Roma: Il Calamo, pp. 99–106.

— (1995) 'Direkte und indirekte Rede im Altpersischen', in: M. Ofitsch and Ch. Zinko (eds) Studia Onomastica et Indogermanica. Festschrift für Fritz Lochner von Hüttenbach zum 65. Geburtstag. Graz: Leykam, pp. 239–47.

— (1999) Beiträge zu altpersischen Inschriften. Wiesbaden: L. Reichert.

— (2000) The OPers. Inscriptions of Naqsh-i Rustam and Persepolis, Corpus Inscriptionum Iranicarum I, I, Texts II. London: Corpus Inscriptionum Iranicarum.

Skjærvø, P. O. (1985) 'Remarks on the Old Persian Verbal System', MSS 45, pp. 211–27 (= Festgabe für K. Hoffmann).

(1994) 'Hymnic Composition in the Avesta', *Die Sprache* 36, pp. 199–243 [publ. 1996].

(1995) 'The Avesta as Source for the Early History of the Iranians', in: G. Erdosy (ed.) *The Indo-Aryans of Ancient South Asia*. Berlin and New York: W. de Gruyter, pp. 155–76.

— (1996) 'Iranian Alphabets Derived from Aramaic', in: P. T. Daniels and W. Bright (eds) *The World's Writing Systems*. New York and Oxford: Oxford University Press), pp. 515–35.

— (1997a) 'A Perfect Participle, *vaox^våŋhō*', *JAOS* 117, pp. 145–47.

— (1997b) 'Avestica II Yokes and Spades and Remnants of the "Tripartite Ideology"', MSS 57, pp. 115–28 [pub. 1998].

(1998) Review of Kellens (1995) in Kratylos 43, pp. 190–91.

(1999a) 'Avestan Quotations in Old Persian?' in S. Shaked and A. Netzer (eds) *Irano-Judaica* IV, Jerusalem, pp. 1–64.

— (1999b) 'Methodological Questions in Old Persian and Parthian Epigraphy', BAI 12 [pub. 2002], pp. 157–67 (review article of Schmitt, The Old Persian Inscriptions of Naqsh-i Rustam and Persepolis, 2000).

(2003–2004) 'The Antiquity of Old Avestan,' Nāme-ye Irān-e Bāstān. The International Journal of Ancient Iranian Studies 3/2, pp. 15–41.

— (2005a) 'Avestica III. Four Notes on Avestan Morphology," in: D. Weber (ed.) Languages of Iran: Past and Present. Iranian Studies in Memoriam David Neil MacKenzie, Iranica 8, Wiesbaden: O. Harrassowitz, pp. 197–206.

— (2005b) 'Poetic and Cosmic Weaving in Ancient Iran. Reflections on Avestan valuma and Yasna 34.2,' in: D. Haug and E. Welo (eds) Haptačahaptāitiš. Festschrift for Fridrik Thordarson, Oslo: Novus, pp. 267–79.

— (2005–2006) 'The Importance of Orality for the Study of Old Iranian Literature and Myth,' *Nāme-ye Irān-e Bāstān. The International Journal of Ancient Iranian Studies* 5/1&2 (pub. 2007), pp. 1–23.

— (2006a) 'Iran iv. Iranian Languages and Scripts', in: *Encyclopædia Iranica* XIII/3, pp. 344-77.

— (2006b) 'The Videvdad: Its Ritual-Mythical Significance', in: V. S. Curtis and S. Stewart (eds) *The Age of the Parthians*, The Idea of Iran 2, London and New York, pp. 105–41.

— (2007a) 'Avestica V. The Thematic Optative 3rd Plural in *-aiiaēn* and the Instrumental Plural of *n*-stems and Some Other Consonant Stems,' in: Alan J. Nussbaum (ed.) Verba Docenti. Studies in Historical and Indo-European Linguistics Presented to Jay H. Jasanoff by Students, Colleagues, and Friends, Ann Arbor, pp. 321–28.

— (2007b) 'Avestan and Old Persian Morphology,' in: Alan S. Kaye (ed.) *Morphologies of Asia and Africa*, Winona Lake, Ind.: Eisenbrauns, pp. 853–940.

Testen, D. (1997) 'Old Persian and Avestan Phonology', in: A. S. Kaye (ed.), *Phonologies of Asia and Africa.* Winona Lake: Eisenbrauns, pp. 569–600.

Tichy, E. (1986) 'Vedisch *rtavan*- und avestisch *ašauuan*-', *Die Sprache* 32, pp. 91–105.

Tremblay, X. (1998) 'Sur *parsui* du Farhang-i-ōim, *ratu, pərətu-, pitu-* et quelques autres thèmes avestiques en *-u*. Essais de grammaire comparée des langues iraniennes III', *StIr* 27, pp. 187--204.

(1999) 'Ist jungawestisch nāismi, nāist Präsens oder sigmatischer Aorist?', in: H. Eichner et al. (eds) Compositiones Indogermanicae in Memoriam Jochem Schindler. Prague: Enigma Corporation, pp. 537-43.

(2006) 'Le pseudo-gâthique. Notes de lecture avestiques II', in: A. Panaino and A. Piras (eds) Proceedings of the 5th Conference of the Societas Iranologica Europæa held in Ravenna, 6–11 October 2003, vol. I. Ancient & Middle Iranian Studies, Rome: Istituto italiano per il Medio ed Estremo Oriente, pp. 233–81.

Tucker, E., 'Denominative Verbs in Avestan: Derivatives from Thematic Stems', in J. H. W. Penney (ed.) Indo-European Perspectives: Studies in Honour of Anna Morpurgo Davies, Oxford/New York: Oxford University Press, 2004, pp. 548–61.

de Vaan, M. (2001) 'Avestan vaēsmənda', MSS 61: 185-92.

- (2003) The Avestan vowels, Amsterdam and New York: Rodopi.

— (2004) "Narten Roots" from the Avestan Point of View', in: A. Hyllested et al. (eds) Per Aspera ad Asteriscos: Studia Indogermanica in Honorem Jens Elmegård Rasmussen Sexagenarii Idibus Martiis Anno MMIV, Innsbruck (Innsbrucker Beiträge zur Sprachwissenschaft 112), pp. 591–99.

- Wackernagel, J., and A. Debrunner. (1896-) Altindische Grammatik. Göttingen: Vandenhoeck und Ruprecht.
- Waters, M. W. (1999) 'The Earliest Persians in Southwestern Iran: the Textual Evidence', *Iranian Studies* 32: 99-107.
- Watkins, C. (2000) "sá figé' in Indo-Iranian and Anatolian', in: A. Hintze and E. Tichy (eds) Anusantatyai. Festschrift für Johanna Narten zum 70. Geburtstag. Dettelbach: J. H. Röll, pp. 263–81.
- Windfuhr, G. (1971) 'Diacritic and Distinctive Features in Avestan', JAOS 91: 104-24.

(1972) 'Some Avestan Rules and Their Signs', JAOS 92: 52-59.

Further readings

Asmussen, J. P. (1992) 'Codices Hafnienses', in: EnIr V, pp. 886-93.

- Bailey, H. W. (1943) Zoroastrian Problems in the Ninth-Century Books. Oxford: Clarendon Press (2nd ed. with new introd., 1971).
- Henning, W. B. (1942) 'The Disintegration of the Avestic Studies', *TPhS* 1942: 40–56 [pub. 1944].
- Gippert, J. (1986) 'Zur Metrik der Gathas', Die Sprache 32: 257-75.
- Kellens, J. (1988) 'Avesta', in: EnIr III, pp. 35-44.
- Klein, J. (1985) Toward a Discourse Grammar of the Rigveda, 2 vols. Heidelberg: C. Winter.
- Narten, J. (1995) Kleine Schriften, M. Albino and M. Fritz (eds) Wiesbaden: L. Reichert.

Pirart, E. (1992) 'Les fragments vieil-avestiques du Y 58', AION 52: 225-47.

- Schmidt, H. -P. (1974) 'Associative Techniques and Symmetrical Structure in the Composition of Yasna 47', in: R. N. Frye (ed.) Neue Methodologie in der Iranistik (dedicated to Wolfgang Lentz); Wiesbaden: O. Harrassowitz, pp. 306–30.
- Schwartz, M. (1986) 'Coded Sound Patterns, Acrostics, and Anagrams in Zoroaster's Oral Poetry', in: R. Schmitt and P. O. Skjærvø (eds) Studia Grammatica Iranica. Festschrift für Helmut Humbach. Munich: R. Kitzinger, pp. 327–92.