H o f f m a n n, Karl, und Bernhard F o r s s m a n : Avestische Lautund Flexionslehre. Innsbruck, Institut für Sprachwissenschaft der Universität Innsbruck, 1996, 8°, 330 S. (IBS, 84.) Geb. 760 öS.

This is the long hoped-for grammar of Avestan, which brings together the present insights on Avestan, which are to such a large part due to Hoffmann and his school; I think that, beside Hoffmann, especially Johanna Narten must be mentioned here. As is well-known, the new approach to Avestan studies is due to Hoffmann, who, however, did not live to see the book published. We are indebted to Forssman for seeing the work to completion.

The set-up of the book is traditional: after an introduction and a chapter on the writing system follow the phonology and the morphology, the latter two subjects organized as usual for an ancient Indo-European language. Very helpful is an extensive (247-282) bibliography per section, which we owe to F. Finally there is a complete index of forms (283-330).

The presentation is perfectly clear; a detailed table of contents helps the reader to find his way; extensive cross-references further make the book easy to consult. There are many overlaps, but I agree with the authors that this is hard to avoid; and it may be instructive.

The main thing one might regret is that the book is not more comprehensive. While the phonology, in connection with the interpretation of the orthography, is quite comprehensive – it is of course of basic importance –, comments on the forms are rather limited. In the introduction it is said that completeness is not aimed at, and this is understandable in the case of a language where much is still unclear. But it is often not specified what is left out. One consequence is that it is not always clear how many forms are attested in a given category: sometimes the examples comprise simply all the evidence there is, but one cannot know.

Especially the introduction might have been much larger to my mind. On Proto-Iranian almost nothing is said (32). On the date of Gathic e.g. there is just a statement, no discussion (33). The characteristics of Gathic, and the position of the dialect, are not discussed (33), there is no attempt to reconstruct the Gathic stage, nor are the developments after Gathic given. What I miss here, is a discussion of the (linguistic character and) value of the different texts. Now only some "wichtige Texte" are mentioned. Metrics are hardly discussed, the metrics of post-Gathic texts are not mentioned at all. One would like to find more about the development of the language, and about the texts written by people who had no active command of the language. The - perhaps - important point of different dialects is not elaborated upon (35, B2). I would have liked to see a discussion of the manuscripts. I would have liked to hear more about the use of Middle Iranian languages in interpreting the text and establishing the forms. A complete list of editions of texts with commentary would have been most welcome. It is clear that this does not diminish the value of the book, but one always wants more.

I shall now make some remarks on specific points. References are to pages, with the sections on that page in brackets.¹

35 (B2). I found dialect questions mentioned on p. 53(f), 62(db), 86(top), 87(f), 96(cg, ch), 101(ce), 102(dd), 106(ca), 107(ea).

At the end of the section on the writing system (39-46) one would have wanted a conclusion about the phonemic system of the language. If I am not mistaken, the word phoneme does not occur in the book. – The section on the origin of the writing system seems to me to be less useful for the reader (46-50).

44 (A2). The sign a should now be written without macron, as there is no opposition with the sign with macron, and the latter is typographically very difficult. (Special characteristics of one manuscript should not make our transcriptions unnecessarily difficult.)

Phonology:

51 (A). Anaptyxis. It would be useful to refer to the colouring of the anaptyctic vowel by surrounding sounds (rather than stating "daneben $\bar{\sigma}$ *a* \bar{o} *i*"), as on p.91 (bb): $\bar{\sigma}r\bar{\sigma} > \bar{\sigma}r\bar{\sigma}$.

¹ For comments I am indebted to Kortlandt, Lubotsky, Schrijver, Boutkan, Cheung and De Vaan.

52. A development $- \partial r \mu i - \rangle - \partial u r i - \rangle \overline{u}^{i} r j$ is assumed. I think that *r had not become ∂r , see on 90(aa). So I think that the (subphonemic) ∂ was coloured to u before the following μ after which the latter was no longer pronounced. This is confirmed by the fact, pointed out to me by Lubotsky, that several manuscripts write $br\overline{a}truiia$ (which is another realization of /-ruia/). The length of the u is to my mind due to the epenthesis (Beekes 1988, 42).

52. It is suggested that in **soronao-* the (second) ∂ was replaced by the u of *sru-ta-* etc. It seems to me improbable, even impossible, that an anaptyctic, automatic, i.e. non-phonemic vowel is replaced by another. Suppose r had become or (and not ∂r as is assumed in this book), it would mean that /*sornu-*/ was replaced by /*sorunu-*/. Rather /*sr-*/ was replaced by *sru-*, and the anaptyctic vowel (the first ∂) became u under the influence of the following u. That this is the right interpretation is shown by the fact that from the root *sri-* we have *s(i)rinu-*, where the first vowel is in several forms not written; this means that it is not a phoneme.

52. $-a^{i}nti$; but note the variant $-\partial nti$.

53 (f). $\beta > \mu$ is earlier than *i*-epenthesis, for *auui* cannot go back to $a^i\beta i$. I think that here the opposition between phonetics and phonology must be considered. $|a\beta i| [a^i\beta i] > |a\mu i|$ which is realized as $[a\mu i]$ because *uu* does not show *i*-epenthesis. So no chronological conclusions can be drawn from the subphonemic epenthesis.

53 (f). A "Lautwandel von $t \partial r(\partial)$ (< tr) zu $tr(\partial)$ ($\bar{a}tr\bar{\partial}m$)" is not acceptable: Avestan does not drop a (full, phonemic) vowel because it stood between t and r. We have a vocalic r, which is normally written $\partial r\partial$; this means that you have a short, probably optional, vowel-like segment before and/or after the r. After t, the r follows so quickly (because the two sounds are homorganic) that (often) no vocalic feature is heard. Thus in *-striieiti* no vowel segment (which would have been coloured *i* through influence of the following *ii*) is heard, whereas you have one in *kiriieiti*. In both cases we have Cry- with a slightly different realization. No chronological conclusions can be drawn. (Of course, $t\partial r$ for /tr/ is p os s i b l e [exactly because it is non-phonemic]: $st\partial r\partial ta$ -.)

54 (c). That long vowels were more open is possible, but it has to be shown how this could explain the irregularity of the reflexes. – In Leiden, Michiel de Vaan is preparing a dissertation on the subject.

62 (b). The explanation of the short *a* in Skt. ánas etc. is that h_3e - had not yet merged with **o*, so that Brugmann's law did not apply, as was shown by Lubotsky (cited p. 253).

62 (db). That am is sometimes written ∂m in inlaut probably shows that we have to do with a phonetic, non-phonemic colouring; before final -m the influence of the -m was of course stronger. Dialects are not to be invoked.

64 (f). That the $-\bar{o}$ in compounds (for -a) was generalized from forms with a labial, as in *daēuuō*. *zušta*- seems improbable to me.

66-67 (hd). "die unrichtige Schreibung **nərāuš*" will be a rendering of the (phonetic, non-phonemic) influence of the *š* on the preceding nasalized vowel.

67 ff. The diphthongs are treated in a strange place, under *a*.

68 (ic). The transition $-uue > -uii\bar{e}$ can best be interpreted as the replacement of the glide u by a glide determined by the following \bar{e} . We may compare OIr., e.g. *biuu* from **bhiō*. It is not necessary to assume a development of $ai > \bar{e} > i\bar{e}$; this is shown by the fact that we have e.g. $mr\bar{u}it\bar{e}$, not * $mr\bar{u}iti\bar{e}$. See on 69 (jc).

69 (ja). The remark that au is represented by *ao* "also durch *a* und geschlossenen *o*-Laut" is rather disturbing; the *u* has become more open.

69 (jb). Note that the two reflexes of **au* are parallel to the two of **ai* (Beekes 1988, 36). Thus it seems certain that $\bar{\sigma}u$ is the reflex in closed syllables.

69 (jc). I assume that *-au first became $-\bar{o}$, which was later diphthongized to $-u\bar{o}$. A metathesis $o\mu > \mu o$ is improbable. See Beekes, 1998.

71 (b). That $-\bar{a}a\underline{t}$ -ca points to an accentuation $a\dot{a}$ seems improbable. The notation indicates that the stress caused extra length and there was a short off-glide, as in Dutch when one calls *Jan* (with short *a*) with much emphasis: *J* $\dot{a}an$ (it may even become *J* $\dot{a}han$).

72 (cg). That *- $\bar{a}i$ became $-\bar{a}$ is shown by nom. sg. *haxa* and by the *i*-stem loc. sg. The dative must have been restored.

73 (c). On xšma- see Kuiper, IIJ 34, 1991, 37.

75 (2). The forms with -ao- from *daiŋhu*- are of course secondary, as the word was hysterodynamic.

78 (c). There can be no doubt that $v\bar{a}ta$ - is trisyllabic in Y 44,4.

79 (f). 1 sg. ind. -a-ai, sub. -a-a-ai, if I understand the text correctly, but $is\bar{a}i$ is translated as a subjunctive. There are serious difficulties with the number of syllables in these forms. Cf. Beekes 1988, 92; see also Pirart, MSS 47, 1986, 163.

80 ff. The treatment of the larnygeals is rather disappointing, in view of the unique information provided by Avestan and the amount of work done. Not even the distinction between initial, internal and final syllable is made with regard to the vocalisation. The reflex of laryngeal between vowels is only sketched.

83. I am very unhappy with the transcription ii, uu for earlier y, v. It solves nothing (we still have to decide in every instance whether it was y or iy), while it looks awful and makes reading more difficult and disturbs the comparison with Old Persian and Sanskrit. The two or three cases (which are not given) where there is a difference in anlaut could have been solved by writing (only these two or three) words with ii-, uu-. (I shall here follow the transcription of the book.)

85. In 5 b. and d. the situation is not very clearly presented. Final -ja

becomes LAv. -e (GAv. -iiā). There are two problems. One is the dat.abl.ins. dual -biia, where we find only very rarely $-\beta e$ (there is no **-be). The form -biia has two problems: there is no -e, and -b- did not become - β -. The latter problem holds also for dat. pl. -biiō and ins. pl. -bīš. I see no good explanation for it. Perhaps the two problems are connected. The *ii* may have been restored after the dat. pl. ending. – The other problem is that beside -ahe < *-ahya we also find -atjhe in the pronouns. A glance at the paradigms in Reichelt, pp. 208–212, convinces me that the ijh forms are due to the feminine, where this sound is regular in several forms. Apparently this 'variant' of h was considered typical for the pronouns. So there is, again, no reason for dialect forms. (If this solution is correct, it shows that synoptic paradigms are a necessary instrument.) – The sequence *ia*- in inlaut is discussed in 5c. and partly in 5d. *iviiejah*- is Gathic and belongs to § 34. If *mašiiehe* is analogical, LAv. *vahehī*- may represent the regular development. But I do not have the material.

86 (7c). Note that *zbaiia*- is always trisyllabic in Gathic, which proves $/zu(H)aya-/ < *g^h uH$ -eie-.

88 (b). "nur durch Senkung des Gaumensegels": this means nasalization of the preceding vowel. I am not sure that this is what the authors mean.

88 (d). That -q for $\bar{o} < *-ans$ would be conditioned by a preceding labial seems phonetically improbable.

90 (aa). *r did not become r, i.e. with a phonemic vowel, in Avestan. All instances point to a vocalic r, which was realized with a short, nonphonemic vowel segment in front and/or behind it. See on pp. 52, 53 and hereafter.

91 (bc). That LAv. *arš* from $\partial r\partial s$ has no anaptyctic vowel after the *r* is understandable: we do not have ∂r (two phonemes) > *ar*, but *r* (realized with subphonemic vowel segments) > *ar*.

91 (bd). On $\bar{a}tr\bar{a}m$ see on p. 53. $ptarabii\bar{o}$ cannot be analogical if the a's are non-phonemic (as I assume). A purely phonetic explanation seems obvious: after a consonant cluster the rise of a prop-vowel is to be expected earlier than after (vowel +) single consonant. (*st* did not count as a cluster, the group being homorganic; in *narabii* \bar{o} the *n*- is word initial.)

91 (bd). Comments of Kortlandt and Lubotsky lead me to the following solution of *fraorət*. In **frauərət* the first prop-vowel was coloured to u; then the u disappeared before the u, and **fraurət* = *fraorət*. So the "shift of the syllable boundary" is secondary. Probably it is just a matter of realisation, not of phonemic change.

95 (b). Here, as in several other places, one would have liked to have a table so that one could see the whole complex of the developments at a glance.

97 (cg). I would think that $uiie < * u\mu e < *u\beta e$ proves that $\beta > \mu$ is a 'genuine' Avestan development, not a dialectal one.

97 (cg). I wonder whether there is another explanation for the type $m\bar{a}uu\bar{o}iia < *mauia$ than contamination. The form looks so typically Avestan that one supposes a phonetic development. Suppose that between uu and ii an a was inserted, as the (unexplained) a in bauu- beside buu-; then -aii- could become, as happens more often (p. 68 id.; cf. also 67 ia. on -ai- before u), $-\bar{o}ii$ - $>-\bar{o}ii$ -, which gives $-auu\bar{o}iia$. This would be parallel to $h\bar{a}uuaiia$ -ca, $h\bar{a}uu\bar{o}iia$ from *hauia, p. 57 (top). Cf. also $ga\bar{e}\vartheta\bar{a}$ - $uuaii\bar{o}$ Y 9.8 in good manuscripts. The length of the first a must be considered together with the whole problem of the length of vowels. Influence of $\bar{a}uu\bar{o}iia$ "woe" seems improbable, but the form is interesting. Comparing $auu\bar{o}i$ (*a-uai), $auua\bar{e}t\bar{a}t$ -, voiia- "woe-cry" ($voii\bar{o}$ -tara-), $vaii\bar{u}.barat$ - and $vaii\bar{o}i$ (*vai-ai) it seems obvious to analyse $\bar{a}uu\bar{o}iia$ as *a-uai-a. For *uai cf. Pokorny 1110. So this form also has $-\bar{o}ii$ - from *-ai-; compare also voiia-, where the short o is suprising.

101 (ce). "Dialektal ... ist der jav. Lautwandel von j zu palatalem \mathring{z} ." Could this not simply be a recent development?

102 (dd). $* \acute{zn}$ - becomes \check{zn} - or $x\check{sn}$ -, for which again dialectal differences are assumed. I wonder whether the first form could not be due to analogy after the full grade forms.

103 (dg). The correspondences to Skt. ks, Gr. $\varkappa \tau$ are not systematically treated. Cf. 100 f. If we assume:

	before back vowel:	before front vowel:
PIE $*tk >$	Av. * <i>tk</i>	Av. *tc
PIE *dg >	Av. *dg	Av. dj

and:

PIE * $t\hat{k}$ > Av. \check{s} (\check{s} -, not $x\check{s}$ -) PIE * $d\check{g}$ > Av. \check{z}

we are left with zam- (from zm- < *gm < *dgm-?) and xšaiieiti. Cf. Beekes 1988, 77 ff.

104 f. The type *huš.haxāi*- is explained by Lubotsky as a phonetic development; to appear in the GS Schindler.

107 (ea, eb). The appearance of x^v for *huu* or $y^v h$ is still unclear. I wonder whether the notations indicated a phonological opposition (in spite of the argument that y was a phoneme because of analogical *vayhuš*, p. 106 cb).

108 (eb). If unstressed *huu- became x^v -, one would think of a (conditioned) regular development rather than of a dialectal form.

109. The forms that do not have -m < -n after labial may be due to analogy (*-ant-*, 3 pl.) rather than to the fact that they represent *-nt*, the *-t* of which had probably long since disappeared when this law operated.

110 (3). The loss of the dental before bitiia- is rather loss of the first

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part of an unusual cluster in anlaut than dissimilation; cf. $pt\bar{a} > t\bar{a}$ (and jit-from $d\bar{a}jit$ -, p. 101).

110. The chapter on sandhi is very succinct, as is the next on the accent. Sandhi almost only regards developments before enclitics (which is not usually called sandhi).

112 (A1). With *mahrka*- cf. *marəkaē-ca* with the stress on the syllable before the enclitic.

Morphology:

In the chapters on inflection I miss paradigms that show the different inflectional types. E.g. p. 139, the *t*-stems should have been split up into separate categories. I remember that it took me quite some time as a student to figure out what types you have. So p. 148 with the difficult paradigms with *-ant-*.

118 Dat. I have always wondered how a PII. innovation ($-\bar{a}iia$) could be replaced by the older form. The forms must have coexisted, as in the nom. pl. $-\bar{a}s$, $-\bar{a}sas$ (whatever the origin of the latter form).

125 (4). It is surprising to find the now completely outdated notion 'schleiftonig' (also p.71b).

125 (5) idem for the notation instr. (PIE) $*-\bar{e}/-\bar{o}$ (for $*-e/ob_1$).

129 f., acc. -*aom*: from *-*auəm*. Often one would like to have more comment, but it must be admitted that this might have made the volume twice as large.

130, loc. $šat\bar{o}$: note that this is an *i*-stem.

134, gen. janiiōiš: cf. Skt. pátyau.

134, loc. Add: *šātō*, with the ending from the *u*-stems (Skt. -*au*).

135 (J). On **reh*1*i*- see Lubotsky in the Kuryłowicz Memorial Volume.

137 (B). The nouns in *-anc* require comment.

138 (1). Note that the other stem of maz- is mazant- on p. 147.

142 (1). On zruuan- see Lubotsky, FS Beekes 144 f.

152, acc. Lubotsky points out to me that $f \partial \delta r \bar{o}$ does not exist, as had been seen by Benveniste (see Duchesne-Guillemin, Les composés de l'Avesta, 119).

153 (2). Nom. sg. ntr. -r/-er. The latter form, as far as I know, can nowhere be demonstrated.

153 (2). huuarō bisyllabic in the Gathas: note that initial huu- is always syllabic in the Gathas (Beekes 1988, 15). (On huuō see Beekes 1998.)

155. The loc. sg. *zraiiā* "ist dialektal oder verderbt": this seems another instance where a dialectal form is considered too soon.

160. Several times from here on the bracket is printed too low, e.g. 1.); this is only a technical accident.

162 f. The presentation of these (pronominal) forms is very unclear.

One does not get an overview of the paradigms. Also it still is not clear to me what 1.), 2.) etc. refer to.

171 ff. Note that the pronominal forms of adjectives are found only in Late Avestan.

175. I miss the ordinals and correlatives.

180 (init). So a 3rd pl. pf. ind. in -ārə does not exist.

181, 2 pl. The distribution LAv. primary $-\vartheta\beta e$: secondary $-\vartheta\beta \partial m$ is most remarkable. But the first form occurs only once (Kellens, Verbe 205, 2.4.2.).

181, 2 pl. There is no comment on $-d\bar{u}m$, which is artificial for *-*duuəm* (which became $-\delta\beta \partial m$ in Late Av.), as was pointed out by H.

181. The 3 pl. pf. ind. m. ending -are disappears now: cāxrare is corrected into act. cāxrarə, p. 237.

181. The section on the augment might have been more comprehensive.

181. The ptc. suffices -mna-, -āna are not explained.

183 ff. It is a good idea to give the form in which Bartholomae gives the roots.

187 (10). On *zbaiia*- see on p. 86.

187. "Falls aber *-*aia*- ... für ... *-*aH*-*a*- steht": this is phonetically impossible, and there is no other way to explain this.

199 (c). The akrodynamic type (in the verb) is the only instance where paradigmatic categories (nominal and verbal) are specified.

207. The type $daid\bar{\iota}t$ is not explained.

227 (2c). It seems obvious that $daduii\bar{e}$ derives from $*d^baH-a-d^b\mu ai$. Given our limited understanding of the length of vowels, we can hardly say that *a* is a "Fehler" for \bar{a} .

229 (A). It is a little misleading that the forms given before and after the slash (/) sometimes indicate ablautforms, sometimes allomorphs, sometimes only different notations.

230 (B1a). "Zu aav. *dōrəšt* vgl. §189c": read 189a.

233 (4). "die Stativendung "ai". In the perfect there is no reason to consider this ending as stative (unless one calls all perfect endings stative).
241 (B2). Note that vīduiiē is disyllabic /vidvai/ in Gathic.

243 (10). Note that uz-irəidiiāi must be read $/uz-(H)i(H)_r dyāi/$ in Gathic.

In conclusion, my remarks mainly concern two points. The first is that phonetics are not always distinguished from phonemic questions. This is largely due to the notations, which are more phonetic than usual. The second point is that it would seem to me that dialectal forms are invoked too soon.

It is clear that much remains to be explained in Avestan, which becomes even more clear as soon as one starts reading a text. In the intro-

duction the authors state that not all forms in the grammar may have been correctly identified. But the grammar gives a very welcome, solid overview of what we know of the language. As stated above, I would have liked a more elaborate handbook, but the present grammar is a well documented instrument for further study. It is a monument of Hoffmann's work, for on every page one notes the results of his research.

Addendum

The phonemic system of Late Avestan.

I suggest the following phonemic system for Late Avestan. (All further letters will be discussed in the notes.)

р	f	b	β					
t	θ	d	δ	S	Ζ			
С		j		š	ž	Ś		
k	x	g	γ					
	h	ŋh?	ńh?					
у	v							
r	š							
т	п							
a	i	и	е			(∂)		ą/ą
ā	ī?	ū?		\bar{o}_1	\bar{o}_2	ā	å	

Notes:

 β , γ , δ are largely allophones of b, d, g, but they were probably phonologized (cf. ins. pl. -*bīš*).

t: *t* is the word final allophone.

 \hat{s} (which I propose to write for \hat{s}) is the palatalized \hat{s} of $\hat{s}ata$ -.

 $x: x^{v}$ can be interpreted as a sequence of two phonemes, xv (there is no opposition $x^v : xv$).

g: g unreleased g, only in GAv. $-\bar{\sigma}ng$. gh is mostly an allophone of h between a's; but it is unconditioned in vanhus, manaŋhō.

ijh is the palatalized h between a's: $vaijh\bar{p}$. $-n^{v}h$ can be seen as a sequence of nh + v; cf. the notations nh, nhu.

y: written *ii.* y- and y- are allophones in anlaut.

v: written *uu*. v- is the allophone in anlaut.

š: if this is a voiceless *r*, "mit Reibegeräusch", it could be put beside *r*. From stressed *rt*.

m: *m* is a voiceless *m*, in *hm*. (When written alone, it may stand for */hm/*.)

n: \dot{n} is the allophone before $y_{.} - n$ is the allophone before stops and affricates. e is a phoneme because of $-e < *ai. - \bar{e}$ is not a phoneme; in $a\bar{e}$ it can be re-

garded as an allophone of *i*.

o: is not a phoneme. In the type vohu it can be regarded as an allophone of a, in *ao* as an allophone of *u*.

 \bar{o}_1 : from *-au. At a later stage it became a diphthong uo; see on p. 69 jc. \bar{o}_2 : from *-ah.

 $\bar{\sigma}$: cf. $k \bar{\sigma} r \bar{\sigma} t \bar{\sigma} e$. – I see no reason to assume that $\bar{\sigma}$ was a phoneme.

a: e.g. from -as. There is no distinction between a (only in one manuscript instead of the other sign) and a. a: cf. ta < *tanb. I see no reason to assume an opposition between a and p.

The vowel system is quite unusual; Kortlandt calls it most improbable. It is due to a number of recent changes. Thus several vowels were phonologized because of word final developments. Several phonemes are rare, and will probably disappear soon.

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