LESSON 2

THE PHONOLOGY (SOUND SYSTEM) OF AVESTAN. GENERAL REMARKS.

One of the things that strikes one about Avestan as opposed to Old Indic (Sanskrit) is the seemingly chaotic orthography. The cause of this state was long thought to be that the Avestan text had been corrupted by the manuscript writers, and scholars therefore decided that the text had to be “corrected” and “normalized” in order to recapture the “original” Avestan text. They never proved their point by examining in detail the orthography and the individual characteristics of the manuscripts, however.

The first Western scholar to undertake a complete analysis of the phonology of Avestan was G. Morgenstierne, who in an article written during World War II and published in 1942 showed that the Avestan alphabet reflected an internally consistent phonological system, in many respects similar to those of living Iranian dialects and languages. Most of the seemingly orthographic aberrations, which at the time were commonly explained as scribal errors, could be explained in terms of the phonological system of the language(s) of the Avesta.

It must be kept in mind, however, that the Avestan texts as we have them do not necessarily in every detail reflect a genuine linguistic system. For centuries they were adjusted by editors (diacrivets) and then by scribes who spoke dialects or languages with phonological systems differing fundamentally from that of the original Avestan language. Thus, on one hand, the Old Avestan texts contain many elements that are clearly borrowed from or influenced by Young Avestan, and, on the other hand, the Young Avestan texts contain both elements that are imitations of Old Avestan (“pseudo-OAv.”) and elements belonging to later stages of Iranian that were probably introduced by the scribes.

It is, finally, almost impossible to determine which of the sound changes we observe in our extant manuscripts already belonged to the original language and which ones were introduced at various stages of the 1000-1500 years’ oral and written transmission of the texts. One way of determining early changes is to compare the Avestan phonological system with that of Old Indic.

As much of the transmission of the surviving Avesta probably took place in southwestern Iran, phonological changes shared with other East-Iranian languages as opposed to West-Iranian languages may be assumed to belong to the early period.

One such typically East-Iranian sound change is the shortening of i and its disappearance in juua- “alive,” which agrees with Sogdian žw-, Khotanese juva-, and Pashto žw-, against OInd. jiwa--; and in cuaut — “how great,” OInd. kivant-.

Palatalization and labialization of vowels, however, which is typical of the transmitted Avestan text, are also found in western Iranian languages and do not necessarily belong to the eastern stage of the transmission.

Important:

Some students may find it useful to compare Sanskrit (Old Indic) when learning the Avestan grammar, but both they and the teachers should avoid phonetically “translating” the Avestan into Sanskrit to explain the Avestan forms. Such an approach not only hints at an “inferior” status of Avestan compared to Sanskrit but also—more importantly—may take the focus away from the linguistic structure of Avestan in its own right—its phonetic and grammatical systems and the indigenous semantic developments. In my own experience, students who routinely see the Sanskrit forms in the Avestan ones may experience great difficulties in identifying typically Avestan, especially “contracted,” forms.

The students are not expected to master completely the following description of the phonological system of Avestan right away but use it for reference.
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PHONEMES

We call "phonemes" the smallest units of speech that distinguish meanings. Phonemes are usually determined by exhibiting "minimal pairs," e.g., English bad ~ sad, a pair that establishes /b/ and /s/ as separate phonemes in English.

Phonemes are denoted by writing them between / /. The phoneme is not a "sound" (the sound that somebody produces and which we hear when somebody speaks) but a linguistic entity devised, as it were, to provide the theoretical link between acoustic sound (the "physical" aspect of speech) and meaning (the "psychological" aspect of speech).

When we want to emphasize that we are talking about the actual sound, or the "phonetic realization" of a phoneme, we use square brackets [ ], e.g., [p], [b], [z]. These actual sounds are also called "phones" or "allophones."

Phonemes are described by listing their "distinctive features." These distinctive features are descriptions of how the sound is produced in the mouth and which parts of the mouth are involved in the sound production. Following are some examples:

/\b/ stop, labial, voiced ~ /p/ stop, labial, unvoiced. ~ /m/ nasal, labial.
/\x/ fricative, velar, unvoiced ~ /h/ fricative, velar, voiced.
/\s/ sibilant, alveo-dental, unvoiced ~ /z/ sibilant alveo-dental, voiced ~ /\s/ sibilant, alveo-palatal, unvoiced ~ /\z/ sibilant, alveo-palatal, voiced.

Note that English /i/ is sometimes aspirated [t h], sometimes not aspirated [t]. The feature "aspiration" is not, however, distinctive in English or Avestan, so there is no phonemic opposition /t/ ~ /th/, /p/ ~ /ph/, etc. In such cases we say that [p] and [ph] are "allophones" of /p/. Aspiration is a distinctive feature in some languages—Sanskrit, for instance, where we have minimal pairs such as kara [kara] "hand" ~ khara [kʰara] "donkey."

In the case of /n/ we note that "voiced" is not a distinctive feature of nasals in English or Avestan, as no two words can be distinguished by the presence or absence of voicing in a nasal /n/. On the other hand, Avestan has a voiceless or, probably, pre-aspirated [hm], which may be a separate phoneme: /hm/ ~ /h\m/, but more probably it is simply an allophone of /m/ after h or alternative (short-hand) way of writing hm.

PHONEMIC NEUTRALIZATION

Phonemes may not be distinguished in all positions. Thus, in English we cannot find any minimal pairs distinguished by the phoneme sequences /st/ and /sd/. In such cases we say that the phonemic opposition between /t/ and /d/ has been neutralized after /s/.

VOWEL PHONEMES

Vowel phonemes are defined by features relating to the position of the tongue in the mouth and the shape of the lips. There are three basic parameters:

1. The height of the highest point of the tongue: high - mid - low.
2. The place of the highest point of the tongue: front - central - back.
3. Rounding or non-rounding of the lips.

In Avestan there are the additional features of short - long and of nasalized - oral (= non-nasalized), only some of which have distinctive function.

Diphthongs may be regarded as combinations of phonemes or single, composite, phonemes.

We may tentatively posit the following vowel (simple and diphthongs) phonemes for Young Avestan (spelling in < >):

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<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back, rounded</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i &lt;i, ī&gt;</td>
<td>a, ā, a&lt;ā, ā&gt;</td>
<td>u &lt;u, ū&gt;</td>
<td>(ā&lt;ē&gt; ?)</td>
</tr>
<tr>
<td>Mid</td>
<td>e &lt;e, ē&gt;</td>
<td>o &lt;o, ō&gt;</td>
<td>(ē&lt;ē&gt; ?)</td>
<td>ā&lt;ā&gt;</td>
</tr>
<tr>
<td>Low</td>
<td>a &lt;a&gt;</td>
<td>ā &lt;ā&gt;</td>
<td>(ē&lt;ē&gt; ?)</td>
<td>ā&lt;ā&gt;</td>
</tr>
</tbody>
</table>

Diphthongs:

Short
ai <aē> ~ oi/oi <ōi> ~ Long
au <ao, aō> ~ ou <ōu> ~ au <āu>

The difference between ē and ā must have been between closed and open [o: ~ ā:] (approximately as in English home ~ hawk, Germ. rote ~ Rotte).

Cf. the following minimal or almost minimal pairs:

āpō ~ apō “waters” nom. plur. ~ gen. sing., acc. plur.
apō ~ apa “water” gen. sing., acc. plur. ~ instr. sing.
āmōm ~ imōm “the strength” ~ “this”
apa ~ upa “with water” ~ “up to, at”
aspō ~ aspa ~ aspā “horse” nom. sing. ~ instr. sing. ~ acc. plur.
surō ~ surd “rich in life-giving strength” masc. nom. sing. ~ fem. nom.-acc. plur.
aēta ~ aēte “this” instr. sing. ~ nom. plur.
aīš ~ aēša “with these” ~ “this (one)”
gāšu ~ gaoš ~ gāšu “cow” nom. ~ gen. ~ gen.
parāna- ~ parāna- “feather” ~ “full”
mašāia- ~ mašāia- “(mortal) man” ~ “immortal”
kaša ~ kaša “armpit” ~ “cutters”
tē ~ tā “they” and haoma ~ haoma “haoma” plur. nom. ~ acc.

The phonetic status of vowel length in the case of i and ī, u and ū is uncertain. Standard editions and grammars give the impression that the distribution of short and long i and u (in Young Avestan) is conditioned by phonetic context and that they are therefore in complementary distribution, but the distribution of i and ī, u and ū in the actual manuscripts has not been investigated in any detail, and from the studies that have been made (e.g., Hintze in JamaspAsa, 1991), it appears that the choice between i or ī, u or ū may be a matter of scribal preference. Thus, the distribution by phonetic context may be a mirage of Western editions and not supported by the manuscripts.

Note that in relatively modern Iranian manuscripts long ū is replaced by ī. Investigation of this phenomenon may help establish the correct distribution of u or ū.

In this manual, long ī and ū are used in final position in monosyllables only (zi, nū) and separated preverbs (ni, vi), as well as to indicate stem forms (tanū, etc.), but in all other cases short i and u are used consistently (with a few exceptions in the reading exercises), in order to stress the fact that the choice of (Young) Avestan short or long ī and ū is not conditioned by their origins, such as Proto-Iranian short and long i and u or by their being contraction products (*-im, *-im, and *-iam) all > -im or -ēm and *-um, *-ūm, and *-uam all > -um or -ūm). Obviously, long ī and ū could also have been used.

The same caveat may to some extent apply to short and long e and ē, o and ō. Thus, in our standard editions, ē other than in monosyllabic words (see below), is restricted to the diphthong aē, while ō, other than as word final and composition vowel is only found before the morpheme border. Pairs such as vohu and dāmōhu do not, therefore necessarily prove a phonemic opposition o ~ ō. The distribution of o ~ ō also varies by manuscripts, however. Thus, many manuscripts have consistently vōhu instead of vohu, and for the diphthong ao many manuscripts commonly have āō.
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\[ ã \] was an allophone of \( ã \) before \( q, n\), and \( s \).

[The short \( ã \) is found in a single manuscript (Pd) for short \( a \) before \( q \).]

\( q \) was an allophone of \( ã \) before \( n \) or \( m \), e.g., \( nqma \) or \( nm̄a \). In the accusative plural it is in complementary distribution with \( ã \), and so apparently stands for \( *q̣ \) or \( *q̄ \). The two letters \( q \) and \( ã \) \((*q̄)\) are used indiscriminately in the extant manuscripts. In Geldner’s edition \( q \) is the “default” letter.

The primary diphthong \( æê \) is never found in final syllable, open or closed. In final closed syllable, \( æê \) is the result of contraction (e.g., \( -qêm < *qêti\)).

The diphthong \( Õi \) appears to be an allophone of \( æê \) used primarily in closed syllables. Thus, in Young Avestan \( Õi \) is preferred before consonant clusters, though not before \( s \) or \( ë \) plus one consonant.\(^2\)

The only apparently minimal pair for \( æê \sim Õi \) is \( æêm \) “he” \( \sim Õim \) “one” \(<aewua\)\. Instead of \( Õim \) we also find the spelling \( aoim \), so \( Õim \) may be just a manuscript variant of \( aoim \). In the table above it is suggested that \( Õi \) is structurally for \( /ai/ \). It occurs occasionally in monosyllables instead of \( ë \), e.g., \( Õi \) but \( ë \).

Note: \( æê \) is never used in final syllable, open or closed.

The diphthong \( Õu \) is used in a small number of words as a variant of \( ao \), probably in imitation of Old Avestan.

The diphthong \( ou \) is only found as the result of labialization (see the next lesson), e.g., \( pours \) < \( *paru \). In the manuscripts it is also written \( ôu \) \((pōru)\).

EXERCISES 2

1. Practice reading and pronouncing the following words and phrases and translate them:

2. Read and try to translate the following sentences:

\(^2\) See Fortson.
VOCABULARY 2

aём, nom. sing. m. of ima-: this one, he
aэša, nom. sing. m., f. of aēta-: this
aēwua, nom. sing. f. of aēwua-: one (numeral)
ahura-: lord
Ahуor Mazdā, nom. sing. of Ahуra- Mazdā-: Ahуra Mazdā, literally: the omniscient lord
ama-: force, strength
amaуua, nom. sing. m. of amaуuаnt-
Amаra'tatā-, aмара'tatā- f.: Non-dying, Immortality; name of the sixth Amаšа Spаntа
Anаhite, voc. sing. of Anаhita-: O Anаhita!
а getData, data-: existence, especially the new-born Ordered existence, generated by the sacrifice
аgra-: evil, destructive; the opposite of spаntа-
Анрο Mаниuш, nom. sing. of Agra- Маниuш: the Evil Spirit
aspо, nom. sing. of aspа-: horse
аsъ < аb-: is
Aşаm Vаhшtаm: Best Order, the second of the Life-giving Immortals
аşаuаuаn- m.: sustainer of Order, Orderly
аuаuаhе, dative sing. of аuаuа-h- n.: to (the) assistance (of)
Ármаtа- f.: Humility; Spаntа- Ármаtа-, Life-giving Humility, the fourth of the Life-giving Immortals
аtаr-аthr-: fire
daēnа, nom. sing., daēnаn, acc. sing. of daēnа-: a visionary sense of man, his “vision soul,” that after death
assumes the form of a woman, beautiful or ugly according to the person’s thoughts, words, and acts in
life, who leads the soul to paradise or hell, as the case may be
daēwua-: old, evil god
dаmоhu, locative plur. of dаmаn- n.: creature
druj- f.: the cosmic Deception, the Lie
druuаnt-: possessed by the Lie, Lieful
dуuаsа-: to attack (? said of evil beings)
dуrоsоsh, nom. sing. duраsоsа-: standing epithet of Haома- of unknown meaning, traditionally interpreted as
“death-averting”
дуsмаtаm, nom.-acc. sing. n., dušmата, nom.-acc. plur. n. of dušmata-: badly thought (thought)
дузуааrшта, nom.-acc. plur. n. of dužuurаrшта-: badly done (deed)
дузuxtа, nom.-acc. plur. n. of dužuxtа-: badly spoken (word)
frašа-: Juicy, wonderful
frašо,ka*rаtі- f.: Juicy-making, Renovation, the permanent reestablishment of the first existence after the
final victory over the powers of evil and darkness
gаеtiшia-: belonging to/residing in the world of living beings,
gао- m., f.: ox, cow; plur. cattle, animal species
gаuš, nom. sing. of gао-
хаоmо, nom. sing. of haоma-, Haоmа-: the haoma plant and a god
Hауuааatа- f.: Wholeness; the fifth of the Life-giving Immortals
hаuа, nom. sing. f. of hаuа-: own
humаtа, nom.-acc. plur. n. of humаtа-: well-thought (thought)
hуuааrшta, nom.-acc. plur. n. of huуuааrшta-: well-done (deed)
хuxtаm, nom.-acc. sing. n., хuxtа, nom.-acc. plur. n. of huxtа-: well-spoken (word)
imоm acc. sing. m. < ima-: this
jаsа < jаsа- Vаgаm: come!
jуuа: 1. nom. plur. m. of juuа-: alive. — 2. imperative 2nd sing. of juuа-: to live
juuо, nom. sing. m. of juuа-: alive
kašа, nom. sing. of kašа-: armpit
mаnаh- n.: thought, mind
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maniiauua-. fem. maniiauui-. belonging to/residing in the world of thought
mašiia, nom. plur. of mašiia-
mazdā- m.: omniscient
mazdaiasni-. of/belonging to the one who sacrifices to Ahura Mazdā (of the one who believes in Ahura Mazdā)
me: to/for/of me
mošu: soon, quickly
nāman- or nāman- n.: name
namažiia-. to revere, do homage
namažiiamahi < namažiia-. we revere, do homage
nuram: now
ōim, acc. sing. m. of āēuua-
paoiriiō.fraθbaθšta, nom. plur. m., n. of paoiriiō.fraθbaθšta-. first fashioned forth
parana, nom.-acc. plur. of parana- n.: feather
Pāuruuō, nom. sing. of Pāuruuu-
parana-. full
pouru, nom.-acc. sing. n. of pauru-. much
pouru.saraθa, nom. sing. f. of pouru.saraθa-: of many kinds
Ṛaśnu-. Rashnu, divine judge who judges the soul’s thoughts, words, and deeds on his scale
ratu-. (divine) model, prototype
saosošiant-. revitalizer, said of the successful sacrificer, especially the last one, son of Zarathustra
spaθa, nom.-acc. plur. n. of spaθa-. white
Tištriia-. Tishtriia, god of the seasonal rains; the Dog Star, Sirius
upa: at, in (+ acc.)
vahišto, nom. sing. m. of vahišta-, vahišta- superlative of vaθuju-. best
vahišto aθhūi: the best existence, paradise
Vaiiu-. name of the god of the space between heaven and earth (note that heaven is spherical and the earth situated in the middle of the sphere)
vairiia-. well-deserved, commonly used of rewards
Vahrθrayna-. name of the god of victory
Vohu Manō, nom. sing. of vohu- manah- n.: Good Mind, the first of of the Life-giving Immortals
Χaθra- n.: (royal) command
Χaθram Vairim: Well-deserved Command, the third of of the Life-giving Immortals
yazata-. deserving of sacrifice, deity
Zarathustra-. name of the mythical first poet-sacrificer; protagonist of the Avesta
zarathuštri-. Zarathustrian, in the tradition of Zarathustra, spoken by Zarathustra