

The form *-šiš*, upon which *-diš* was made by analogy, must be older than the coalescence of the two sets of forms, and have received its *-š* from pIE *-ns* of the acc. pl., reduced to *-s* in pIE after long vowels, as in Skt. acc. pl. *sénās* 'armies', *devīṣ* 'goddesses', *vadhūṣ* 'women', cf. GAv. encl. acc. pl. masc. *iš* to stem *i-*. We cannot be certain therefore that *-šiš* and *-diš* had a short rather than a long vowel. The reason for the preservation of these distinctive forms is that these stems had no regular nominative forms which could be transformed by analogy to accusative function.

§196. THE THIRD PERSONAL PRONOUN *haw*, functioning also as an adjective, is from pIE *\*so* + particle *\*u*; see also Lex. s.v. This *\*so* is the nsm. of the pIE demonstrative *\*so \*sā \*tod*, seen in Av. *hō hā tā*, Skt. *sá-s sā tád*, Gk. *ὁ ἡ τό*. OP *haw* serves both as nsm. (from *\*so-u*) and as nsf. (from *\*sā-u*) (§131); before an enclitic pronoun it is written either *haw-* or *haw-* (§137). The form *hawam* (DB 1.29) is *haw* + *-am* from *adam*, *tam*, etc., retaining the *-v* after the model of the separate *haw*.

The same pIE demonstrative appears probably in the enclitic apm. *-tā* in *awabāša-tā* (DB 4.72; see Lex. s.v. *-ta-*), and as the prior element in *hya hyā tya* (§198).

§197. THE PIE RELATIVE PRONOUN *\*i-* survives in OP as the second element of *hya hyā tya* (§198); in the nom.-acc. nt. *yaciy* 'whatever' from *\*iōd-q'id*; and in the subordinating conjunctions *yātā*, *yabā*, *yadā*, *yadiy*, *yaniy*, *yāvā*, the formation of which is given in the Lex. s.vv.

§198. THE OP RELATIVE AND ARTICLE *hya hyā tya* is for earlier *\*syas syā tyād*, an amalgamation of the demonstrative *\*sa sā tad* (pIE *\*so sā tod*) with the relative *\*ias iā iad* (pIE *\*ios iā iōd*); its equivalent is not found in Avestan. The demonstrative *syā-s syā tyād* of Vedic Skt., though phonetically identical, differs in meaning and seems to be an *-(i)ios* extension of the old demonstrative, which has assumed the paradigmatic endings of the demonstrative itself (Lg. 20.1-6).

The forms extant in OP are the following:

	Masc.	Fem.	Neut.
Sg. Nom.	<i>hya</i>	<i>hyā</i>	<i>tya</i>
Acc.	<i>tyam</i>	<i>tyām</i>	<i>tya</i>
Inst.			<i>tyanā</i>

	Masc.	Fem.	Neut.
Du. Nom.	<i>tyā</i>		
Pl. Nom.	<i>tyaiy tyai-</i>	<i>tyā tyaiy</i>	<i>tyā</i>
Acc.	<i>tyaiy</i>	<i>tyā</i>	<i>tyā</i>
Gen.		<i>tyaišām</i>	

The nom. sg. of the relative in pIE, as given above, is represented in the nom. sg. *hya<sup>b</sup> hyā tya<sup>d</sup>*. Other forms follow the usual *-o/-ā-* declension, except the following: inst. *tyanā* has the ending *-na* seen in Skt. *yéna*, Av. *kana* (to Av. *ka-* 'who?'); nom. pl. *tyaiy* has pronom. pl. *-i*, like Skt. *yé*, from pIE *\*ioi*, and this form, properly masc. nom., may function also as masc. acc. and as fem. nom. (alongside the regular fem. nom. *tyā*, Skt. *yās*); gen. pl. *tyaišām* has plural *-i* + pronominal gen. pl. *-šām*, cf. Skt. *yéšām*, and is used for the fem. as well as for the masc. (no extant masc. example).

While the stem with original initial *s* was originally limited to the nom. sg. masc. and fem., there is an occasional extension of the *s-* to other forms. In OP we have the absn. *hyā*, from pAr. *\*sṣād*, as adverb in *hyā dawaištam* and in *hyāparam*.

§199. THE DEMONSTRATIVE PRONOUN 'THIS' was in OP a combination of two stems, each in two forms: *i-* and *ima-*, *a-* and *ahyā-*: their developments are described below. The extant forms are:

	Masc.	Fem.	Neut.
Sg. Nom.	<i>iyam</i>	<i>iyam</i>	<i>ima</i>
Acc.	<i>imam</i>	<i>imām</i>	<i>ima</i>
Inst.	<i>anā</i>		
Loc.		<i>ahyāyā</i>	
Pl. Nom.	<i>imaiy</i>	<i>imā</i>	
Acc.	<i>imaiy</i>	<i>imā</i>	<i>imā</i>
Inst.			<i>imaibiš</i>
Gen.	<i>imaišām</i>		

The stem *\*i-* is that seen in Latin *is*, nt. *id*, pIE nsm. *\*is*, nt. *\*id*; the nsf. was presumably *\*i*, which, with the addition of (Ar.) *-am* from other pronouns, gives Skt. nsf. *iyám*, OP nsf. *iyam*, used also as masc. The asm. was pIE *\*im*, which, with the same affix, is Skt. *imám*, OP *imam*, Av. *imom*; from this a stem *ima-* was extracted, declined according to the pronominal endings: nt. *\*imad*, OP *ima*, Av. *imaṭ*; nfm. *\*imai*, OP *imaiy*, Av. *ime*. Other forms from this stem are regular in case-formation, but in Skt. and Av. they are limited to

the nom. and acc. cases; in OP the plural *-i* is kept before the case-ending in the inst. and gen.

From the gsm. *\*ahya* (Skt. *asyá*, GÁv. *ahyā*, LÁv. *ahē*), not found in extant OP, a stem *ahya-* was extracted in OP, to which a fem. stem *ahyā-* was formed, with a lsf. *ahyāyā*, sometimes also *ahiyāyā* (§27). The stem *a-*, on which *\*ahya* was formed, is PIE *\*e-*, seen in Lt. nt. *\*ed* in *ec-ce* 'lo'; on it also is formed the ism. OP *anā*, GÁv. *anā*, with the inst. ending *-na* seen in *tyanā*.

§200. THE DEMONSTRATIVE PRONOUN 'THAT' was in OP *awa-*, found also in Av. (Skt. only gen. du. *avóṣ*). The extant OP forms are:

	Masc.	Fem.	Neut.
Sg. Nom.	<i>awa</i>		<i>awa awaš-ciy</i>
Acc.	<i>avam</i>	<i>avām</i>	<i>awa awaš-ciy</i>
Inst.			<i>avanā</i>
Abl.	<i>avanā</i>		<i>avanā</i>
Gen.	<i>awahyā</i>		
Pl. Nom.	<i>awaiy</i>	<i>a[ivā]</i>	<i>avā</i>
Acc.	<i>awaiy</i>		
Gen.	<i>awaišām</i>		

The nt. *awa* is for *\*avad*, with pron. *-d*; *awaš-ciy* is a sandhi-product (§105). Isn. *avanā* has inst. *-na*, like *tyanā* and *anā*. Abl. *avanā* is for *\*awasmād*, with the regular pronominal ending of the abl., as in Av. *ahmāt*, Skt. *asmāt*, to stem *a-*; whence OP *\*awašmād*, remade to *avanā* after inst. *avanā*. The remaining forms show no new peculiarities.

The adverbs from this stem are *awadā*, *avadā*, *awa-parā*, *awahya-rādīy*, *pasāva* (from *\*pasāwa*).

§201. THE INTERROGATIVE-INDEFINITE PIE *\*q<sup>o</sup>-*/*\*q<sup>i</sup>-* occurs only sparingly in OP. Nsm. *kaš-ciy* 'anybody' is *\*q<sup>o</sup>-s*, Skt. *kaś*, Av. *kaś-*, + encl. *-ciy*; asn. *ciš-ciy* 'anything' is *\*q<sup>i</sup>-d*, Gk. *τι*, Lt. *quid*, + encl. *-ciy*: both with Median sandhi-development (§105). Enclitic *-ciy* is PIE *\*q<sup>i</sup>-id*, Skt. *cid*, Av. *-cīl*, Lt. *quid*, etc. See also *aciy*, *yaciy*, *kā*, *-kaiy*, *citā*, *ci[nā]*, *ciyākkara-* in the Lexicon.

§202. THE DEMONSTRATIVE *aita-* 'THIS' was perhaps the demonstrative PIE *\*e-* (§199) + deictic *-i* + demonstrative *\*to-* (§196). In OP we find nsm.-asn. *aita* (Av. *aēta*, Skt. *etād*), apf. *aitā*.

§203. SEMI-PRONOMINAL ADJECTIVES are those adjectives which to some extent are usable as pronouns, and therefore have assumed some of the special declensional forms of pronouns: such are,

for example, Lt. *ūnus*, *alter*, etc., with gen. in *-tus*, dat. in *-i*, like *is*, *quā*, *hic*, etc.

I. OP *aniya-*, Av. *ainya-*, Skt. *anyā-* 'other (of two)'; forms:

	Masc.	Fem.	Neut.
Sg. Nom.	<i>aniya</i>	<i>aniyā</i>	<i>aniya</i> <i>aniyaš-ciy</i>
Acc.	<i>aniyam</i>	<i>aniyām</i>	
Abl.	<i>aniyanā</i>		
Pl. Nom.	<i>aniyai-ciy</i>	<i>aniyā</i>	<i>aniyāha</i>
Acc.		<i>aniyā</i>	
Loc.		<i>aniyāwā</i>	

Of these forms, nsm. *aniya* has *-d*, like Skt. *anyād*, Av. adv. *ainyaṭ* 'except'; *aniyaš-ciy* has the same sandhi-development which has been seen in *awaš-ciy*, *ciš-ciy*. Abl. *aniyanā* developed like abl. *avanā* (§200); cf. Skt. abl. *anyasmād*. Npm. *aniyai-* has the pronominal pl. *-i*; *aniyāha* has the double ending seen in *bagāha*, which it modifies (§10). Loc. *aniyāwā* is equal to Skt. *anyāsu*, with added postposition *-ā*; cf. *maškāwā* (§§175-6).

II. OP *harwa-* 'all' (Av. *haurva-*, Skt. *sārva-*) has nsm. *harwa*; asn. *-haravam* in adv. *fraharavam* (with irregular writing of *-rv-*; §26); lsf. *harwahyāyā*, upon fem. stem *harwahyā-* formed to gsm. *\*harwahyā*, Skt. *sārvasya* (*harwahyāyā* is a defective writing not indicating the length of the vowel), cf. lsf. *ahyāyā* (§199).

III. OP *hama-* 'one and the same' (Av. *hama-*, Skt. *samā-*) has *hama* DB 4.92, either nsm. *hamā<sup>d</sup>* or asn. as adv. *\*hama<sup>d</sup>* with pron. nt. *-d* (in DB 4.90, asn. as adv., if correctly read); gsf. *hamahyāyā*, formed on stem extracted from gsm. *\*hamahyā*, like lsf. *ahyāyā* and *harwahyāyā*.

§204. THE NUMERALS are scantily represented in OP, since they are commonly indicated by numerical signs (§43). There are the following written out in the cuneiform characters:

I. One: asm. *aivam*, Av. *aēva-*, Gk. Cypr. *oiḥos* 'alone', from PIE *\*oiḥos*; probably demonstrative *\*o-* + deictic *i* + suffix *-yo-*, cf. with other suffixes Skt. *ēka-* 'one' from PIE *\*oiḥo-*, and Lt. *ūnus*, Gt. *áins*, from PIE *\*oino-*. PIE *\*sem* 'one' (Gk. nt. *ἓν* 'one', Lt. *sem-per* 'always') is seen in zero form *\*sm-* as first part of OP *ha-karam* 'once', cf. Skt. *sa-kṛt* 'once'; with this, the inseparable prefix

OP *ha-ham-* (see Lex. s.vv.), Skt. *sa-sam-*, is probably identical.

II. Two: nt. *duvītyam* 'a second time' is the precise equivalent of Skt. *dvītya-* 'second'; formed on \**dui-* (as in Skt. *dvīṣ* 'twice') + ordinal suffix *-to-* + a further suffix *-ījo-*. The simpler *dvīta-* seems to appear in inst. sg. as the first part of *duvītā-paranam* 'former with a second', that is, 'one after another'. The stem *anīya-* 'one or other of two, other, rest of' is the same as Skt. *anyā-*; cf. Gt. *anpara-*, Eng. *other*, with the comparative suffix, see §190.III.

III. Three: nt. *çitīyam* 'a third time' and the conjectural asf. *ç[iām]* are related to the stem \**tri-* 'three' in Av. *θritīm* (graphic for *-īyam*) 'a second

time' and to Gk. *τρίτος* 'third', as OP *duvītyam* and *dvīta-* are to the similar cognates (see II); Skt. *tṛtīya-* has the same suffix, but is based on a simpler form of the stem.

IV. Nine: nsm. *navama* 'ninth' is identical with Skt. *navamā-s*, and is formed from the ordinal PIE \**neyn*, Skt. *nāva*, in imitation of \**dekmos* to \**dekṃ*, cf. Skt. *daśamā-s* to *dāśa*, Lt. *decimus* to *decem*. The *-n* in 'nine' is seen in the Lt. ordinal *nōnus*, from \**noyenos*.

V. Hundred: it is possible, but not certain, that the prior part of the province-name *Θata-guš* is the stem of the PIE \**kṛtō-m* '100', cf. Av. *satəm*, Skt. *satām*, Lt. *centum*.

## CHAPTER VI. STEMS AND FORMS OF VERBS

§205. THE VERB IN OLD PERSIAN shows the expected form-categories, though some of them are scantily represented:

Tense-Stems: present, aorist, perfect, with various formations.

Voices: active, middle, passive.

Moods: indicative, subjunctive, optative, injunctive, imperative.

Tenses: present, imperfect, aorist, perfect.

Persons: first, second, third.

Numbers: singular, dual, plural.

Infinitive: present.

Participles: present active, present middle, perfect passive, future passive.

§206. VERBAL PREFIXES.

(a) The following adverbs, occurring also in prepositional uses, are found as verbal prefixes in OP: *ā-*, *ati-*, *abi-*, *upa-*, *upari-*, *ni-*, *pati-*, *parā-*.

(b) The following, not found as prepositions in the extant remains of OP, are found as verbal prefixes: *apa-*, *awa-*, *ud-*, *nij-*, *fra-*, *vi-*.

(c) Double prefixes are perhaps found in two forms: *pati-ā-* in *patiyābaram* DB 1.68, *awa-ā-* in *avājanīyā* DB 1.51, 52; but there are some dubious features even about these, cf. JAOS 62.274-5.

§207. THE PRESENT-TENSE FORMATIONS which are found in OP include the following types, which are discussed in the following sections:

(a) Type of Skt. *āsti*.

(b) Type of Skt. *dādhati*.

(c) Types of Skt. *kṛnōti*, *kṛnāti*, *venati*.

(d) Type of Latin *junxit*.

(e) Type of Skt. *prcchāti*.

(f) Types of Skt. *bhāvati*, *rudāti*.

(g) Types of Skt. *nāhyati*, *drūhyati*.

(h) Types of Skt. *patdyati*, *patdyati*.

(i) Type with suffix *-ye/-yo-*.

(j) Type of Skt. *namasyati* (denominative).

§208. THE PRESENT-TENSE SYSTEM OF TYPE SKT. *āsti*: the stem is the bare root, non-thematic, suffixless, without reduplication; the root has the strong grade in the singular indicative active and in the singular imperative active (except when the personal ending is PIE \**-dhi*), and the zero grade in other forms unless paradigmatic leveling interferes:

PIE \**ei-ti* 'he goes', OP *aitiy*, Skt. *éti*; \**i-te* 'go ye', OP *-itā* in *paraitā*, Skt. *itā*; \**i-dhi* 'go thou', OP *-idiy* in *paridiy*, Skt. *ihā*; inf. \**ei-ṇ* 'I went', OP *-āyam* (for *-am*, §67.II) in *nij-āyam* [up]-*āyam*, Skt. *āyam*; inf. 3d sg. OP *āiš* (on *-š*, §228.III) and *atiy-āiš*; inf. 3d pl. with thematic vowel from 1st sg., OP *-āya* in *apariy-āya*, *-āiša* (on *-ša*, §232.III) in *patiy-āiša*, mid. *āya<sup>ra</sup>tā* from \**ā-āya<sup>ra</sup>tā*.

PIE \**es-mi* 'I am', OP *a<sup>m</sup>miy*, Skt. *āsmi*; \**es-ti* 'he is', OP *astiy*, Skt. *āsti*; \**s-enti* 'they are', OP *ha<sup>ra</sup>tiy*, Skt. *stānti*; pAR. \**s-mas-i* 'we are', Skt. *smās-i*, OP *a<sup>m</sup>mahy* (with full grade of root extended from the singular); inf. \**es-ṇ* 'I was', in antevocalic development Skt. *āsam*, OP *āham*, whence with thematic vowel 3d sg. OP *āha<sup>t</sup>*,

- Av. *awhat*, 3d pl. OP *āha*<sup>n</sup>, Skt. *āsan*, mid. OP *āha*<sup>n</sup>*tā* (and *āha*<sup>n</sup>*ta*, §36.IV.c).
- PIE \**g<sup>h</sup>en-ti* 'he smites', OP *ja<sup>n</sup>tiy*, Skt. *hānti*; \**eg<sup>h</sup>en-t* 'he smote', OP *aja<sup>n</sup>*, Skt. *āhan*; 2d sg. inv. \**g<sup>h</sup>en-dhi*, OP *jady*, Skt. *jaht*; so also 2d pl. inv. \**g<sup>h</sup>en-te*, OP *jatā*, and 3d sg. inf. mid. \**eg<sup>h</sup>en-ṃ*, OP *patiy-ajatā*; inf. \**g<sup>h</sup>en-ṃ*, OP *ajanam*, Skt. *āhanam* (with antevocalic development of *ṃ*, §67.II), whence with thematic vowel 3d pl. OP *-ajana<sup>n</sup>* in *avājana<sup>n</sup>* and perhaps the restored subjunctive 3d pl. *vi-jamā<sup>n</sup>tiy*.
- pAr. \**k(h)an-* 'dig', in 3d pl. inf. OP *viy-aka<sup>n</sup>*, 3d sg. inv. OP *ni-ka<sup>n</sup>tw*.
- pAr. \**pā-* 'protect', Skt. *pāti* 'he protects'; OP 2d sg. inv. *pādiy*, 3d sg. and pl. inv. *pātw pā<sup>n</sup>tw*.
- pIr. \**xšnu-ti*, OP *ā-xšnautiy* 'he satisfies'; inv. \**xšnu-dhi*, OP *ā-xšnudyi* 'hear thou'.
- PIE \**g<sup>em</sup>-* in opt. Skt. *gam-yāt*, OP *ā-jamiyā<sup>t</sup>* (cf. §101).
- PIE \**bhy-ijēt* to root \**bheu-*, in OP *biyā<sup>t</sup>*, cf. Av. *buyāt* from \**bhu-ijēt*; on loss of *-y-*, §114.
- §209. THE PRESENT-TENSE SYSTEM OF TYPE SKT. *dādhati*: the stem is the root, non-thematic, suffixless, with reduplication; ablaut grades of the root the same as in the preceding class:
- PIE \**dhē-* 'put, make'; inf. OP *adadā*, Skt. *ādadhāt*, Gk. *éridhē*.
- PIE \**dō-* 'give'; inv. OP *dadāt*, Skt. *dādātu*, Gk. *didōra*.
- PIE \**stā-* 'put, (mid.) stand'; inf. mid. OP *a<sup>n</sup>ištata*, Skt. *ātiṣṭhata*, both probably shifted to thematic class (§213); Gk. *ισταρο*.
- PIE \**dhī-* 'think, see', in inv. Skt. *dīdīht dīdīht*, OP *dīdiy* (with hapology, §129).
- §210. THE PRESENT-TENSE SYSTEM OF TYPES SKT. *kṛṇōti*, *kṛṇāti*, *vénati*: the stem is the root in the zero-grade (usually), with a suffix beginning with a nasal.
- I. The suffix is *-neu-*, varying with *-nu-*:
- pAr. \**kṛ-nau-* in OP *kunautiy*, Skt. *kṛṇōti*; inv. OP *kunautw*, Skt. *kṛṇōtu*; inf. OP *akunavam* (§226.II), *akunauš* (§228.III), Skt. *ākṛṇavam* *ākṛṇot*; with thematic vowel, OP 3d pl. act. *akunava<sup>n</sup>*, mid. *akunava<sup>n</sup>tā*.
- pAr. \**dhr̥š-nau-* in OP *adaršnuš*, Skt. *ādhr̥ṣṇot*.
- pAr. \**vr̥-nau-* in Skt. *vr̥ṇōti*; thematic in OP inf. mid. *avarnavatā*, inv. mid. *varnavatām*.
- pAr. \**tu-nau-/nu-* in pres. \**tunauti*, OP ptc. nsm. *tunw-ā*, asm. *-a<sup>n</sup>lam*, gsm. *-a<sup>n</sup>tahyā*.

On *damu[taiy]* as alternative to *damu[patiy]*, see §216; on *ā-xšnautiy* and forms, see §208.

II. The suffix is *-nā-*, alternating with *-nə-*:

OP inf. *adīnā<sup>t</sup>* 'he took away', cf. Av. *zināiti* 'he harms'; OP 1st sg. *adīnam* with *-nā-* as though thematic.

OP inf. *adānā<sup>t</sup>*, Skt. *djānāt* 'he knew', from \**ǵh<sup>n</sup>-nā-*; unless from \**ǵh<sup>n</sup>ō-nā-* with full grade of the root and dissimilative loss of the prior *n* (§68).

III. The suffix is thematic *-ne-/no-*:

PIE \**ueid-ne-/no-* in OP *vaināmyi* 'I see', 3d sg. *vainātiy*, mid. *vainatāiy*; Skt. *vēnāmi* 'I desire', *vēnati*, *vēnate*.

§211. THE PRESENT-TENSE SYSTEM OF TYPE LATIN *jungit*: the stem is the root in zero grade, with an ablauting infix *-ne/-n-*: Skt. *yu-nā-k-ti* 'he joins', pl. *yu-n-j-ānti*, to root \**ǵueg-/\*ǵug-*. In some languages the paradigm is leveled to the form of the plural, and the stem is made thematic; thus Latin *jungit*, *jungunt*. This is the situation in the Aryan root \**mauth-*, Skt. pres. *muṇṭhate<sup>t</sup>* 'he runs away', OP inf. *amu<sup>n</sup>ṭa<sup>t</sup>* 'he fled', and probably in Ar. \**paīs-*, Skt. pres. *piśāti*, OP 3d sg. inf. *apiṭa<sup>t</sup>* (DSf 54).

The same formation is seen in Skt. *vi-n-dāti* 'finds'; the present participle OP *vi<sup>n</sup>da<sup>t</sup>* is seen as the prior element of *Vidaḥarnā* 'Intaphernes'.

§212. THE PRESENT-TENSE SYSTEM OF TYPE SKT. *prcchāti*: the stem has the thematic suffix *-ske-/sko-*, the root being normally in a zero-grade; but some verbs have the full grade extended from other stems:

PIE \**prek-*, pres. \**prk-ske-*, OP *parsāmyi* 'I punish', Skt. *prcchāmi* 'I ask'; inf. OP *aparsam*, Skt. *āprccham*; inv. OP *parsā*, Skt. *prcchā*.

PIE \**ǵem-* 'reach out', pres. \**ǵm-ske-*, Skt. *yācchati*; inf. mid. OP *āyasa<sup>n</sup>* (to *ā-yam-*).

PIE \**tres-* in Skt. *trāsati*; pres. \**tṛs-ske-*, OP *tarsatiy* 'he fears', pl. *tarsa<sup>n</sup>tiy*, inf. *atarsa<sup>n</sup>*, pl. *atarsa<sup>n</sup>*, inj. 1st sg. *tarsam*.

PIE \**ǵnō-*, pres. \**ǵnō-ske-*, Lt. *gnōscit* 'he learns'; subj. OP *xšnāsāhy xšnāsātiy*, Lt. (fut. ind.) *gnōscēs gnōscet*.

PIE \**ṛ-* in pres. \**ṛ-ske-*, Skt. *ṛcchāti*; \**re-ske-*, NPers. *rāsād*, inf. OP *arasam* 'I went', 3d sg. *-arasa* in *parārasa<sup>t</sup>*.

<sup>1</sup> Middle, with cerebral *-ṇth-* of post-classical development.

§213. THE PRESENT-TENSE SYSTEM OF TYPES  
SKT. *bhāvati*, *ruddāti*: the stem consists of the root ending in a thematic *-e/-o-*; the root is regularly in the strong grade if accented, but in the zero-grade if the thematic vowel is accented:

pIE \**bhere-*, Skt. *bhāraṭi*; OP *bara<sup>n</sup>tiy* 'they bear', Skt. *bhāraṇti*; inf. OP *abaram*, 3d sg. *abara<sup>t</sup>*, 3d pl. *abara<sup>n</sup> abaraha<sup>n</sup>*, mid. *abara<sup>n</sup>tā*; inv. 3d sg. *baratw*; in cpds., 3d sg. pres. *ā-baratiy*, 2d sg. inv. *pari-barā*.

pIE \**bheye-*, Skt. *bhāvati*, OP *bavatiy* 'he becomes'; 3d pl. *bava<sup>n</sup>tiy*, inf. *abavam abava<sup>n</sup> abava<sup>n</sup>*.

pIE \**pete-*, Skt. *pātati* 'he flies'; inf. mid. OP *ud-apatatā* 'he rose up, rebelled'.

pIE \**ṣāge-*, Skt. *yaṣati* 'he worships'; mid. OP *yadataiy*, inf. 1st sg. *ayadaiy*, Skt. *āyaje*.

pIE \**reḡhe-* (or \**redhe-*, see Lex. s.v.), Skt. *rahati* 'he leaves'; inj. 2d sg. OP *ava-rada<sup>h</sup>*.

pIE \**ḡeye-*, Skt. *cyāvati* 'he moves'; inf. OP *aṣiyavam* 'I set forth', *aṣiyava<sup>n</sup> aṣiyava<sup>n</sup>*.

pIE \**ke(n)se-*, Skt. *śaṣati* 'he praises', OP *ṭātiy* (§131) 'he says'; inf. OP *abāham, abaha<sup>n</sup>*.

pIE \**neḡe-*, Skt. *nāyati* 'leads'; OP inf. *-amayam* in *frānayam, anaya<sup>n</sup>, anaya<sup>n</sup>*, 3d sg. mid. *anayātā*.

pIE \**mṛde-*, Skt. *mṛddati* 'he crushes', OP *vi-mar-daiy*, inf. *viyamarda<sup>n</sup>* (cf. §44).

pIE \**srḡe-*, Skt. *srjāti* 'he looses'; inf. OP *ava-har-[da]* (unaugmented).

pIE \**snḡe-*, Skt. *stjāti* 'he hangs', or \**senḡe-* (Skt. accent is irregular for root in zero-grade); imp. OP *-ahajam* (or *-aha<sup>n</sup>jam?*) in *frāhajam*.

Also, with strong-grade roots: OP *kana-* in inf. *avākanam*; *gauba-* in mid. *gaubataiy*, inf. *agau-batā*, pl. *agauba<sup>n</sup>tā*; *taxša-* in mid. *ha<sup>n</sup>taxšataiy*, inf. *hamataxšaiy hamataxšatā hamataxša<sup>n</sup>tā*; *yauda-* (Av. *yaozaiti*), in inf. *ayauda<sup>n</sup> ayau<sup>n</sup>*, ptc. *yauda<sup>n</sup>[da<sup>n</sup>tim]*; apparently *vaja-* in *avajam, razθa-* in inv. *razbatw*; perhaps *māva-* in 3d pl. inf. mid. *[am]āvatā*.

pAr. \**kšāja-* in Skt. *kṣāyati* 'he possesses', OP inf. *patiy-axšayaiy* 'I ruled over', ptc. *xšayamma* 'ruling'; unless this is rather pIE \**ḡbā-ḡe-* (§214) to \**ḡbē-* seen in Gk. *κέρηuai* 'I possess'.

pAr. \**ḡvja-*, OP *ḡva-*, see §216.

§214. THE PRESENT-TENSE SYSTEM OF TYPES  
SKT. *nāhyati*, *drūhyati*: there is a suffix *-ḡe/-ḡo-* added to the root either in a strong grade or in a zero grade; this suffix may be identical with the

passive suffix (§220), which is accented, and therefore this class may be merely passives which have assumed active (or middle) meanings, usually accompanied with a shift of the accent to the radical syllable. Those with strong-grade roots seems to be later formations, made from the roots by direct addition of the unaccented suffix.

pIE \**dhreugh-*: pAr. \**drughja-* in Skt. *drūhyati* 'he deceives', OP inf. *adurujiyā<sup>n</sup>*, pl. *adurujiyāša<sup>n</sup>*.

pIE \**men-*: pAr. \**manja-* in Skt. *mānyate* 'he thinks', OP 1st sg. *maniyaiy*, inf. *amaniyaiy*.

pIE \**mer-*: pAr. \**mriḡe-* or \**mrije-* in Skt. *mriyāte* (with accent of passive) 'he dies', OP inf. *amariyatā*.

pIE \**ḡhūā-* (vowel quality indeterminate) and \**ḡhūā-*: pAr. *zhya-ya-* 'call' in Skt. *hvāyati*, OP inf. *patiy-azbayam*.

pAr. \**pā-* 'protect', and \**pa-ya-* (from pIE \**pā-*), in OP 1st sg. inf. *apayaiy*, 2d sg. inv. mid. *pati-payā<sup>n</sup>uwā*.

pIE \**ḡhedh-* in pAr. \**ḡadhja-*, Av. *jaiḡeyiti*, OP *jadiyāmiy* 'I entreat'.

pAr. \**as-* 'throw' in \**ašja-*, Skt. *āsyati*, OP inf. mid. *[ā]hyatā*.

pIE \**stā-* in pAr. \**stā-ja-*, OP inf. *-astāyam* in *niyaštāyam* 'I enjoined' (on §117) and *avāstāyam* 'I restored', 3d sg. *niyaštāya<sup>n</sup>*.

pIE \**mē-* 'measure' in pAr. \**mā-ja-*, Skt. *māyate*: OP inf. mid. *-amāyatā* in *frāmāyatā* 'commanded'.

On OP *xšaya-*, see §213.

§215. THE PRESENT-TENSE SYSTEM OF TYPES  
SKT. *pātāyati*, *patāyati*: this is an original causative formation with the pIE suffix *-ḡe/-ḡo-* attached to the root in the *o*-grade; in Aryan the suffix is *-ai-* and the root has *-ā-* (also in the diphthongs *-ai-* and *-au-* before consonants) or *-ā-* (rarely, *-ī-* or *-ū-*).

pIE \**dher-* 'hold firm': pAr. \**dhāraja-* in Skt. *dhārāyati*; OP *dārayāmiy, dārayatiy*, pl. *dāraya<sup>n</sup>tiy*, inf. 3d sg. *adāraya<sup>n</sup>*, mid. 1st sg. *ham-adārayaiy*, 3d sg. *adārayatā*.

pIE \**klei-* 'lean': pAr. \**šrāja-* in Skt. *śrāyāyati*; OP 1st sg. inf. *niy-ačārayam*, with *-r-* after *dārayatiy*.

pIE \**neḡ-* 'perish': pAr. \**nāšja-* in Skt. *nāšāyati*, OP *vi-nāḡayatiy*, inf. 3d sg. *viy-anāḡaya<sup>n</sup>*, opt. 3d sg. *vi-nāḡayāš*.

pIE \**sed-* 'sit': pAr. \**sādaja-* 'seat' in Skt. *sādāyati*;

OP inf. *nīyaśādayam* 'I set down' (on -ś-, §117).  
pAr. \**aiś-ai-* in Skt. *eṣayati*; OP inf. *frāśayam*  
*frāśaya'*.

pAr. \**ḡāy-ai-* in Skt. *jāvayati*; OP inf. *abiy-*  
*ajāvayam* 'I promoted'.

pAr. \**tāy-ai-* in OP *tāvayati* 'has strength', inf.  
*atāvayam*.

pAr. \**tar-ai-* 'cross', OP inf. *viy-atarayam* 'I put  
across', pl. *viy-atarayāmā*; cf. Skt. *tārāyati*.

pAr. \**mān-ai-* 'remain', OP inf. *amānaya'*.

pAr. \**gauṣh-ai-* 'conceal', OP 2d sg. inj. *apa-*  
*gaudaya'*; cf. Skt. *gūhāyati*.

pI. \**śadaḡa-* 'seem', Av. *sadayeiti*, OP 3d sg. inj.  
*ṭadayat'*; cf. Skt. *chadāyati chandāyati*.

pIE \**uort-eje-* 'cause to turn', Skt. *varṭayati*; per-  
haps in OP [va]rtāyāy 'I appeal to' (for *-tayāy*,  
§48).

pOP \**ias-ai-* derivative to pI. \**iāsa-* (with pIE  
*-skē-*, OP inf. *āyasatā* 'took as his own'), *nīya-*  
*saya'* 'set down' (for \**nīyayasaya'*, §23.I).

§216. THE PRESENT-TENSE SYSTEM WITH SUF-  
FIX *-ye/-yo-*: this is found with certainty in OP  
only in inj. *sta<sup>m</sup>ba-va<sup>b</sup>* 'revolt!', cf. NPers. *stāmb-*.  
There are two other less certain examples:

OP *danu[pati]*, Skt. *dhanvati*, stem pAr. *dhan-*  
*va-*; unless we should restore OP *danu[layi]*, like  
Skt. *dhanutē*, stem pIE \**dhn<sup>h</sup>-nu-* (varying with  
*-neu-*, §210.I).<sup>1</sup>

OP inv. *ḡivā* 'live!' from pIE \**g<sup>h</sup>i-ye*; OP 3d du.  
inf. *ajīwatam*; cf. Skt. *ḡivati* 'he lives': unless  
\**g<sup>h</sup>iye-* is really a broken reduplication \**g<sup>h</sup>i-g<sup>h</sup>e-*  
to the root \**g<sup>h</sup>ei-* 'live', with dissimilative loss  
of the second *g*, cf. Lt. *vivō* 'I live', *vīvos* 'living',  
Osc. npm. *bivus* 'living', but oEng. *cwicu* 'living',  
NEng. *quick*, Gm. *queck*, *erquicken*.

§217. THE PRESENT-TENSE SYSTEM OF DE-  
NOMINATIVE VERBS (type, Skt. *namas-yati* 're-  
veres', to *nāmas-* 'reverence') has the pIE suffix  
\**-je/-jo-* attached to the nominal stem; the suffix  
originally bore the accent:

OP *avah-ya-* in inf. *patiy-avahiyāy* 'I appealed for  
help', to stem in Av. *avah-* 'help'.

OP *garbā-ya-* in inf. *agarbāyam agarbāya' agarbā-*  
*ya<sup>a</sup> agarbāyatā*; to pAr. \**grbhā-*, cf. Skt. *grbhāyati*;

<sup>1</sup> But pAr. \**dhanva-* may be merely \**dha-nu-* made  
thematic, and therefore properly analyzable as \**dha-nu-*  
+ *-e-*; cf. similar shifts from non-thematic to thematic in  
Greek verbs, such as *δεικ-νβ-ε-τε* 'you show' replacing  
*δεικ-νν-τε*.

OP ptc. *ā-garbīta* has the final stem-vowel of the  
noun changed to *ī*, as in the next example.

OP *draujī-ya-* 'regard as a lie' in 2d sg. subj.  
[*drau*]jīyāhy, to *drauga-* 'the Lie', with change  
of the final stem vowel to *ī* before the suffix;  
cf. Whitney, Skt. Gram. §1059d.

§218. THE AORIST-TENSE FORMATIONS found in  
OP are few and scattering.

I. The Sigmatic Aorist is seen in *nīy-apaiśam* 'I  
inscribed' (or *-apiśam?*)<sup>1</sup>, to root *paiθ-*, pIE \**peik-*;  
in mid. *adarśiy* 'I held', to root *dar-*, pIE \**dher-*;  
perhaps in pass. *-asahya* in *frāśah[ya]*. The aorist  
endings 3d sg. *-s-t*, pl. *-s-nt*, may also be respon-  
sible for the endings of *aiś -āiśa<sup>a</sup>* to root *ay-*  
(§208); *akunauś akunawaśa* to *kar-*; *adurujiyaśa* to  
*durujiya-*; *abaraha* to *bar-*.

II. The Strong or Suffixless Aorist, with strong  
grade of the root in the singular indicative active  
and zero grade in most other forms, is seen in OP  
*adā* 'he created', Skt. *ādhat*, pIE \**édhēt*; OP *akutā*  
'he made', *akumā* 'we made', *kuśuā* 'make thou',  
= Skt. *ākṛta*, \**akṛma*, \**kr̥ṣva*. Possibly also there  
belong here the inv. *ḡivāy*, if it is to be explained  
without haplogy (§209), and the opt. *ā-jamiyā*  
(§208), which have been taken as presents; per-  
haps also the opt. 2d sg. *biyā<sup>b</sup>*, 3d sg. *biyā<sup>t</sup>* (§223.I).  
On *am<sup>a</sup>r<sup>m</sup>ma<sup>a</sup>* if it to be taken as (*h*)*am-azmatā*, see  
Lex. s.v. *amazamatā*.

§219. THE PERFECT TENSE is attested with cer-  
tainty in OP only by a single form, the opt. *caariyā<sup>t</sup>*,  
from \**qe-qr-ijēt*, with regular reduplica-  
tion and with zero grade of the root in the opta-  
tive. There is a dubious restoration of a 3d sg.  
perf. indie. pass. [*ca*]ar[īyatā] or *caar[īyatā]*, DB  
4.90, for KT's *.ar<sup>r</sup>...*

§220. THE PASSIVE-VOICE PRESENT STEM of  
pIE was formed by the addition of the suffix pIE  
*-je/-jo-*, which is accented in Sanskrit; in OP the  
root regularly has the normal grade, with *-a-*: inf.  
3d sg. and pl. *abariya abariya<sup>a</sup>*, to root *bar-*;  
*ayadīya ayadīya<sup>a</sup>*, to *yad-*; *akaniya*, to root *kan-*  
'dig'; *abahya* and *abahiya*, to *ṭah-*; *avaniya*, to *van-*;  
*ajaniya*, to *jan-*; *akariya akariya<sup>a</sup>*, to *kar-*; pres.  
1st pl. *ṭahyāmahy*, to *ṭah-*; opt. 3d sg. *kariyāiś* to  
*kar-*, *frābiyāiś* to *frāθ-*, 3d pl. *yadiyāiśa<sup>a</sup>* to *yad-*.

<sup>1</sup> Though OP *nīy<sup>a</sup>-paiś<sup>m</sup>* permits either normaliza-  
tion, an s-aorist with strong ablaut-grade is to be ex-  
pected rather than one with zero-grade.

With the vocalism of the present-tense stem: *adāriya*, to *dar-*, pres. *dāraya-* (§215); and the uncertain [ap]i[θ]i[ya] (see Lex. s.v. *paīθ-*). Formed on the present-tense stem: 3d pl. *akunawayā<sup>r</sup>tā*, to *kar-*, pres. *kunav-a-* (§210.I); and the uncertain [a]fiya[si]ya, for \**aliyayasiya* (§215), to *yam-*, pres. *yasa-* (§212). Dubious forms on the sigmatic aorist stem, *frāsah[ya]* to root *sā-* (§218.I), and on the perfect stem, *caxr[iyatā]* or [c]āxr[iyatā], to *kar-*.

It is to be noted that with two exceptions active endings are used, the *-ya-* suffix being adequate to indicate the passive value.<sup>1</sup> The exceptions are *akunawayatā* and *caxr[iyatā]* or [c]āxr[iyatā].

§221. THE FINITE MOODS OF THE VERB IN OP: The indicative is formed directly upon the tense stem by the addition of the personal endings, as is also the imperative. The subjunctive and the optative have special mood-formations, and the injunctive differs from the indicative in lacking the augment; these three moods will therefore be considered separately. The indicative and the imperative will be considered only under the personal endings (§225-§237).

§222. THE SUBJUNCTIVE FORMATIONS: all subjunctives so far found in OP have primary personal endings (§225).

I. Non-thematic stems have subjunctives with the thematic vowel, long in the first person and short in the second and third persons: to *as-* 'be', Skt. *āsāni āsasi āsati*, OP *ahaniy āhy ahaiy*. In *ahaniy* the *ā*, if not an error in writing, is an extension from the other forms; *āhy* is for \**ahahi* (§131).

II. Thematic stems have subjunctives with the long thematic vowel throughout, 1st sg. and 1st and 3d pl. *ō*, other forms *ē*; 2d and 3d sg. and mid. as in Skt. *bhār-āsi-āti-āse-āte*: OP *xšnāsāhy, θāhy* (for \**θahāhy*), *apa-gaudayāhy, [drau]jīyāhy, pati-parsāhy, pari-barāhy* (and *-āh<sup>r</sup>-diš*), *vaināhy; ni-rasātiy, xšnāsātiy, pati-parsātiy, bavātiy, vainātiy; maniyāhaiy* (for variant spellings, see Lex. s.v. 'man-); *maniyātaiy, gaubātaiy, θadayātaiy, yadātaiy, vainātaiy*. 3d pl. act. as in Skt. *-ānti*: OP *vi-nāthayā<sup>r</sup>tīy* (restored form).

<sup>1</sup> The same variation between active and middle endings in forms with the specifically passive stem-suffix is found in the Avesta (Reichelt, *Aw. Elmb.* §615) and in Sanskrit (Whitney, *Skt. Gram.* §774); but in both these languages the middle endings are more frequent than the active endings in the *am-* passives.

III. Certain non-thematic stems which in the indicative have in part been shifted to thematic stems, have subjunctives of the second type: *kar-*, pres. *kunav(a)-: kunavāhy*, mid. 1st sg. *kunavānaiy*, 3d sg. *kunavātaiy*. *var-*, pres. *varnav(a)-: varnavātaiy*. *xšnaw-*, pres. *xšnaw(a)-: ā-xšnawāhy*. *kan-*, pres. *kan(a)-: vi-kanāhy* (and *-āh<sup>r</sup>-diš*). *jan-*, pres. *jan(a)-*: perhaps (restored) 3d pl. *vi-janā<sup>r</sup>tīy*, cf. Av. 3d sg. *janāiti*.

§223. THE OPTATIVE FORMATIONS: all optatives have in OP, as in other languages, secondary endings.

I. Non-thematic stems have optatives with pIE *-iē-* in the sg. act., *-i-* in other forms. The *-iē-* suffix, which alone appears in extant OP, became *-iē-* after two consonants even in pIE; and in OP even *-iē-* was of necessity written *-iyā-* after any consonant except *h* (§25). Examples: 2d sg. *b-iyā<sup>r</sup>*; 3d sg. *b-iyā<sup>r</sup>, ā-jam-iyā<sup>r</sup>, avā-jan-iyā<sup>r</sup>*, perf. *caxr-iyā<sup>r</sup>*.

II. Thematic stems have optatives with *-i-* (as zero-grade of *-iē-*, cf. I) added to the thematic vowel pIE *-o-*, making pIE *-oi-*: cf. 2d and 3d sg. Gk. *φέποις φέποι*, Skt. *bhāreṣ bhāret*. Examples: 3d sg. *vi-nāthayaiš*, pass. *kariyaiš fraθiyaiš*, pass. pl. *yadiyaiša<sup>r</sup>* (for ending, §232.III); 2d sg. mid. with ending *-so*, *yadaišā*, cf. Gk. *φέποιω*.

§224. THE INJUNCTIVE FORMATIONS are merely secondary indicative forms lacking the augment; the following forms have been found in OP: 1st sg. *tarsam*; 2d sg. *stabava<sup>r</sup> apa-gaudaya<sup>r</sup> ava-rada<sup>r</sup>*; 3d sg. *θadayat<sup>r</sup>*. See also §237.

§225. THE PERSONAL ENDINGS OF THE VERB, so far as they appear in extant OP forms, are listed in the table; they are given in the pAr. values, since the pIE values cannot in all instances be determined.

TABLE OF PERSONAL ENDINGS

		Active			Middle		
		Prim.	Sec.	Inv.	Prim.	Sec.	Inv.
Sg.	1	$\left\{ \begin{array}{l} -mi \\ -ni \end{array} \right\}$	<i>-m</i>		$\left\{ \begin{array}{l} -i \\ -nai \end{array} \right\}$	<i>-i</i>	
	2	<i>-si</i>	<i>-s</i>	$\left\{ \begin{array}{l} \text{nil} \\ -dhi \end{array} \right\}$	<i>-sai</i>	<i>-sa</i>	<i>-sya</i> .
	3	<i>-ti</i>	<i>-t</i>	<i>-tu</i>	<i>-tai</i>	<i>-to</i>	<i>-tām</i>
Du.	3			<i>-tam</i>			
Pl.	1	<i>-masi</i>	<i>-ma</i>				
	2		<i>-ta</i>				
	3	<i>-nti</i>	<i>-nt</i>			<i>-nta</i>	

The original quality of the pAr. *a* in some of these endings is seen in certain other languages, especially Greek: 2d pl. *-ta* is pIE *-te*; *-sai -tai* are pIE *-sai -tai*; *-sa*, 3d sg. *-ta, -tam, -nta* are pIE *-so -to -tom -nto*; *-masi* and *-ma* varied between *-e* (as in Gk. Dor. *-mes*) and *-o* (as in Lt. *-mus*); for the *-ā* of *-nai, -sya, -tām* there is no evidence.

A number of variations from the pIE formations will be discussed in the following sections. The imperative endings are taken up collectively in §237.

It is to be noted that certain of these endings cannot be distinguished in the OP syllabary. The endings *-ti -tai -nti* are all written *-tiy<sup>a</sup>*, though normalized *-tiy -taiy -ntiy* on the evidence of the context or of other forms of the same verb; *-ta* and *-nta* are both written *-ta*, and normalized *-tā* and *-ntā*; *-s -t -nt* are all unrepresented in the writing if preceded by *-ā*, though, like the *n* in *-nti* and *-nta*, they may optionally be represented by raised letters in the normalization. The subjunctive endings *-ni* and *-nai* also are both written *-niy<sup>a</sup>*, though normalized *-niy* and *-naiy*. Further, the Aryan change of both pIE *e* and pIE *o* to *a* makes it impossible to distinguish the quality of the thematic vowel by citation of Aryan forms merely; for this purpose, Greek cognates have been cited.

#### §226. THE PERSONAL ENDINGS OF THE FIRST SINGULAR ACTIVE.

I. The primary ending *-mi* is attached directly to non-thematic stems, as in pIE *\*es-mi*, Skt. *āsmi*, Av. *ahmi*, OP *amiy*. The ending of thematic stems was the lengthening of the thematic vowel *o*, as in Lat. *ferō*, Gk. *φέρω*; but to this *-ō* there was added in Aryan the ending *-mi*, as in Skt. *bhāvā-mi*, Av. *barāmi*, OP *pari-barāmiy*. Other OP examples: *parsāmiy*, Skt. *prcchāmi*; *dārayāmiy*, Skt. *dhārāyāmi*; *vaināmiy*, *jadīyāmiy*.

The ending *-ni*, of unexplained origin, was similarly added to the 1st sg. subj. in *-ō*: pIE *\*es-ō* to *es- 'be'*, Gk. Ion. *ἔω*, Lat. (fut. ind.) *erō*; but Skt. *āsā-ni*, OP *ahāniy* (with *ā* perhaps after the *ā* of other forms, as in 3d sg. *ahāiy*).

II. The secondary ending *-m* was attached directly to the thematic vowel *-o*: pIE *ehero-m* 'I bore', Skt. *ābharam*, Gk. *ἔφερον*, OP *abaram*; Skt. *āprccham*, OP *aparsam*. Other OP examples: *niy-āśādayam*, *frānayam*, *arasam*, etc. When attached to non-thematic stems, the *-m* became vocalic, and developed in pAr. to *-am*, a generalization of the antevocalic value, furthered by the identity

with *-am* from thematic *-o-m*: pIE *\*es-ṃ* 'I was', Skt. *āsam*, OP *āham*; Skt. *akṛṇavam*, OP *akunavam*; OP *frājanam avājanam*, *viyakanam*, *avākanam*, *nij-āyam* [u]pāyam upariy-ā[ya]m, aor. *niy-apaišam*. The suffix *-nā-* has become *-na-* in *adīnam*, in imitation of other first persons.

#### §227. THE PERSONAL ENDINGS OF THE SECOND SINGULAR ACTIVE.

I. The primary ending *-si* was attached directly to the present stem, whether thematic or non-thematic, but happens to occur in OP only in subjunctive forms: *pai-parsāhy* (on *-hy*, §37), Skt. *prcchāsi*; *pari-barāhy* and *-barāh-diš* (§136), *vikanāhy* and *-kamāh-diš*, *kunavāhy*, *xšnāsāhy*, *āxšnāvāhy*, *vaināhy*, *apa-gaudayāhy*, [drau]jīyāhy; *thāhy* for *\*thāhy* (§131); *āhy* for short-vowel subjunctive (§222.I) *\*ahahy* = Skt. *āsasi*.

II. The secondary ending *-s* is seen in Skt. *ābharas*, Gk. *ἔφερες*; in OP it happens to occur only in injunctive *ava-rada*, *apa-gaudaya*, *stabava*, and in opt. [biy]ā, in which it is not written because it is final after *ā* (§36).

#### §228. THE PERSONAL ENDINGS OF THE THIRD SINGULAR ACTIVE.

I. The primary ending is *-ti*, before which the thematic vowel is *-e*: pIE *\*bheyeti*, Skt. *bhāvati*, OP *bavatiy*; pIE *\*bhereti*, Skt. *bhāratī*, OP *ābaratiy*; OP *tarsatiy*, *dārayatiy*, etc.; *thāiy* for *\*thahatiy* after *\*thāhy* for *\*thahahy* (§131). Non-thematic: pIE *\*esti*, Skt. *āsti*, OP *astiy*; pIE *\*eiti*, Skt. *ēti*, OP *aitiy*; Skt. *hānti*, OP *ja'tiy*; Skt. *kṛṇōti*, OP *kunautiy*; OP *ā-xšnautiy*. Subjunctives: Skt. *bhāvāti*, OP *bavatiy*; Skt. *āsati*, OP *ahatiy*; etc. (§222).

II. The secondary ending is *-t*, which is not written in OP final after *ā* (§40); before *-t* the thematic vowel is *-e*: pIE *\*ebheyet*, Skt. *ābhavat*, OP *abava*; pIE *\*ebheret*, Gk. *ἔφερε*, Skt. *ābharat*, OP *abara*; Skt. *ādruhyat*, OP *adurujīya*; Skt. *adhārayat*, OP *adāraya*; *viyamarda*; unaugmented *avahar[da]*; etc. Injunctive *thadaya*. Remodeled non-thematic, *āha* 'was'. Passive, *abariya*, *adāriya*, etc. (§220). Non-thematic: *adānā* to *xšnā*, *adadā* to *ādā*, *adīnā* to *ādī*, *viy-aka* to *kan*, *avājan* to *ava-jan*; in the last two, radical *n* as well as ending *t* is not represented in the OP orthography. Strong aorist: pIE *\*edhet*, Skt. *ādhat*, OP *adā*. Optatives: Skt. *gamyāt*, OP *ā-jamiyā*; OP *avā-janiyā*, *biyā*, perf. *carriyā*.

III. When *i* or *u* stands before the ending *t*, the OP form has a final *š*. Probably this is a trans-



fer from the sigmatic aorist, where the terminations would be pIE *-is-ŋ -is-s -is-t*, pAr. *-išam -iš -išš*, the identity of second and third personal forms gives an analogy to the 2d sg. imperfect in *-i-š* (no examples extant in OP), whence impf. 3d sg. in *-iš*.<sup>1</sup> After *u* the phenomena are the same.<sup>2</sup> The OP examples are *āiš* 'went', *atīy-āiš* 'went past', *akunauš* 'made' (Skt. *ākṛnot*), *adaršnauš* 'dared' (Skt. *ādṛṣnot*); and the thematic optatives active *vinādayaiš*, passive *kariyaiš frabiyaiš* (cf. for ending Gk. *φέροι*, Skt. *bhāret*).

§229. THE PERSONAL ENDINGS OF THE THIRD DUAL ACTIVE. This occurs in OP only in *ajwatam* '(the two) were living', with ending agreeing with the Greek primary ending in present *φέρετον* '(the two) are bearing', pIE *-tom*. In the corresponding imperfect, Gk. Dor. *ἐφερέτων* and Skt. *ābharatām* both have analogically lengthened vowels.

§230. THE PERSONAL ENDINGS OF THE FIRST PLURAL ACTIVE.

I. The primary ending was pIE *-mes*, as in Gk. Dor. *φέρομεσ*, or *-mos*, as in Latin *ferimus*; pAr. has *-mas* or *mas*, with added deictic *-i*, *-masi*. Both *-mas* and *-masi* occur in Skt., but only *-masi* in Iranian. Thus Skt. *smās* and *smāsi* 'we are', Av. *mahi*, OP *a<sup>h</sup>mahy* (*a-* after sg. *a<sup>h</sup>mīy*, *astiy*, as also in Gk. *ἐσμέ-ν*). The same ending stands in OP *bahyāmahy* 'we are called'.

II. The secondary ending was pIE *-me* or *-mo*, as in Gk. *ἐφέρομε-ν*, Skt. *ābharāma*; OP examples, impf. *viy-atarayāmā*, aor. *akumā*.

§231. THE PERSONAL ENDINGS OF THE SECOND PLURAL ACTIVE. The only OP forms are two infinitives as imperative: *paraitā* 'go ye forth' from *parā + itā*, cf. impv. Skt. *itā*, Gk. *ίτε*, Lat. *ite* (with strong grade of root from singular); *jatā* 'smite ye', Skt. *hotā*. The ending is pIE secondary *-te*.

§232. THE PERSONAL ENDINGS OF THE THIRD PLURAL ACTIVE.

I. The primary ending was pIE *-nti*, which was attached to the thematic vowel *-o-*: pIE *\*bheronti*, Gk. Dor. *φέρουσι*, Skt. *bhāranti*, OP *bara<sup>n</sup>tīy*; Skt.

*bhāvanti*, OP *bava<sup>n</sup>tīy*; Skt. *dhārayanti*, OP *dāraya<sup>n</sup>tīy*; OP *tarsa<sup>n</sup>tīy*; (restored) subjunctives with *-ō-*, OP *vinādaya<sup>n</sup>tīy*, *vijanā<sup>n</sup>tīy* (cf. §222.III). When attached to an unaccented non-thematic stem, the *-nti* was of necessity accented, and took the form pIE *-énti*: pIE *\*s-énti* 'they are', Osc. *sent*, Gk. Dor. (enclitic) *ἐντι*, Skt. *sānti*, OP *ha<sup>n</sup>tīy*. It is to be noted that the OP script does not permit the writing of the nasal in the ending (§111).

II. The secondary ending was pIE *-nt*, which lost the final *t* in pAr. unless sentence phonetics permitted its retention; for in pAr. only a single consonant could stand at the end of a word. In OP, also, the final *n* was not written (§112). Before this ending the thematic vowel was *-o-*: pIE *\*ebheront*, Gk. *ἐφερον*, Skt. *ābharan*, OP *abara<sup>n</sup>*; OP *abava<sup>n</sup>*, *anaya<sup>n</sup>*, *ayayuda<sup>n</sup>*, *ašiyawa<sup>n</sup>*, *atarsa<sup>n</sup>*, *agarbāya<sup>n</sup>*; passive *abariya<sup>n</sup>*, *ayadiya<sup>n</sup>*. Non-thematic stems would normally have pIE *-nt* after consonants, becoming pAr. *-at*; but this was commonly replaced by *-an(t)* after the *-am* of the 1st sg.: pIE *\*es-nt*, but Skt. *ásan*, OP *āha<sup>n</sup>*; OP *apariy-āya<sup>n</sup>*, *avājana<sup>n</sup>*.

III. The sigmatic aorist similarly remodeled its 3d pl. from *-sat* (< *-s-nt*) to *-san(t)*; thus in Gk., *s*-aorist *ἐλοσ-αν* 'they loosed', whence strong aorist *ἔδοσαν* 'they gave', and (late Greek) thematic *ἐλάβοσαν* 'they took'. So also in OP, the *-san* spread to some verbs,<sup>1</sup> being regularly *-ha<sup>n</sup>* after *a* and *-ša<sup>n</sup>* after *i*: *abaraha<sup>n</sup>* alongside *abara<sup>n</sup>*, *patiy-āiša<sup>n</sup>*, opt. pass. *yadiyaiša<sup>n</sup>*, and with extension of *-ša<sup>n</sup>* to the position after *a*, *adurujiyaša<sup>n</sup>*, *akunavaša<sup>n</sup>* alongside *akunava<sup>n</sup>*.

§233. THE PERSONAL ENDINGS OF THE FIRST SINGULAR MIDDLE.

I. The perfect tense seems to have had an ending *-ai*, as in Skt. *tutudē*, Latin *tutudē*, with vowel quality determined by Faliscan *PEPARAI* 'peperi'; this looks like the perfect first active *-a*, seen in Gk. *οἶδα*, Skt. *vēda*, + middle ending *-i* (see V, below).

II. Whatever the original ending in primary tenses, this was in Aryan replaced by *-ai*, identical with the ending in the perfect; probably this was facilitated by the change of the thematic vowel *-e/-o-* to Aryan *-a-*, and the *-ai* of the 2d sg. *-sai*, 3d sg. *-tai*, as in Gk. (non-thematic) *ἴδοσαι ἴδο-*

<sup>1</sup> A detailed discussion of this analogical process is given by Pisani, Riv. Stud. Or. 19.89-92. <sup>2</sup> While nothing stands in the way of assuming phonetic development of final *t* after *u* to *š* in OP, it is unlikely that this change occurred after *i*; for OP *-ciy* is from pIE *\*q<sup>2</sup>id*, which is Skt. *cid*, Av. *čīl*, Lat. *quid*. One must assume that the 3d sg. *-š* after *u* is of the same origin as the same ending after *i*.

<sup>1</sup> This analogical extension is treated in detail by Pisani, Riv. Stud. Or. 19.92-3.

ra-, (thematic) φέρη φέρεται. In OP we have pres. *naniyāiy* (= Skt. *mānye*), *patiy-avahyāiy*, and [a]rtaiyāiy (for *-tayāiy*, §48; = Skt. *varṭaye*). The same *-ai* is found as primary ending of non-thematic stems in Avestan and Indic, but there are no OP examples.

III. This *-ai* was used in Aryan also as secondary ending in thematic imperfections, as in Skt. *āmānye*, OP *amaniyāiy*; OP *ayadāiy*, *apayāiy*, *ham-adārayāiy*, *ham-ataxšāiy*, *patiy-axšāyāiy*.

IV. The present subjunctive middle *kunavānaiy* has the active *-ni* remodeled to *-nai* after the 2d sg. *-sai*, 3d sg. *-tai*; in this form *-ānai* is not found in Skt., which has only *-āi*, but in Av. both *-āi* and *-āne* (from *-ānai*) occur.

V. The ending *-i* seems to be original in non-thematic imperfections and aorists in Aryan; cf. Skt. *āneśi* 'I led' to root *nī-*. There is one example in OP, the sigmatic aorist *adaršiy* 'I held' to root *dar-* (normalization *adaršāiy*, with *-aiy* like all other OP 1st sg. middles, is also possible).

#### §234. THE PERSONAL ENDINGS OF THE SECOND SINGULAR MIDDLE.

I. The primary ending was pIE *-sai*, seen in Gk. (non-thematic) *ἵδο-σαι*, Skt. (thematic) *bhārase*. The only OP example is subj. *maniyāhāiy* (with varying orthographies, see Lex. s.v. '*man-*').

II. The secondary ending was pIE *-so*, seen in Gk. (non-thematic) *ἴδω-σο*, with which Avestan agrees (Skt. has a different ending, *-hās*). There is one OP example, opt. *yadaišā*; for formation and ending, cf. Gk. *ἔστω* 'thou wouldst follow', Av. *haxšaēša* (written *hix-*).

#### §235. THE PERSONAL ENDINGS OF THE THIRD SINGULAR MIDDLE.

I. The primary ending was pIE *-tai*, as in Gk. φέρεται, Skt. *bhārate*; this is seen in OP *yadatāiy* (= Skt. *yājate*), *gaubātāiy*, *ham-taxšatāiy*, *vainatāiy*, *varnavatāiy*, and in the subjunctives *yadātāiy*, *gaubātāiy*, etc. (§222).

II. The secondary ending was pIE *-to*, as in Gk. ἐφέρετο, Skt. *ābharata*; this is seen in OP *ud-apatātā* (Gk. *ἐπέτετο*, Skt. *āpatata*), *amayātā* (Skt. *āmayata*), *amariyātā*, *frāmāyātā*, *agarbāyātā*, *agoubatā*, *ham-ataxšatā*, *āyasatā*, [ā]h[iyat]ā, *adā[rayat]ā*, [am]āvātā, passive *akunavayātā*, perhaps aor. (h) *amaxmatā* and perf. pass. *caxr[īyat]ā* or [c]axr[īyat]ā; non-thematic remade to thematic, *avarnavatā* and *a'rištātā*; non-thematic aor. *akutā* (Skt. *ākṛta*) and inf. *patiy-ajatā* (Skt. *āhata*).

§236. THE PERSONAL ENDINGS OF THE THIRD PLURAL MIDDLE. The thematic vowel before the ending was *-o-*, as is shown by the Greek.

I. The primary ending was pIE *-ntai*, as in Gk. φέρονται, Skt. *bhāraṅte*; but this is not attested in OP.

II. The secondary ending was pIE *-nto*, as in OP *abara<sup>a</sup>tā*, Skt. *ābharanta*, Gk. ἐφέροντο; *agoubatā*, pass. *akariyātā*; non-thematic remade to thematic, *akunava<sup>a</sup>tā* 'made', *āha<sup>a</sup>tā* 'were', *āya<sup>a</sup>tā* 'went'.

§237. THE PERSONAL ENDINGS OF THE IMPERATIVE. Apart from injunctive forms, there are imperatives with special endings, here discussed. The injunctives are those used in prohibitions with *mā*: 1st sg. *tarsam* (§226.II), 2d sg. *stabava<sup>b</sup> apagaudaya<sup>b</sup> ava-rada<sup>b</sup>* (§227.II), 3d sg. *ḥadaya<sup>t</sup>* (§228.II); and those used as regular imperatives: 2d pl. *paraitā jalā* (§231).

I. The second singular active of thematic stems is the stem without suffix: *jīvā*, Skt. *jīva*; *pari-barā*, Skt. *bhāra*, Gk. φέρε; *parsā*, Skt. *prcchā*, Lat. *posce*. That of non-thematic stems has an accented *-dhi*, attached to the zero grade of the root: pIE *\*i-dhi*, OP *-idīy* in *paraidīy* and *paridīy*, Skt. *ihī*, Gk. *ἴθι*; pIE *\*g<sup>h</sup>h<sup>2</sup>-dhi*, OP *jadiy*, Skt. *jahī*; OP *pādiy*, *dīdiy* (§129), *ā-xšrudīy*.

II. The third singular active and the third plural active have in Aryan the endings *-tu* and *-ntu*, possibly being injunctives in *-t* and *-nt* with the accretion of an emphatic particle *u* (familiar in Skt.): thematic *baratw*, Skt. *bhāratu*; *raxdatw*; non-thematic *dadāt<sup>w</sup>*, Skt. *dādātu*; *kunaut<sup>w</sup>*, *pāt<sup>w</sup>*, *nī-ka<sup>t</sup>w*; 3d pl. *pāt<sup>w</sup>*.

III. The second singular middle had in Aryan an ending *-sya*: OP *patī-paya<sup>a</sup>-wā*, cf. Skt. *bhārasya*; OP *ku-šwā*, Skt. *kṛ-śwā*.

IV. The third singular middle had in Aryan an ending *-tām*, as in Skt. *bhāratām*; the only OP example is *varnavatām*, a thematic form remade from a non-thematic stem.

§238. THE INFINITIVE OCCURS in OP only in the present active, with the suffix *-tanaiy*, the ancestor of the NPers. infinitive ending *-tān* or *-dān*: *cartanaiy* 'to do', to *kar-*; *ka<sup>a</sup>-tanaiy* 'to dig', to *kan-*, cf. NPers. *kāndān*; *bartanaiy* 'to bear', to *bar-*; *nīpaištanaiy* 'to engrave', to *nī-paiθ-*. The *c-* of *cartanaiy* is evidence for the *-e-* ablaut-grade in this formation (§98); NPers. *kārdān* 'to do' has *k-* generalized from the rest of the paradigm. In form,