LESSON 4

PHONOLOGY

Modifications of consonants and vowels

To students of other ancient languages, such as Latin, Greek, or Sanskrit, the most disturbing feature of Avestan is the seeming—and sometimes actual—irregularity of the shape of the language. Thus, knowing how to produce the grammatical form of one word does not guarantee the ability to produce the same grammatical form of another word, even if the two words belong to the same grammatical category.

For instance, the accusative and genitive singular forms of *haoma-* are *haomạm* and *haomahe*, but of *mašiia-* the same forms are *mašim* and *mašiiehe*. Similarly, the 3rd sing. present indicative of *bara-* "to carry" is *baraiti* "he carries," but of *yuiδiia-* "to fight" it is *yuiδiiẹiti*, compare the OInd. forms:

Avestan	Old Indic	Avestan	Old Indic
haomō	*somo*	*mašiiō*	*martiyo*
haomạm	*somam*	*mašim*	*martiyam*
hamahe	*somasya*	*mašiiehe*	*martiyasya*
baraiti	*bharati*	*yuiδiieiti*	*yudhyati*

Not only endings vary in shape, even the stem of the word sometimes changes, thus "I am" is *ahmi*, but "he is" is *asti*, and "they are" is *hạnti*, and "bad" is *aka-*, while "worst" is *acišta-*.

Not all of these changes can be predicted from within Avestan. Some require knowledge of the history of the language to understand. It cannot be recommended strongly enough that the students learn whatever rules there are and note in what kind of words and stems they occur. "Guessing" forms in Avestan is not a good idea.

1. Palatalization of *a* (*i*-umlaut)

This section describes the palatalization of *a* when **not** followed by a nasal (see Lessons 5, 7):

a > e when preceded by *y* or *ii* and followed by *i* or *e* or when in final position after *h, n, r,* or *s*. This rule affects numerous nominal and verbal forms.

In the table below palatalization is indicated by a raised *-ⁱ-*. Frequently the original *-iia* has been reintroduced.

Summary of changes (C = consonant):

*yaCi	>	*yeCⁱi*	**yadi*	>	*yeiδi*
			*yazi	>	*yezi*
*yaCe	>	*yeCⁱe*	**āiase*	>	*āiiese*
			*frā-iaze	>	*frāiieze*
-Cịa	>	*-Cⁱe*	**arịa*	>	*aire* (not †*eire*!)
			*-ahịa	>	*-ahe*

Notes:

On the "intrusive" *i* in *yeiδi* and *aire*, see below.

yaz- has yaze, not **yeze*

2. Labialization of *a* (*u*-umlaut)

A short *a* followed by *r* or *h* is labialized—or "rounded"—into *o* before an *u* (not *uu*) in the following syllable, e.g., *pouru- < *paru*, *vohu- < *vahu*, *pouru.sarǝδa-* "of many species," *vohu.friiāna-*

"Vohu.friiāna" (a kind of fire), *vohuuərəz-* "who performs good (acts)" (< *vohu* + *vərəz-*).
    This change also takes place when the *u* is not an original *u*, e.g., *pourum* < **pa"ruuam* "prior, former."
In *-aŋhu-* the *a* is never labialized.

Note: On the "intrusive" *u* in *pouru*, see below.

3. Palatalization and labialization of consonants: *i-* and *u*-epenthesis

    The most common sound alternations in Avestan are those referred to as palatalization or *i*-epenthesis
and labialization or *u*-epenthesis.
    "Palatalization" here means lifting the flat tongue toward the palate and touching it while pronouncing
the consonant (as in Russian). ("Palatalized" is different from "palatal," which refers to the palate as point
of articulation, with the tip of the tongue or flat tongue.)
    "Labialization" means rounding the lips while pronouncing the consonant.
    It cannot now be determined when exactly these sounds arose in Avestan. It can have been in the proto-
Avestan, the Avestan, or even in the post-Avestan period—at some stage of the later oral transmission of
the text.

4. Palatalization of consonants

    Palatalization of consonants occurred when *i* or *i̯* palatalized preceding consonants or consonant groups.
In the Avestan orthography the palatalization is explicitly noted in two ways:
    1. by special consonant signs: *ń, ŋ́, x́* (on which see Lesson 3);
    2. by writing an *i* **before** the palatalized consonant.

    It cannot now be ascertained whether consonants other than *ń, ŋ́, x́* were actually palatalized (as in
Russian) or—if they were— for how long they remained so during the transmission of the texts. It is
reasonable to assume that at some stage of the transmission the originally palatalized consonants lost their
palatalization, leaving behind only the epenthetic *i* (which then virtually formed a diphthong with the
preceding vowel).
    Not all consonants show palatalization by epenthesis. Thus, the palatal consonants *c* and *j* and the
sibilants (*s, z, š, ž*), as well as *m* and *h*, never do. Other consonants, however, regularly do, e.g., *aipi* (<
*api), *aiβi* (< **abi*), *aēiti* (< **aēti*), *aēibiš* (< **aēbiš*), *āhuiri* (< **āhuri*).
    Occasional exceptions may be attributed to late scribal practice, e.g., *sure*, not *suire*.
    Note also that according to the standard editions we have, for instance, *aēibiiō* but *ābiiō* (not *āibiiō*) and
-aiti but *-atica*, *-rəiti* but *-rətica*, etc.

    Consonant groups are rarely palatalized, the only important exception being *ṇt*, e.g., *astuuaiṇti* "in (the
world) with bones." The word *māzdaiiasni-* sometimes shows palatalization: *māzdaiiesniš, māzdaiiesnim,*
beside *māzdaiiasniš, māzdaiiasnim.*
    Palatalization is also seen in the group *r* + consonant: *airime* "in peace" (< **armi̯e*).
    When the vowel preceding the epenthetic *i* and *u* is *ā* (*āi* and *āu*) it cannot be determined from the
orthography alone whether we have an original long diphthong = *āi*, OInd. *ai*, or *ā* + *i*.

5. Labialization of consonants

    Labialization of consonants occurred when a *u̯* labialized a preceding *h* or a *u̯* or *u* labialized a preceding
r.
    A labialized *h* became *x^v* initially, but *ŋ^vh* between vowels. For both these sounds special consonant
signs were invented.
    We see that *x^v* and *ŋ^vh* are in complementary distribution: *x^v* is used initially, *ŋ^vh* between vowels. Only
by analogy or influence from Old Avestan is *x^v* found between vowels.

Labialized *r* is expressed by writing a *u* **before** the *r*: *ur*.

When the vowel preceding the epenthetic *u* is *ā* (*āur*) it cannot be determined from the orthography alone whether we have an original long diphthong = *āu*, OInd., or *ā* + *u*.

6. Combined palatalization and labialization

Palatalization and labialization can be combined, as in **paruuiia- > paoiriia-* "first" and **paruuī- > paoirī-* (fem. of *pouru-* "much").

The velar nasals

The palatalized and labialized velar nasals *ŋ́* and *ŋᵛ* appear only before *h*. If *ŋh* is analyzed as a realization of /h/, then these too should probably be analyzed as palatalized and labialized realizations of /h/.

For *ŋ́h* < *hi̯*, cf. *vaŋhō* "better" < **vah-i̯ah-*, and *daŋhu-* "land" < **dah-i̯u-*, cf. the genitive plural *dax́iiunąm*.

The group *ŋ́h* seems to be the rule when followed by final *-e* (< **-ai*) in the genitive singular of *a*-stems, the dative singular of *h*-stems (*manaŋhe*), and the 2nd singular middle (*parasåŋhe*). Of these only the dative form is regularly spelled with *ŋ́* (or *ŋ*) in the manuscripts. In the genitive singular and 2nd singular middle the endings are usually *-ahe*. In the 2nd singular middle *-ŋ́he* seems to be limited to the position after long *ā* (*å*), there being only one example of an ending *-aŋ́he* with short *a*. In the genitive singular, *-aŋ́he* is common in the pronoun "his, its" beside *ahe*. Note also *vaheh̄-* < **vah-i̯ah-ī-*, feminine of *vaŋhah-*.

Similarly *ŋᵛh* is from **hu̯*, cf. *aŋᵛhe* < **ahu-e*, dative sing. of *ahu-/aŋhu-* "(state of) existence," and the 2nd middle imperative ending *-ŋᵛha-* < **-hu̯a*, which has the allomorph *-suua* after dental (*dasuua* "take!" < **dad-su̯a*). In word formation *ŋᵛh* alternates with *xᵛ*: *xᵛara-* "to eat" ~ *fraŋᵛhara-* "to eat, consume."

The velar fricatives

In Young Avestan *x́* appears only before *ii* in forms of *daŋhu-* (*dax́iiuma-*, *dax́iium*, *dax́iiunąm*, dual *dax́iiu ~ daŋhu*) and in the ethnic *x́iiaona-* "Chionite"(?). It cannot be an allophone of *x*, as it does not appear in paradigms and word formation for *xi̯*, and its paradigmatic relationship to *ŋ́h* strongly suggests it should be analyzed as an irregular realization of *hi̯*: *dax́iiŭ-* may have been influenced by Old Avestan, and *x́iiaona-* may be the local pronunciation of the ethnic.

The case of *xᵛ* is similar. It is in complementary distribution with *ŋᵛh*: initial ~ intervocalic, but the initial *xᵛ* has regularly been restored after "privative" *a* (*xᵛarəta- ~ axᵛarəta-* "eaten, uneaten"). There are only two examples of intervocalic *xᵛ* in Young Avestan: *kaxᵛarəδa-* "sorcerer" (cf. Skt. *kākhorda*), and the country name *Haraxᵛaitī-*, which may preserve the local pronunciation.

Old **ku̯* also became *xᵛ*, as in the act. perf. part. *vaoxᵛah-* "having (ever) spoken."

Consonant changes. Sandhi

The phenomenon of *sandhi* refers to the modification of consonants or vowels caused by preceding or following sounds. There are two kinds of *sandhi*: internal and external.

Internal sandhi refers to the changes that occur in the final consonant of the stem of a word before an ending or in the initial consonant of the ending, e.g., **drug + š > druxš* "the Lie," *bad + ta > basta* "bound," **dad-te > daz-de* "is made, given," as well as in the initial consonants of the second members of compounds, e.g., *raθaēštā-* "charioteer" < *raθaē + stā-*.

External (or final) *sandhi* means that the final consonant of a word is modified because of the initial of the following word.

External *sandhi* is a fundamental feature of Old Indic but occurs only sporadically in Avestan and almost exclusively in connection with the enclitic particles *-ca* "and" and *-cit̰*, a generalizing particle "even, -so-

ever," occasionally before enclitic pronouns—rarely nouns—beginning with *t-*, e.g., *haomō + -ca* > *haomasca* "and Haoma," *kō > -cit̰* > *kascit̰* "whoever, every," *kasə θβąm* "who (pressed) you (O Haoma)," *xᵛax̌iiā̊ tanuuō > xᵛax̌iiā̊sə tanuuō* "of (his) own body/self," *anākåsə tāiiuš* "(if) not in full view, (he is) a thief" (Her.6)

In the paradigms sandhi forms are marked with a raised circle (°), e.g., *kas°* or *kasə°* for *kō*.

[In Sanskrit also the initial of a word can be modified because of the final of the preceding word, e.g., *tam śakram > tañ śakram > tañ chakram*.]

NOUNS

Masc. *iia-* and fem. *iiā*-stems

When the ending *-iia* is preceded by consonant, symbolically "*Ciia#*," the group *-iia* ought to become *-e* according to the rule just given, at least when the consonant allows palatalization. Most often, however, the normal *a-* and *ā*-stem forms have been reintroduced. The masc. *iia*-stems and fem. *iiā*-stems have the following modified forms (paradigms: *airiia-* "Aryan," *mairiia-* "villain," *kaniiā-* "young woman," *mairiiā-* "roguish woman").

Examples:

	iia-decl.		*iiā*-decl.
Sing.			
nom.	*mašiiō*	*airiiō, airiias°*	*kaine, maire*
voc.	*mašiia*	**aire, maire*	**maire*
Plur.			
nom.-voc.	*mašiia, mašiiåŋhō*	*aire*	*kaniiå, kaniiå̊s°*

Notes:

The vocative of nouns such as *mairiia-* should be **maire*, with *-iia > -e*, but no examples are found in the texts (although some are used here in the exercises).

The sandhi form of the plur. nom. masc. is—both in *iia*-stems and other *a*-stems—sometimes *-å°*, e.g., *mašiiåca* "and men" (cf. *mašiiāka-* "people," *staorāca* "and big animals").

I have found no examples of forms in *-e < *-iia* of neut. *iia*-stems, such as **haiθe* "true" *< *haiθiia*. A form such as *vāstriia* "pastures" could probably not undergo palatalization.

Masc. *uua*-stems

The final ending *-uua* of various origins occasionally becomes *-uuō*. There seems to be one example of this change in a masc. *uua*-stem: *Huuōuuō* "the Huuōuuas."

i- and *ī*-stems

The endings of the nom. and voc. sing. and plur. forms of the *i-* and *ī*-declensions are:

	i-decl. m. f.	n.	*ī*-decl f.
Sing.			
nom.	*-iš*	*-i*	*-i, -iš*
voc.	*-e*		*-i*
Plur.			
nom.-voc.	*-aiiō, -aiias°*	*-i*	*-iš*

Notes:

Aši- has the irregular voc. *Aši* (e.g., *Aši srire* "O beautiful Aši!"; perhaps in analogy with *Arəduuī Sūre*). In *Arəduuī* the ending is usually long in the manuscripts.

Paradigms (*gairi-* m., *frauuaṣi-* f., *āhuiri-* n. "belonging to Ahura Mazda, Ahurian," *vaŋʰⁱ-* f. "good," *baβrī-* "(female) beaver" (note how the palatalization and labialization rules work!):

	i-decl.			*ī*-decl.
	m.	f.	n.	f.
Sing.				
nom.	*gairiš*	*frauuaṣiš*	*āhuiri*	*vaŋʰⁱhi, baβriš*
voc.	**gaire*	**frauuaṣe*		*vaŋʰⁱhi*
Plur.				
nom.-voc.	*garaiiō, garaiias°*	*frauuaṣaiiō, frauuaṣaiias°*	*āhuiri*	*vaŋʰⁱhiš*

Note the irregular voc. *zāire* from *zairi-* "tawny," common epithet of the *haoma-*.

r-stems. *ātar-* "fire" and agent nouns

The extremely common word for "fire" is *ātar-*, a masc. (irregular) *r*-stem. It has no nom.-voc. plur. forms.

Masc. nouns in *-tar-* denoting people who do something, occasionally or professionally, e.g., *pātar-* "protector," *dātar-* "maker, creator," are called agent nouns.

The neuter noun *vadar-* "striking weapon" has only the nom.-acc. sing.

These words are declined as follows:

Sing.				
nom.	*dāta*	*pāta*	*ātarš*	*vadarə*
voc.	*dātarə*	-	*ātarə*	
Plur.				
nom.-voc.	*dātārō*	*pātārō*	*ātarō*	

Note: the plur. of *raθaēštā-* is usually *raθaēštārō* after the *tar*-declension.

VERBS

Athematic verbs

Athematic verbs do not have an *-a-* before the ending, as in *jas-a-ta*. Instead the endings are added directly to the final consonant or vowel of the stem.

Examples of imperative active forms of athematic verbs (*daδā-/daδ-* "to give, place," *naēd-/nid-* "to blame, scorn" *stao-/stu-* "to praise"):

Sing.	2	*-δi, -di*	*stuiδi* "praise!"	*dazdi* "give!"	
Plur.	2	*-ta*	*staota*	*dasta*	*nista* "blame!"

Notes:

The athematic ending of the 2 singular is *-di* after consonant, but *-δi* after vowel, cf. also *jaiδi* "strike, smash!" < *jan-/ja-*.

The forms *dazdi, dasta,* and *nista* are from **dad-di, *dad-ta,* and **nid-ta* and provide examples of internal *sandhi*.

Some verbs show ablaut (see Lesson 10) in the imperative, e.g., *stuiδi*, plur. *staota* from *stao-/stu-* "to praise," probably also *mrao-/mru-* "to say." Note that these verbs have a "short" form before *-δi* and a "long" form before *-ta*. Few forms are attested.

The imperative of *iia*-stems

The 2 sing. imperative of *iia*-stems ought to be affected by the palatalization rules described above: *-iia >
-e*. The **only** example appears to be °*nase* in *apa.nase, vī.nase* "get lost!" (V.8.21, Sb. 3). Thus, the *aiia*-
and *āiia*-stems end in °*aiia* and °*āiia*.

The imperative active 3rd person

Unlike English, but like Latin, Greek, and Sanskrit, Avestan also has 3rd pers. imperatives.

The 3rd person imperative sing. and plur. should be translated into English as "let him/them do!,"
"he/they must do."

Paradigms (athem.: *aē-/i-* "go," *daδā-/daδ-* "to give, place," *mrao-* "say"; thematic: *bauua-* "become,"
jasa- "come, go," *nasiia-* "perish"):

	Athematic		Thematic	
Sing.	*-tu*	*mraotu*, "let him say!"	*-atu*	*jasatu* "let him come!"
		daδātu "let him give!"		
Plur.	*-əntu*	*daδəntu* "let them give!"	*-əntu*	*jasəntu* "let them come!"
	-iiaṇtu	*yaṇtu* "let them go!"	*-iiaṇtu*	*nasiiaṇtu* "let them perish!"
	-uuaṇtu	**mruuaṇtu* "let them say!"	*-uuaṇtu*	*bauuaṇtu* "let them be(come)!"

Notes:

In the 3rd sing. of athematic verbs the "long" form of the stem is used. Vowels are lost before the ending
-əntu.

The imperative of "to be"

In athematic verbs, the imperative forms of "to be" are as follows (no plural forms attested):

Sing.
2   **zdī* "be!"
3   *astu* "let him be!"

Note: *zdī* is only attested in Old Avestan.

SYNTAX

Further examples of the uses of the nominative, vocative, and imperative

daēuuō apa.nasiiatu "Let the daēuua perish!"

daēuua apa.nase "Perish, O daēuua!"

mošu mē auuaŋhe jasatu "May he/she come quickly to my help!"

Sraošō iδa astu "may Sraoša/hearing be here (present)!"

raθaēštārō pātārō jasəntu iδa niš.hiδəntu
   "Let the charioteers come (as) protectors! Let them sit down here!"

frauuašaiiō xšnutå iδa aiiaṇtu xšnutå iδa vī.carəntu
   "May the fravashis (if) satisfied come here, may they (if) satisfied go about here!" (after Yt.13.156)

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azəm yō Ahurō Mazdå dāta ahmi
    "I who (am) Ahura Mazda am the creator."

azəm bā tē ahmi yā hauua daēna
    "well, I am the *daēnā* which (is) your own (= your own *daēnā*)."

tum ahi Ahurō Mazdå maniiuš spəništō
    "You are Ahura Mazda, the most life-giving spirit."

EXERCISES 4

1. Write in transcription and Avestan script the sing. and plur. nom. and voc. forms of the following nouns and adjectives:

mairiia- acišta-, aka- daēuua-, ātar- vohu.friiāna-, paṇtā- darəγa-, nmāna- āhuiri-, gairi- spaēta-, kaniiā- huraoδā-;
Aši- vaŋʰī-, Sraoša- Ašiia-, Aži- Dahāka-.

2. Write in transcription and Avestan script the sing. and plur. imperative forms of the following verbs:

aē-/i-, mrao-/mru-, kərənao-/kərənu-, bara-, jaiδiia-, rāmaiia-.

3. Transcribe and translate into English:

4. Translate into Avestan:

1. O good fravashis, dwell here!
2. Rise, O people, and praise Order!
3. We, O Mazdayasnians, are Aryans.
4. Let the Huuōuuas, the brave charioteers, go about here!
5. O Miθra, come down hither to us for help!
6. This young woman is both beautiful and well-shaped.
7. Let this strong fravashi dwell here!
8. Let not this daēuua be here!
9. Let the villain perish! O villain, run away!
10. May Ahura Mazdā and the fire appear to us!

VOCABULARY 4

aē-/i- < √i: to go
aiβiθura-: unshakable
aii- < āi-
airime: in peace
aora: here, hither, on/to this side
āhuiri-: belonging to Ahura Mazdā, Ahurian
āi- < ā + √aē/i: to come
āiiapta- n.: reward, spoils
āiiasa- < √yam mid.: to harness (only 1st sing. āiiese)
ākå(sə): in full view (of: + loc.)
āuuiš adv.: clear, apparent
baβrī- f.: (female) beaver
basta- < baṇdaiia-: bound, tied up
bā: a particle of uncertain function and meaning
daδā-/daδ-: to give; set in place ("create")
daēuuō.ciθra-: spawned by daēuuas, daēuua brood
daēuuō.fradāta-: brought forth (created) by daēuuas
daēuuō.frakərəsta-: fashioned forth by daēuuas
daiuuī- fem.: deceitful
dātar-: establisher, "creator"
Druuāspā-: a goddess
druxš, nom.-voc. sing. of druj-
frauuaṣi- f.: fravashi, pre-soul
frāiiaza- < √yaz mid.: to send forth in sacrifice, sacrifice (+ acc. of thing or god)
friθa-: dear
haiθiia-: true, real (not only seemingly true)
Hukairiia-: name of a mountain
Huuōuua-: name of a family
iδa: here
im, sing. nom. fem. of ima-: this
jaiδi < √jan
jaiδiia- < √gad/jad: to implore
ka-: who?
kaniiā-: young woman
kascit̰: each and every one

kərənao-/kərənu- < √kar: to do
mairiia-: villain, rogue
mairiiā-: villainess
maṣiiāka- (usually plural): people
mā, + imperative (injunctive, optative): let not
mitaiia- < √maēt/mit: to stay, dwell
miθnā-/miθn-: to stay, dwell
mrao-/mru- < √mrao-/mru: to say
naēd-/nid- (nis-) < √naēd/nid: to blame, scorn
nasiia- < √nas: to perish
niš.hiδa- < √had: to sit down
nmāna- n.: house, home
paiti.auua.jasa-: to come down hither
paiti.auua.kərəṇta- < √kart: to cut down (to/upon: instr.)
paiti.mrao-/mru-: to answer
paṇtā- m.: road, way (Lesson 12)
paoirī- f. of pauru-
paoiriia-: first
pauruua-: prior, former
pātar-: protector
pourum < pauruua-
raθaēštā- m.: charioteer
rāmaiia- < √ram: to dwell (in peace and quiet)
saδaiia- < √sand: to seem, appear
səuuišta- superlative of sura-: most rich in life-giving strength
srira- (srīra-): beautiful
tanū- f.: body
tāiiu-: thief
Tura-: Turanian
uγra-: strong
upa.šaē-/ši-: to dwell, inhabit
vāstriia- n.: pasture
vispō.vahma-: containing all hymns (?)
vī.cara- < √car: to go about, go far and wide
vī.nasiia- < √nas: to (go away and) get lost

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vohu.friiāna-: Vohu.friiāna; name of a fire

vohuuərəz-: who performs good (acts)

vouru.gaoiiaoiti-: having/with wide grazing grounds (refers either to the vast heavenly spaces that Miθra "grazes" or to the pastures he will give to his worshippers as rewards)

xšnuta-, past part. of xšnāuuaiia- < √xšnao: satisfied

yaṱ: that, when, if (etc.)

yaza- < √yaz, mid.: to sacrifice (to) (+ acc. of thing or god)

yeiδi: if, when (conjunction)

yezi: if (conjunction)

yuiδiia-: to fight

zarənaēna- (zaranaēna-), f. zarənaēnī-: of gold

zāire, voc. sing. of zairi-: golden, tawny; standing epithet of Haoma