The *h*-Future of Pāli with Random Notes on "Historical" and "Irregular" Future Forms

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I. The *h*-future of Pāli certainly is a knotty problem. But taking into account all attested forms together with intermediate stages of formation (as well as for Ardha-Māgadhī), their (probable) chronological relation and geographical distribution, the phonological and morphological processes involved, and the phenomenon of historical orthography,¹ we can reach a solution which remains, unlike a recently proposed alternative, within the probabilities and possibilities of Pāli morphology.² This solution, by contrast, sheds light on some key features of Pāli phonetics, e.g. on *Samprasāraņa*, which will now have to be re-scrutinized.

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¹ The requirements for in-depth study also of the future have been outlined by Caillat (1977/78: 102 [= *Selected Papers*, p. 126]): "All data [should be taken] into account ... [and] phonetics, spelling, morphology should not be separately considered."

² I regret to have to record that, due to an entirely insufficient material base (see below, n. 18), an over-simplistic view of sound changes in Pāli (see n. 114), a complete disregard of chronological facts (see n. 5) as well as an unfamiliarity with the phenomenon of historical orthography (see p. 173), a recent article (Milizia 2011) is flawed in virtually every respect, despite having successfully passed peer review by *JAOS*. It was argued by the author that the $^{\circ}h(i)$ - of the *h*-future is taken from the *hi*-imperative. Despite this argument, he omitted to examine the proof that there is a close relationship between the future tense and the imperative in Vedic, in Sanskrit and/or in Middle Indo-Aryan. With the help of Bloomfield's still indispensable *Vedic Variants*, it can easily be found, for instance, that in Vedic Sanskrit there are only two known cases (one in a Śrauta-, the other in a Grhyasūtra) where the future tense interchanges with the imperative, whereas it frequently alternates with subjunctive, optative, and precative (see Bloomfield & Edgerton 1930: 103). And neither of these two cases involves an imperative in $^{\circ}hi$.

2. The system of the future tense was already obscured in (Vedic) Sanskrit by the differential developments of the suffix.³ While °*i*syawas distinct in all roots which used it (in some of them as °[*aR*]*i*sy*a*-),⁴ °*sya*- was kept intact (as ° $\bar{V}Sya$ -) only in a number of roots ending in a vowel (*dāsyati, esyati, śrosyati*). In roots ending in consonants it fused into the clusters °*msya*-, °(*r*)*ksya*-, °(*n*/*r*)*tsya*- and °(*r*)*psya*-. Hence it was that by the stage of early Middle Indo-Aryan °(*aR*)*issa*-/° $\bar{V}sa$ - °*Vssa*- co-existed with °*kkh*- and °*cch*- (see pp. 170*f*., 181). This variety facilitated the forming of yet another future suffix, which was clearly recognizable as such by its -*h*-. The way in which this happened was familiar — "Neue morphologische Kategorien entspringen letzten Endes meist der Nachbildung von Formen einzelner besonders wichtiger und häufiger Wörter … [wie] *dā* 'geben', *yā* 'fahren' ….." (Leumann 1952: 2) — as will be seen below.

3. As far as we know, the oldest *h*-futures are several forms attested in Asokan Prakrit:⁵ *ehatha*,⁶ SE II Dh Sann, *dāhamti*, PE IV, *hohamti*, PE VII. All of them have a long vowel before the *-h*-. Most interesting is the first of these forms, since *esatha* corresponds in Jaugada. And PE VII has *hosamti* in line 23 besides the cited *hohamti* in lines 25–27, both

³ For a concise overview of the development of the future see Bloch 1965: 212, 227–28.

 $^{^{4}}$ *R* is used as a cover symbol for all liquids.

⁵ Milizia opens his article with a reference to the Asokan forms, only then to completely lose sight of them. All we are told is that "*eha-* and *hoha-* have thematic vowel *-a-* instead of *-i-*" (2011: 32; 33, n. 18). Does that mean that the (probably) oldest forms known to us were secondarily adjusted to the *a-*verbs, thereby losing the °*hi-* they had taken shortly before from the imperative? Milizia might have referred to Smith (1952: 176), the most important study to date of the Middle Indic future, which he has not seen fit to use at all, much to his disadvantage. On Smith's point of view see, however, n. 85.

⁶ Note that neither Pāli nor Ardha-Māgadhī have °*hi*- in the 2 pl. (see pp. 178*f*.). The sole exception in AMg., viz. *dāhittha*, shows the strong influence of the aorist on the future (on which see pp. 174–77).

of which have the $-\bar{o}$ - of the present stem ho(ti). When compared with the latter doublet,⁷ it seems almost certain that *esatha* is to be interpreted as *ēsatha* (cf. *kāsamti*, see pp. 177*f*.).⁸ And there is much to support the suspicion that ${}^{\circ}h(a)$ - and ${}^{\circ}s(a)$ - belong together, and hence are (historically) related.⁹ If this is true, we have first of all to explain the future stems *ēsa-*, *dāsa-*, and *hōsa-*. And the same would hold for Pāli and Ardha-Māgadhī (see pp. 172–74).

Note that in Aśokan Prakrit the *-h*- is never followed by *-i*-,¹⁰ but only by *-a*-.¹¹ Since not only Pāli (apart from the 1st persons)¹² but also Ardha-Māgadhī exhibits *i*-vocalism throughout¹³ (in Pāli with the exception of $k\bar{a}h\bar{a}^{\circ}$ which however stands beside $k\bar{a}hi^{\circ}$,¹⁴ see p.169), it

- ¹¹ Cf. caghatha, SE II Dh J Sann (where, however, only ghatha is preserved).
- ¹² Forms like *ehimi* and *ehima* which the Saddanīti teaches (320,32) are not attested in Pāli texts.
- ¹³ Attested are °hāmi, °hisi, °hii/°hī, °hāmo/u, °hittha/°hiha, °hinti (see Pischel § 520–34). But even in the I sg. °him is to be met with (pāhim "I shall drink", Uttarajjhayana 19,59). And the Prakrit grammarians record the I sg. °ihimi and the I pl. °ihimo (see Pischel § 520).
- ¹⁴ AMg. has $k\bar{a}h\bar{a}^{\circ}$ in the 1st persons and $k\bar{a}hi^{\circ}$ in the other ones (see Pischel § 533).

⁷ As Smith pointed out (1952: 175 n. 2) there is no difference, to all appearances, between *hosamti* and *hohamti* (*pace* Turner 1931: 531 [= *Collected Papers* p. 325]).

⁸ See also Turner's note added to his "The future stem in Aśoka" on p. 330 of his *Collected Papers*: "The change of long vowel + geminate to long vowel + single consonant was an early eastern MI. development."

⁹ Also the side-by-side attestations of dāsāmi (Āyāraṅgasutta [ed. Jacobi. London 1882] I 8,7.2) and dāhāmi (Āyāraṅgasutta [ed. Jacobi. London 1882] II 1,10.1, Utt XXV 6) and dāsāmo (Sūyagaḍaṅga [ed. Bollée. Stuttgart 1988] I 3,2.8) and dāhāmo/u (Utt XII 11 / 16) in Ardha-Māgadhī point to this conclusion.

¹⁰ For this simple reason, Milizia's explanation does not work for the (most probably) oldest example of the *h*-future, which he does not discuss at all (see n. 5).

can be surmised that the °*ha*- of Aśokan Prakrit is either older than °*hi*or that it was retained only in (Sanskritic) writing (presumably under pressure from the indicative). The latter seems to be the case. The available evidence for the vocalism of the oldest *h*-future (°*ha*- in Aś Pkt., °*hi*- in Pāli and AMg.) strongly suggests that originally it was a sound articulated somewhere between *a* and *i*, in all probability — on account of the preceding y — a slightly palatalized *a*, viz. something like /*a*/. And this is confirmed by the comparable fluctuation in the future of (Aś. Pkt.) *vadhati*, MRE I (see p. 179).

4. The co-existence of two etymologically related word forms such as *s*and *h*-futures, as it is given in Pāli, as a rule suggests that one is the "genuine" Pāli form and the other inherited — or taken over — from the proto-canonical eastern language(s): Nom. Sg. of masc. *a*-stems - $o \sim -e$, acc. pl. m. of the same stems $-e \sim -\bar{a}ni$, 3rd sg. opt. *assa* ~ *siyā* (cf. *tanhā*- ~ *tasinā*-).¹⁵ And the available evidence strongly indicates that the *h*-future is an "eastern" element within Pāli. Since it is attested also in Buddhist Sanskrit¹⁶ and Ardha-Māgadhī,¹⁷ it surely belonged to the *koinē gangetique* (see p. 189) from which it was inherited into the languages just named.

¹⁵ See Oberlies 2001 : 2–3.

¹⁶ See BHSG § 31.12–20 (with only a few forms besides those of \sqrt{kr} and $\sqrt{bh\bar{u}}$), to which the following forms from the Patna Dhammapada may be added: (2 sg.) (*up*)*ehisi*, 57, 150, *nehisi*, 276–77, *praccanubhohisi*, 198, *vihāhisi*, 324, (3 sg.) *pajehiti*, 131–32, *vijehiti*, 131–32, *bhijjīhiti*, 259, *abhiśehiti*, 349, *hehiti*, 57, (3 pl.) *ehinti*, 262, *saṃyyamehinti*, 344. Hence this text also shows only forms in °*hisi*, °*hiti* and °*hinti*, all preceded by a long vowel.

¹⁷ Tedesco (1945: 157) erroneously maintained that "kāhāma also appears in Lüders' Old Prākrits" (with reference to Lüders 1911: 57); cf. von Hinüber 2001: §467.

5. To check these preliminary considerations against the evidence of Pāli a hopefully complete list of all attested forms of the *h*-future of (almost exclusively canonical) Pāli texts is presented here:¹⁸

- -- ehisi, Cp 347; Ja V 480,4*; VI 386,6* (B^{ds}/Chatth [cf. Sadd 320,30]); Thī 166; Dhp 236,¹⁹ 238 (up+), 348 (id.), 369; ehiti, Cp 150; Ja I 16,4* (up+) / 6* = Bv II 62 (up+) / 63; Ja II 153,18*; VI 543,15*, 579,11*, 580,18*, 20*; Pv 155; ehinti, Ja I 209,16* (*āgacchissanti*, cty);²⁰ (\langle upehi, Ja V 479,31*; upagamissasi, cty (CSB upesi) \rangle)
- *kāhiti* Ja VI 497,2* (B^d kāhati); vyanti-kāhiti, Dhp 350; sacchi-kāhiti, Ap 49,22; Th 201; kāhinti, Thī 509 (E against all mss. khāhinti "to eat"); *kāhāmi*, Cp 347; Ja II 257,1* (C^s kahāmi) = VI 128,3*, III 47,15*, 225,13* (C^s Bⁱ kahāmi), 535,23*, IV 281,20*, 358,6*, 463,30*, 467,14* (C^{ks} kahāmi), V 308,30*, 254,30*; Th 103; Pv 342; Vv 614, 872; kāhasi, Ja III 175,20*; V 44,2* (°sī), 308,19*; Th 184, 1134 (Chatth kāhisi); Thī 57; Dhp 154; M I 39,25*; Sn 427; Vin I 40,25; kāhati, Ja I 214,10*; II 443,14*; III 99,15*; VI 449,3* (Chatth kāhiti); D III 185,6* (B^{mr} / Chatth kāhiti); kāhāma, Ap 33,15; Ja IV 345,4*; Pv 792; Vv 1257; kāhatha, Ja V 165,29*; kāhanti, Ja II 130,6* = 8*; VI 436,29*, 510,3* (=) ... 17*; *kīrihiti*; Thī 424 (Ee karihiti)²¹

¹⁸ Astonishingly, Milizia is content to cite this and that form culled from secondary literature. Relying on Schwarzschild (1953: 43 [= *Collected Articles* p. 2]), who maintained "that the affix -*h*- is scarcely found [in the gāthās of Pāli] in the first persons except in verbs ending in a long vowel" — without, however, giving an example — he, for instance, erroneously attributes "-*hāmi* (or -*ham*) and -*hāma*" to Pāli (34) and thus overlooks the fact that it is not therefore only classical Māhārāṣtrī that has a mixed paradigm of °*issa*- and °*hi*-forms (34) but also Pāli (see pp. 178*f*.).

¹⁹ On verse b of this stanza see Wright 1995: 438.

²⁰ The verse corresponds to sa tadā vašam eşyati of the Tantrākhyāna (see Bendall 1888: 477).

²¹ On this emendation of the reading of E^e (and Chatth), which, however, was accepted by Geiger § 150 ("he will do"), see Smith (1952: 177, n. 2); cf. also Alsdorf, Thī-ed. App. II p. 242.

— jāyihiti, Ja V 165,21* (jāyissati, cty)

— *jīvihisī*, Ap 67,28, 68,11, 14

- *thāhiti*, Anāg 134 (= Norman, CP VIII 240)
- paññāyihinti, Ja V 178,21* (paññāyissanti, cty)²²
- padāhisi, Thī 303
- *bhāhisi*, Sn 719²³; *bhāhiti*, Anāg 108 (= Norman, *CP* VIII 237)
- anubhohisi, Thī 510 (see below hohisi)
- *lambihitī*, Ja V 302,15^{*24}
- palehiti, Th 307 (see, however, Berger 1961: 34, n. 10)²⁵
- $-p\bar{a}hisi$, Ap 67,24 (Chatth vahisi)²⁶
- parinibbāhisi, Th 415
- (jahāti) hāhasi, Ja III 172,26*
- (harati) hāhiti, Ja VI 500,6*; vihāhisi, Ja I 298,26* (parihāhisi pipāţho); Dhp 379
- hehisi, Th 1141, 1142; hehiti, Th 719; Thī 249, 250, 288, 289, Ap 339,9; Bv II 9; Vv 1006; hohisi, Ja III 450,4*; IV 285,25*

²² Sadd 839,15 records this *h*-future as an alternative besides $pa\tilde{n}\tilde{n}ayissa(n)ti$ (see also n. 30).

²³ Thus to be read with cty (*bhāhisi bhāsissasi pakāsessasi*) against E^e *bhāsihi*.

²⁴ Thus to be read with Fausbøll (*ad loc.* n. 4), Berger 1961: 32 and Chopra 1966: 180 against E^e *lambahīti*. CS^e and Chatth have *lambissatī*.

²⁵ The sense of Ja V 302,8* requires *parikaddhayanti* to be a future (cf. v.l. *parikaddhissanti* of B, which is also the case at Ja V 302,20*, where C has *parikaddhayanti* [while Fausbøll's wording is completely different; see Chopra 1966: 180]). According to Berger (1961: 32–34) it is to be corrected to *parikaddhihinti*. Assuming he is right, this would give us another *h*-future.

²⁶ Smith, Sadd-Index p. 1526 (s.v. pajānanā) and p. 1605 (s.v. pāhisi), proposes to read Ap 67,23 (E^e pajāni hi te) as pajānihite/ti, which he construes as the future of pajānāti that stands side by side with pāhisi, 67,24 (according to Smith the future of pāti "protects"), and jīvihisī, 67,28.

(Chatth both times *hehisi*), 71,23*, 380,4*;²⁷ Th 382–84; D II 144,20; Pv 9; S I 197,14*; *hohiti*, Ja III 328,17*, 425,20*, 26*; IV 162,4*, 163,24*, 440,9* ... 25*, 468,4*; V 394,11*; Th 1137 (Chatth throughout *hehiti*); Ja III 298,2*; Thī 465 (see also above *anubhohisi*).

Attested therefore are (aside from kāhāmi and kāhāma, on which see below) only 2nd and 3rd persons of the singular as well as the 3rd of the plural. Apart from kāha° and hāha°, the vowel following the -h- is always -i-. If we set aside the textually problematic (+parikaddhihinti, +pajānihite,) palehiti and pāhisi (see nn. 25, 26), there are only fourteen verbs which have an h-future. And no less than ten of these have a long vowel before the -h-, which is \bar{a} in seven cases. Except in the cases of kāhati/kāhiti and hāhiti, which stand apart anyhow, and hehiti/hohiti, this long vowel is "inherited" from (Vedic) Sanskrit. Moreover, the above list clearly shows that the *h*-future was not a productive category in Pāli.²⁸ Apart from *thāhiti* (Anāg 134) and *bhāhiti* (Anāg 108), it is only attested in canonical (metrical) texts, and in old ones at that (the Apadāna set aside). And only jāvihiti,²⁹ jīvihisī, paññāvihinti,³⁰ and (°b)hohisi are built upon the present stem (jāyate, jīvati, paññāyate, $[^{\circ}b]hoti$).³¹ Note that, in these *h*-futures, neither \bar{a} nor (apart from [°b]hoti, on which see below) another long vowel precedes the -h-.

- ²⁹ Cf. AMg. °yāhisi / °yāhii (see Pischel § 527).
- ³⁰ It is equivalent to *paññāyissanti*, D II 218,16,25, M I 524,1 (see also n. 22).

²⁷ Alsdorf (1962: 129 [= Kl. Sch. p. 244]) emended *hohisi* to mere *hosi*. And this indeed is the reading of Chatth.

²⁸ Quite different from the Prakrit languages, it is restricted to old texts. And other than Prakrit, Pāli has no *h*-future of verbs like *neti* "leads" or *suņāti* "hears".

³¹ At the same time the pre-suffix stem closely agrees with that of the corresponding aorists: ajāyi(m), — jīvittha / ajīvimha, — paññāyimsu. Note also the proportion hohiti: ahosi = dāhiti: adāsi (see p. 174).

6. That almost all *h*-futures of Pāli belong to stems ending in \bar{a} , e, or o^{32} tallies well with what is found in Aśokan Prakrit and in ancient Prakrit (see pp. 164*f*.).³³ Since these vowels are for the most part inherited ones (see p. 169), it is reasonable to start the explanation of the *h*-future from (Vedic) Sanskrit °*V*sya- (see p. 164).

There are typically two scenarios of its development in Pāli. One is (1) °*Vssa*-, and the other one is (2) °Vsa-.³⁴ The first line of development resulted in the following future forms in Pāli:³⁵

issāmi "I shall go", D II 286,4* (v.l. *essāmi*); *essām*, Ja III 535,19* (BS; CE *esam* [see p. 172]); Th 60 (*pacc*+); Vin I 255,24, (*pacc*+); Sn 29 (*up*+); *essati*, Ja VI 414,27*, 416,17*; Th 192; Dhp 369; S IV 379,19 (*sam*+); *essanti*, Ap 345,6 (*up*+); Ja IV 362,16* (*paccup*+); Dhp 86; S IV 70,12 (*sam*+); V 24,20*; *essati* "will come", Th 191= Ud 41,3*;³⁶ *samayissati*, Ap 126,17³⁷ — *akkhissam* "I shall teach", Ja IV 257,26*; VI 523,21*; Sn 997; Pv 529; Sn 600 (*up*+); Sn 900 (*vy*+); *akkhissati*, Pv 579, cf. *ācikkhissam*, Thī 434; *ācikkhissanti*, D II 104,22³⁸ — *ñassati* "he will know", D I 165,19, 22, 28; *ñassāma*, Ja IV 289,25*; D II 209,23 (cf. cond. *aññassa*, A III 131,22 = V 143,27); *upaññissam*, Sn 701 = 716; *upaññissati*, Ja V 215,17*; *viñňissanti*, A III 347,13* (v.l. *viñňassanti*); Th 703 —

³² As is well known, this was pointed out long ago by Turner (1931: 534 [= *Collected Papers*, p. 327]) and Bloch (1965: 228); see also Pischel § 520 and BHSG § 31.6 / 19. Sakamoto-Gotō (1988: 106) erroneously maintains that "in Pāli the future in *-hi*- is — with the exception of *karihiti* — always formed from a root which terminates in long ā". On *karihiti* see p. 167 with n. 21.

³³ See Pischel § 520.

³⁴ A third possibility is °*Vsiya*- which, however, was not realized.

³⁵ The following list is not an exhaustive one as far as the attestations are concerned.

³⁶ A complete paradigm is given by Sadd 320,27–28.

³⁷ This resolution of -e- into -ayi- is due to the rhyme with damayissati.

³⁸ *ācikkhati* seems to be a blending of *ākhyā*, *ācakş*, *ādiś* and *śikş* (cf. Emeneau 1968: 31–32).

thassati "he will stand (= remain)", D I 46,10; thassanti, D I 20,1, II 75,28; upațthissam, Ja VI 523,12* — dassāmi "I shall give", Ja III 218,10*; Pv 249; Vv 631; dassati, D III 258,11; M I 126,9; dassatha, D II 96,20; dassanti, M III 268,21; paccupadissāmi, Ja V 221,7* (Chatth paccuttarissāmi)³⁹ — paridhassati "he will wear", Th 969, — pissāmi "I shall drink", Ja III 432,12*; IV 217,4* (Chațțh; E^e pāyāmi, B^d pivissāmi); VI 152,25* (Chațțh; E^e pāyāmi [Cks passāmi] — pāyāmîti pivissāmi, cty); pissati, Ja VI 527,20* (Chatth; on E^e pāssati see below); pissāma, Ja I 171,18* (Chatth; E^e pivissāma)⁴⁰ — anuyissanti "they will follow", Ja VI 49,16*; niyyissanti, A V 195,12, 16 — parinibbissam "I shall be quenched", Th 658 = 1017; Ap 535,17; Bv XXVI 23; "bbissati, Th 100; °bbissanti, Th 576, — hassāmi "I shall give up", Ja IV 415,19*, 420,20* (B^d both times *hissāmi*) ~ V 465,7* (B^{ds} *hissāmi*); pahassatha, Dh 144; hessāmi, Ja IV 415,19*, 416,14*, 18* (at all places ... jahissāmi ... hessāmi ...); VI 80,20*,41 180,5*, 441,16*, 501,18* (Bd hissāmi).42

It can easily be seen that the old $\circ VSya$ -futures were mostly retained (or formed) if there were no homonymous rivals (*essati*, *ñassati*, *thassati*, d(h)assati).⁴³ If there were, these future forms were re-modelled,⁴⁴ most

- ⁴¹ On this stanza see Čičak-Chand 1974: 28.
- ⁴² Note that *hessāmi* is *also* the future of *hoti*. On *abhihessati*, the future of *abhibhavati*, see CPD I 363b line 13 from bottom.
- ⁴³ But even the future of these verbs was rebuilt according to the °iss-futures, as the examples clearly show (cf. °ñissati, °dissati, °bissati, °yissati).

³⁹ (*urasā*) paccupadissāmi (< prati-upā-√dā [so Helmer Smith apud Trenckner, Radices s.v.; cf. Geiger § 151]) recalls *urasā panudahessāmi*, Ja VI 508,2*, # (*urasā*) panudahissāmi "I will push aside", Th 27 = 233 = Ap 505,24 (cit. Sadd 118,20). The latter seems to be a blending of panudissati (pra-√nud) and padahessati (< [a]pa-/pra-√dhā]). °dahessati, which is also attested at Dhp 9, seems to have been coined to distinguish the futures of dahăti "puts" and dahati "burns".

⁴⁰ Fausbøll "has supplied the hemistich which is omitted in all three MSS from the comment".

often after the °*issa*-future (*pissāmi*, °*bbissati*, *hissāmi*/*hessāmi*).⁴⁵ Another means for disposing of homonymity was the use of Sanskritic forms like *pāssati* "he will drink", Ja VI 527,20*,⁴⁶ or *pahāssam* "I shall give up", M II 100,3*. And yet another means for avoiding homonymity was, probably, recourse to the °*Vsa*-future (see also p. 174). This third line of development of °*VSya*- (viz. into °*VSa*-), though not the "regular" one, was brought about by the close relationship between the future and the aorist (see pp. 174–76), additionally enhanced by the terminational weakness of the future suffix (see p. 173). As far as could be traced, there is only one single form in Pāli that belongs here: *esam*, Ja III 535,19* (*cf. esanti*, Sūyagada XI 29, XIII 4 [v.l. *esinti*]). But this formation, whose existence is indirectly proved by the future *kāsam* (see p.177),⁴⁷ was almost completely given up, since it was detached from the °*issa*form and generated with a mere *-s*- a suffix that is hard to recognize.

The agreement of Pāli and Ardha-Māgadhī points to the fact that already the *koinē gangetique* had begun to systematically replace the ${}^{\circ}Vsa$ -future forms with the *h*-future (see p. 189).⁴⁸

7. But how to explain the -h? Time and again it has been pointed out that the *h*-future is primarily found after long vowels (see p. 170 with n. 32). But no explanation for this state of affairs has been given. If, however, one surveys the *h*-future of Aś Pkt., Pāli and Ardha-Māgadhī

- ⁴⁶ This reading is secured by Sadd 401,18–19, where additionally a complete paradigm is recorded.
- ⁴⁷ Cf. AMg. dāsāmi, Āyārangasutta [ed. Jacobi] I 8,7.2, and dāsāmo, Sūyagadanga [ed. Bollée. Stuttgart 1988] I 3,2.8).
- ⁴⁸ It is to be noted that Ardha-Māgadhī, which developed the *h*-future to a much greater extent than Pāli, has widely abandoned both the °*Vssa* and the °*Vsa* future that go back to °*VSya*-, this being obviously the other side of the same coin.

⁴⁴ This also happened to the futures of $\sqrt{khy\bar{a}}$, $\sqrt{j\bar{n}\bar{a}}$, and $\sqrt{y\bar{a}}$, here obviously due to the palatalizing effect of their $-y_{-}/-j\bar{n}$ - (see p. 186).

 $^{^{45}}$ Or else the future was formed from the present stem (cf. *parinibbāyissati*, Ap 86,14).

(and also BHS [see n. 16]), it turns out that this long vowel is usually \bar{a} , with only very few exceptions, the most important of which is *ehati/ehiti* (see pp. 164 and 167). And this \bar{a} is inherited from Old Indo-Aryan (except in *kāhiti* and *hāhiti* as far as Pāli is concerned). In Old Indo-Aryan, only roots in \bar{a}^{49} had °*sya*- as future suffix, while other vocalic roots had °*isya*-, °*esya*- (\sqrt{i} , $\sqrt{kr\bar{i}}$, \sqrt{ji} , $\sqrt{n\bar{i}}$, $\sqrt{s\bar{i}}$) or °*osya*- (\sqrt{cyu} , \sqrt{sru} , $\sqrt{s\bar{u}}$, \sqrt{hu}). As a terminational element⁵⁰ °(\bar{a})*sya*- was feebly pronounced anyhow, albeit distinctly less so than °*isya*-, °*esya*-, °*esya*-, °*ksya*- and the other combinations containing a cerebral. This slurred pronounciation, which weakened °(\bar{a})*sya*- into °(\bar{a})*s*^y*a*- (and via *° $\bar{a}za$ - further to ° $\bar{a}hi$ -), was certainly enhanced by the fact that verbs in \bar{a} are everyday words, i.e. words in frequent use.

Apart from *esam* (see p. 172), no traces of ${}^{\circ}VS(\tilde{a}/i)$ -futures with single *-s*- are attested in Pāli (and Ardha-Māgadhī also has only *esanti* and *dāsāmu* [see p. 172]). The degemination of ${}^{\circ}ss(a)$ - (< ${}^{\circ}sya$ -) into ${}^{\circ}s(a)$ -, however, took place to a much greater extent, though it is partly hidden by the historical orthography of Pāli texts:⁵¹

karis $\langle s \rangle \bar{a}mi$, Ja III 161,14*; Ap 72,31, niggahis $\langle s \rangle \bar{a}mi$; Th 77, caris $\langle s \rangle \bar{a}mi$; Ja III 381,21*; IV 487,12*; passis $\langle s \rangle \bar{a}mi$ (- ~ - -), Pv 528, parirakkhis $\langle s \rangle \bar{a}mi$ (- ~ - -), Ja IV 480,11*; phusis $\langle s \rangle ati$, Sn 693; bhavis $\langle s \rangle ati$, Sn 691–94; Pv 575; muccis $\langle s \rangle ati$, Ja VI 449,3*; dakkhis $\bar{a}ma$, Ja III 99,7*; sikkhis $\langle s \rangle \bar{a}mase$, Sn 814; khīyis $\langle s \rangle anti$, Ja V 392,4*.⁵²

⁴⁹ Namely (if futures are attested only in the Epics and classical literature, the roots have been placed in brackets): $\sqrt{khy\bar{a}}$, $\sqrt{g\bar{a}}$ "to sing", ($\sqrt{j\bar{a}}/jan$), $\sqrt{j\tilde{n}\bar{a}}$, $\sqrt{jy\bar{a}}$, $\sqrt{tr\bar{a}}$, $\sqrt{d\bar{a}}$, $\sqrt{dh\bar{a}}$, ($\sqrt{dh\bar{a}}$ ($\sqrt{dh\bar{a}}$ "to suck"), ($\sqrt{dhy\bar{a}}$), $\sqrt{p\bar{a}}$ "to drink", $\sqrt{bh\bar{a}}$, $\sqrt{y\bar{a}}$, ($\sqrt{v\bar{a}}$), $\sqrt{sh\bar{a}}$, ($\sqrt{sn\bar{a}}$), $\sqrt{h\bar{a}}$. On roots ending in a consonant which form the °*sya*-future see p. 181–84.

⁵⁰ See Turner 1927 and Bloch 1965: 68–69, 72.

⁵¹ See Caillat 1970: 6–7 (= *Selected Papers* pp. 2–3) and Oberlies 2001: 14–16 (cf. Berger 1955: 19, n. 2, and 52, n. 100).

⁵² What is certainly not the case is — and here Milizia (2011: 27) is undoubtedly right — that *such* forms with their single *-s-* are the *origin* of the *h*-future (to be corrected in Oberlies 2001: 109).

Note that here we throughout have to do even with the much more distinctly articulated suffix *°isya-*.

The development⁵³ of $\circ(\bar{a})sya$ - into $\circ(\bar{a})s^{y}a$ - was further backed by the close conjunction of sya-future and s-aorist (on which see below). For (almost) all Skt. futures in $^{\circ}C(C)\bar{a}sya$ - had aorists in (single) -S- at their side: gāsyati ~ agāsīt, jñāsyati ~ ajñāsam, jyāsyati ~ ajyāsişam, trāsyate ~ atrāsmahi, dāsyati ~ adisi, dhāsyati ~ adhisi, pāsyati ~ apāh / pāsta,⁵⁴ bhāsyati ~ abhāsīt, yāsyati ~ ayāsam, sthāsyati ~ asthişi, $h\bar{a}syati \sim ah\bar{a}si^{55}$ (cf. $khy\bar{a}syati \sim khyesam^{56}$). And this conjunction was inherited into early Middle Indo-Aryan, where there is, however, a conjunction of h-future and $\circ \bar{a}s(i)$ -aorist (cf. Pāli $\circ d\bar{a}hisi \sim ad\bar{a}si$, bhāhisi ~ °bhāsi, $[\sqrt{ha}]$ hāhasi ~ °hāsi, $[\sqrt{hr}]$ hāhiti ~ °hāsi, kāhiti ~ akāsi, cf. hohiti ~ ahosi). And other forms containing \bar{a} , such as the infinitive and the gerundive (e.g. dātum, dātabba-), certainly exerted additional pressure to keep \bar{a} intact (and hence to degeminate -ss-), with the consequence that the generating of homophones like passati, vassati, and hassati⁵⁷ was avoided (see p. 172). This stage which was abandoned in Pāli (except for single esam, see p. 172) has been preserved in Ardha-Māgadhī, which exhibits future forms such as esanti and dāsāmu. And this °sya- further developed via *zya- into °h ∂ - (on s > h see pp. 186– 88).

Throughout the history of Indo-Aryan, future and aorist are closely bound together. Already in the language of the Atharvaveda the aorist influenced the future, so much so that "shortened" future forms were built which increased in number as time went on: *kramsyate*, *cyosyate*,

⁵³ Turner opines that $\bar{V}CC > \bar{V}C$ is a typical feature of the eastern language (on this see n. 8).

⁵⁴ See Narten 1964: 168.

⁵⁵ Cf. Smith 1952: 179 and BHSG § 31.5.

⁵⁶ On this precative see Hoffmann 1976: 470–72.

⁵⁷ passati "will drink"/"sees" (< pāsyati/paśyati), vassati "will blow"/"rains" (< vāsyati/varşati), hassati "will give up"/"rejoices" (< hāsyati/hasati x hṛṣyati).

namsyati, stoşyati, hoşyati.58 The same influence is responsible for the lengthened stem vowel of futures like aprākṣyaḥ (on which see below), mārkşyate and utsākşye.59 In late Vedic Sanskrit the "future-preterites" (as Thieme 1981: 300 [= Kl. Sch. p. 910] has apply called them) agrahaisyat and aprāksyah were created which combined features of aorist and future. And in Middle Indo-Aryan, aorist and future more often fit together than do future and present:⁶⁰ gahessati ~ aggahesi \leftrightarrow ganhati, thassati ~ atthāsi \leftrightarrow titthati (cf. hāhiti ~ ahāsi \leftrightarrow harati).⁶¹ The partial supplanting of asti by bhavati brought particularly aorist and future into close connection: $atthi \sim [hoti \rightarrow] ahosi/hohiti.^{62}$ And — to give a last instance — the future ruccha-/rucchi- (see pp. 183f.) gave rise to an aorist *rucchi*, Ja IV 285,24* = V 182,10* ~ VI 152,17*.⁶³ All of which led to the employment of aorist endings with the future and, vice versa, most notably of $\circ is(s)am^{64}$ in the 1st person (see Oberlies 2001: 241):65 vijāyissam "I gave birth to", Ja V 179,8*; samdhāvissam "I have run", Th 78 = Dhp 153; Ja VI 238,30*; *apucchissam* "I asked", Sn 1116;

⁵⁸ See Schulze 1904.

⁵⁹ See Hoffmann 1976: 370, n. 25.

⁶⁰ Hc III 162 registers the aorists kāsī / kāhī and thāsī / thāhī (which do not seem to be attested in available texts). Here we have — so to say — an *h*-aorist (kāhī ~ kāsī < [a]kārşīt; and by analogy thāhī ~ thāsī), which stands side by side with the *h*-future (kāhāmi, thāhāmi). Cf. Alsdorf 1935–37: 324 (= Kl. Sch. p. 61).

⁶¹ See Bloch 1965: 227.

⁶² See Bloch 1965: 303.

⁶³ On this reading see Bechert 1961: 19 and Oberlies 1995/96: 282.

⁶⁴ Note that 1sg. aor. atimaññissam, Pv 40, scans ~ ~ - ~ - and hence hides atimaññisam (cf. Th 424).

⁶⁵ But for various reasons it is beyond doubt that the use of the future in preterite sense is not only due to the close resemblance between the aorist ending *`isam* and the future ending *`isam (pace von Hinüber 2001: §§465/484)*, though it is obvious that younger texts use the latter as a convenient metrical licence (as *avekkhissam* "I paid heed to", Vv 794, to avoid ~ - ~ - in pāda c). The whole problem still awaits thorough investigation.

amaññissam "I had thought", Th 765; M III 247,2; *vandissam* "I worshipped", Th 480, 621; *asakkhissam* "I was able", M III 179,28; *pamādassam* "I was negligent", M III 179,29⁶⁶ — *nibandhisam* "I shall bind", Th 1141⁶⁷ (cf. AMg. *dāhittha* Utt XII 17; on AMg. aor. $k\bar{a}h\bar{n}$, *thāhī*, Hc III 162, see n. 60).⁶⁸

If, however, the two factors mentioned — \bar{a} -verbs whose aorist has influenced the future — are determinant, *ehiti* must be an analogical formation.⁶⁹ And indeed it is just this which is argued for here. And the same holds for *hohiti* (and *hehiti*).

That \bar{a} -verbs and the conjunction of future and aorist are the two decisive factors in the development of the *h*-future can almost be demonstrated. As Schulze (1904) long ago pointed out, the formation of shorter future forms like *mamsyate*, *namsyate*, or *stoşyati* in Sanskrit (on which see above) excluded roots ending in $r^{.70}$ These roots had only futures like *karişyati*. Since there are no traces whatsoever of **karşyati*⁷¹ or *kārşyati*⁷² (and **hărşyati*), the alleged sources of Pāli *kāhati* (and *hāhiti*), the latter can only be explained as an analogical

⁶⁶ It was Oldenberg who pointed to this most remarkable form in °assam (1881: 322 n. 1 [= Kl. Sch. p. 1170, n. 1]).

⁶⁷ A form to be reconsidered is *anurakkhissam*, Cp 240 (so E^e), for which Chatth reads (?with the metre) °*rakkhisam*.

⁶⁸ For Prakrit see Alsdorf 1935–37: 323–24 (= *Kl. Sch.* pp. 60–61).

⁶⁹ It remains to be clarified whether *eti* does not form an aorist as maintained by the Saddanīti (320,26) or whether forms like *anvesi*, Ja VI 510,31* (= *agamāsi*, cty), *upesi*, Ap 263,8, and *abhisamesum*, S V 415,28–30, are genuine aorists.

⁷⁰ Schulze, however, added that "die jüngere Volkssprache hat auch diese Grenze nicht immer respektiert und wenigstens *karşyati oder *kārşyati neugeschaffen" (102) referring to Pāli kāhati and kāhiti.

⁷¹ As far as could be ascertained, **karsyati* was first proposed — obviously without knowing Schulze (see n. 70) — by Michelson 1909: 289, n. 2.

⁷² Thieme (1981: 299 [= Kl. Sch. p. 909]) was rightly opposed to a postulated *karsyati and set up a future stem *kārsya-, which arose from the future karisya- due to the influence of the aorist $ak\bar{a}rs^{\circ}$. Basically Thieme is right on this point (*pace* von Hinüber 2001: §469). The remodelling of the future by the aorist, however, occurred not in (Vedic) Sanskrit but only in Middle Indic.

formation. After the proportion $d\bar{a}hati :: ad\bar{a}si$ or $th\bar{a}hati:: atth\bar{a}si$, the future $k\bar{a}hati$ was built on the aorist $ak\bar{a}si$ (the "stem" $k\bar{a}$ - is found also in the infinitive $k\bar{a}tum$, the gerundive $k\bar{a}tabba$ - and the like).⁷³ To be more precise: since $k\bar{a}hi(t)i$ is also found in AMg. and in Buddhist Sanskrit, it obviously also belonged to the *koinē gangetique* (see p. 189). Hence we have to postulate that $*k\bar{a}hati$ was formed out of $ak\bar{a}si$, according the proportion $*d\bar{a}hati: ad\bar{a}si$. And Pāli took over $*k\bar{a}hati$ as $k\bar{a}hiti$. By means of paradigmatic levelling ($k\bar{a}hati \leftarrow k\bar{a}h\bar{a}mi$ / $k\bar{a}h\bar{a}ma$) and through the influence of $k\bar{a}sam/kass\bar{a}ma$ (see below), a new paradigm $k\bar{a}hati$ was then built up.⁷⁴

Another future form of *karoti*, which within the Asokan edicts is solely attested at Girnār, is also of great relevance in this context, viz. $k\bar{a}samti$.⁷⁵ It is only Pāli that in $k\bar{a}sam/kass\bar{a}mi^{76}$ exhibits similar forms, whereas Ardha-Māgadhī does not know the like. This $k\bar{a}samti$ may either represent $k\bar{a}santi$ or $k\bar{a}ssanti$, as is the case with the parallels in the north-western edicts that are likewise ambiguous.⁷⁷ If it represents $k\bar{a}santi$, we have to do with the counterpart of *hosanti* (see pp. 164–65). In that case it would attest to a degeminated $d\bar{a}sati$. For it, too, is built upon the aorist $ak\bar{a}si$ according to the proportion ($d\bar{a}hati <$) * $d\bar{a}sati$: $ad\bar{a}si$.⁷⁸ If, on the other hand, it represents $k\bar{a}ssanti$ (see p. 172).⁷⁹ Note that

⁷³ See Turner 1935–37: 208 and von Hinüber 2001: §469 (where, however, ka-, ha- have to be corrected to kā-, hā-).

⁷⁴ Or else $k\bar{a}hati$ is a dissimilated form of $k\bar{a}hiti$, as already surmised by Trenckner (1908: 129).

⁷⁵ RE VII has *kasamti* side by side with *kāsamti*. But this most probably has to be emended to *kāsamti* (see Bloch 1950: 110, n. 3).

⁷⁶ kāsam, Ja IV 286,21*... 287,15* (Āryā), VI 36,20* (B^d kassam = Sadd 514,18), kassāmi, Th 1138–39, Pv 554, kassam, Th 381 (kasissāmi, v.l. kar°, Th-a II 164,23), Pv 242, S I 179,7, kassāma, Ap 185,19, D II 288,2*.

⁷⁷ See Bloch 1950: 74 (§ 38).

⁷⁸ Tedesco (1946: 185) — as others — derived it from *karsyati.

⁷⁹ Note that all infringements of the "law of mora" in Girnār are due to blatant Sanskritisms (cf. von Hinüber 2001: § 109).

in Pāli only 1st persons ($k\bar{a}sam/kass\bar{a}mi/kass\bar{a}ma$) are attested and that therefore these forms and $k\bar{a}hisi/k\bar{a}hiti/k\bar{a}hinti$ build up *one* supplementary paradigm whose forms influenced each other (see p. 181).⁸⁰

8. The next facts to be explained are why in Pāli there is — apart from $k\bar{a}ha^{\circ}$ and $h\bar{a}hasi$ — no -*a*- after -*h*- but only -*i*- (in marked contrast with Asokan Prakrit, which only has -*ha*-) and why the *hi*-future is restricted to the 2nd and 3rd sg. and the 3rd pl.⁸¹ For again it is only $k\bar{a}h^{\circ}$ that has forms of other persons too. It is quite different with the Prakrits: they formed a whole paradigm, which exhibits $^{\circ}hi$ - (almost) throughout (see p. 165). If we look at the attested and also the non-attested forms of Pāli,

$\bar{V} \# \bar{\iota} / \bar{u}$		[apart from <i>kāhāmi</i> , etc.]
	†° <i></i> Vhimi	†°Ūhāmi
†° <i></i> Vhisi		†°Ūhasi
†° <i></i> Vhiti		†° <i>Vhati</i>
	†°Ūhima	†°Ūhāma
	†° Vhitha	†°Ūhatha
†° <i></i> Vhinti		†° <i>V</i> hanti

it is evident that the *Samprasāraņa* hypothesis does not work. What has happened can be deduced from the absence of 1st sg. $\dagger^{\circ}h\bar{a}mi$ and 1st pl. $\dagger^{\circ}h\bar{a}ma$ and above all of 2nd pl. $\dagger^{\circ}hitha$ and $\dagger^{\circ}hatha$ —, apart from $k\bar{a}hatha$ (on which see p. 167).⁸² It is surely true that the absence of

⁸⁰ In this connection, the complete absence of kāsa° as future stem in Ardha-Māgadhī (see above) and the scarcity of kāha° in that same Prakrit are note-worthy, since both seem to be closely related (see p. 165).

⁸¹ See Müller 1884: 118–19, Geiger § 150 (though he speaks of "*particularly* in the 2. 3. Sg. and 3. Pl." [my emphasis]) and Bloch 1950: 74 (§ 38).

⁸² It is also pivotal for the question of whether Samprasāraņa is involved in the formation of future forms that *†dakkhitha*, *†vakkhitha*, *†sakkhitha* (etc.) are not attested (see p. 182f.).

 $\dagger^{\circ}h\bar{a}mi$ and $\dagger^{\circ}h\bar{a}ma$ would point to interference by Samprasāraņa on the development of future endings in Pāli (as well as Prakrit).⁸³ But the complete absence of the 2nd pl. renders this explanation highly unlikely. So another explanation is called for.⁸⁴ Namely, it must have been the final *-i* that led to the changing of *-a*- (or, to be more precise, of *-a*-) into *-i*- by regressive assimilation. Meaning that the obligatory condition for the "genuine" *h*-future within Pāli was (Skt.) $\circ \bar{V}Sy\bar{a}C(C)i$. This accounts for *all* attested forms as well as *all* forms that do *not* occur. And this suggests that a situation of flux within Pāli was resolved by some kind of morphological adjustment. Thus, only $\circ hi$ - was admitted as future suffix. And this was conditioned, on the other hand, by the *-y(a)*-together with the final *-i*.

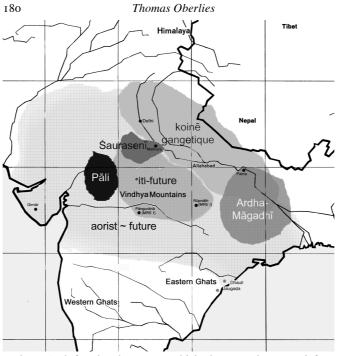
Much the same happened with the °*işya*-future in certain Middle Indic dialects/languages neighbouring Pāli. For the sole example of °*iti* < °(*işy*)*ati* in Aś. Pkt., *vadhisiti*, MRE I, exhibits a geographical pattern that accords very well with what we see in the *h*-future of Pāli. Whereas Ahraurā and Sahasrām, the one in Mirzapur District, the other close by in Bihar, have *vadhisati*,⁸⁵ two of whose versions have *vadhisiti*, i.e. Pāngurāriā and Rūpnāth,⁸⁶ lie not far from the area where Śaurasenī was

⁸³ This is the explanation given by von Hinüber 2001: §§467--68 (cf. also §129). In his treatment of the future, he heavily draws on Berger's explanations, albeit without accepting them as a whole.

⁸⁴ Tedesco (1945: 158-159) takes up Pischel's theory § 151.

⁸⁵ I regard Smith's opinion that the Aśokan °*ha*-future is a thematization of an earlier °*hi*-future (*loc. cit.*) as no less erroneous than his view that "l'aberrant vadhisiti fait seul exception [i.e. to this thematization]" (1952: 176). It was Caillat (1977/78: 104 [= Selected Papers p. 128]) who took up a passing remark of Bloch (1950: 74 [§ 38]) and pointed out that vadhisiti is a "sprachwirkliche" form which belongs to Śaurasenī futures in °*idi*.

⁸⁶ Besides Brahmagiri, Gavīmath, Niţtūr and Śiddhāpura have vadhisiti, presumably "one of the numerous westernisms appearing in the basically eastern language of the Mysore edicts" (Alsdorf 1960: 261 [= Kl. Sch. p. 440]). Note that Girnār also has -dh- in the verb vadhati besides the expected "western" -dh-



spoken. And for that language, which does not have an *h*-future,⁸⁷ Hemacandra records a future in °*ssidi* (He IV 275).⁸⁸ This fits well with the only attestations which are found in literary sources: gami[s]si(ti), *pavvajissiti*, Aśvaghoşa (Lüders 1911: 47–48, 58).⁸⁹ That there was a

(*vadhayisamti*, RE IV). Though Turner explicitly calls *vadhisiti* an "Eastern form" (1931: 532 [= *Collected Papers* p. 326]), the fact is we cannot tell.

- ⁸⁷ At least according to Hemacandra.
- ⁸⁸ Caillat rightly points out that "from Hemacandra's rule and examples the conclusion seems to follow that, in the Ś[aurasenī] futures, *-i-* does not continue Sk. (*-ya-*), but (*-a-*)" (1977/78: 104).
- ⁸⁹ See von Hinüber §468 (where the form is, however, erroneously cited as *gamissidi*). Schwarzschild (1953: 52 [= *Collected Papers* p. 11]) maintains that *gami(s)si* is "contracted", but she has obviously misunderstood Lüders' remark that the form is "mutilated" ("verstümmelt").

tendency in western India to mark off the future with °*iti* can also be seen from Gāndhārī Prakrit, which likewise does not know the *h*-future (see Caillat 1977/78).

Again the *a*-vocalism of $k\bar{a}ha^{\circ}$ clearly shows its singularity. Other than $k\bar{a}hi^{\circ}$ which only has $k\bar{a}hisi$, $k\bar{a}hiti$ and $k\bar{a}hinti$ as could be expected, $k\bar{a}ha^{\circ}$ has formed a full paradigm. Since Ardha-Māgadhī knows only $k\bar{a}h\bar{a}mi$, Uttarajjhayaṇa 17,2, the full array of $k\bar{a}ha^{\circ}$ -forms seems to be an innovation of Pāli. We may surmise that it was created by adjusting the vocalism of $k\bar{a}hiti$ to that of $kass\bar{a}mi$, $kass\bar{a}ma$.

9. Let us now turn to the type *dakkhiti* / *bhecchati*.⁹⁰ It derives from futures whose °*sya*- fused with the final consonant of the root into °(*r*)*ksya*-, °(*n*/*r*)*tsya*- and °(*r*)*psya*- (see p. 164). Omitting roots which altogether ceased to be used after the Vedic age or which formed their °*sya*-future only at a very late date, these were as follows:⁹¹

√ad, √āp, √kŗt "to cut", √kŗş,⁹² √kşip, √gup, √chid, √tap, √tyaj, √trap, √dah, √diś, √dṛś, √druh, √naś, √nud, √pac, √pad, √piş, √praś, √bandh, √budh, √bhaj, √bhañj, √bhid, √bhuj, √majj, √mih, √muc, √mrj, √yaj, √yabh, √yuj, √yudh, √rabh, √rādh, √ric, √rudh, √ruh, √labh, √vac, √vap, √vas "to dwell", √vah, √vid "to find", √viś, √vrj, √vrt, √vyadh, √śak, √śad, √śiş, √śus, √sad, √sah, √sic, √sidh "to repel" / "to succeed", √srj, √srp, √skand, √spŗś, √syand, √svap.

⁹⁰ A strange form which would seem to belong here is *gagghate*, A IV 301,17 (on which see Cone s.v.). It would exceed the scope of this article to discuss this and other anomalous formations (such as *pațipațijāmi*, D III 189,8).

⁹¹ On roots ending in a vowel which form the °sya-future see n. 49.

⁹² anukassāmi, D II 255,23* (silokam ~), which was erroneously regarded by *CPD* (s.v. anukasati) as "fut. 1 sg." of anu- $\sqrt{k_F}$ (as in Cone, who alternatively suspects anukassāmi to be an error for *anugassāmi), is the future of anukaroti "to do after [someone has done something], to recite after [someone has recited]" (cf. Takakusu 1900: 141-42).

These developed into two groups in Pāli (and also in Middle Indo-Aryan), the one having (1) -*kkh*- and the other characterized by (2) -*cch*-:⁹³

(1) (\sqrt{drs}) dakkham, Th 1099 (Chatth daccham); dakkhāmi, D II 207,13; dakkhasi, Ja II 420,4*; V 208,9*/13*; S I 116,11* (= S I (2nd ed.) 256,25*), 132,12* (= S I (2nd ed.) 289,10*) = dakkhisi; Thī 232 (v.l. [and Chatth] dakkhasi, the reading also of Ap 556,22); dakkhasī, Ja V 43,1*; dakkhati, Ja V 345,8* = 346,26*; D III 158,21* (v.l. [and Chatth] dakkhiti); M II 10,6, 15; III 130,1 (v.l. dakkhīti), 21; S II 255,23; Vin III 105,26; dakkhatha, Ja V 309,17*; dakkhanti, Vin I 5,11* (rāgarattā na ~ [on which see below]); dakkhisi, Ja VI 423,7*, 496,23*... 497,24*, 498,15*–27* (Bd dakkhasi); M I 512,11 (Chatth dakkhissasi); dakkhiti, D II 130,2 (v.l. dakkhati), 132,22 (v.l. dakkhissati); M II 202,6, 203,8; S I 198,2* (= S I (2nd ed.) 428,10* [vv.ll. dakkhati, dakkhīti]); Sn 909 (Chatth throughout dakkhati); dakkhīti, D I 165,19, 22, 29; M I 434,28, 34, 435,2, 8 (Chatth throughout dakkhati);⁹⁴ dakkhinti, D I 46,10, 12, 18; II 26,9, 14, 18, 27,17, 24, 41,31; M I 168,8* = S I 136,24* ($r\bar{a}garatt\bar{a}$ na ~ [on which see above]); 95 S II 109,18–19, 111,2–3 — (\sqrt{bhuj}) bhokkham, Ja IV 127,20* (bhuñjissāmi, 129,14'); bhokkhāma, Ja V 166,7*, — (\sqrt{muc}) mokkhasi, Ja I 363,12*; S I 105,15* = 106,7* (= S I (2nd ed.)) 235,16* = 237,6*), 111,29* (= Vin I 21,18*), 115,14 (= S I (2nd ed.) 255,16), 116,9* (= S I (2nd ed.) 256,20*); mokkhāma, Ja VI 183,12*; mokkhanti, Dhp 37; pamokkhati, Ja 183,21* ... 184,25*; pamo*kkhanti*, Dhp 276 (all with passive meaning), — (\sqrt{vac}) vakkhāmi, Ja III 346,21*; D III 9* (pa+); Sn 702 (pa+); vakkhasi, Ja V 150,19*; vakkhati, Ja V 324,6* (pa+); M III 207,23; S I 142,32; vakkhāma, M III 207,23; S IV 72,9; vakkhatha, Vin III 224,20; IV

⁹³ Apart from some frequently used forms like *mokkhati* and *vakkhati* the following list registers, hopefully, all that is attested.

⁹⁴ According to Cone s.v. $\sqrt{dis^2}$ (II 396b) *dakkhīti*, D I 165,19 = M I 434,34, is an *erroneous reading*. Note, however, that "les quelques graphies *-īti* résultent de l'habitude de noter *-ī* (en fin du mot) devant *ti* (\Rightarrow : *iti*)" (Smith 1952: 176, n. 4).

⁹⁵ Chatth dakkhanti throughout.

58,6; vakkhanti, Ja IV 185,17*, 340,14* (pa+); Vin II 1,21, (\sqrt{vis}) pavekkhāmi, Ja I 503,20*; III 86,5*; S IV 199,6 ... 200,18, pavekkhāma, Ja VI 304,6* (\sqrt{sak}) sakkhasi, S IV 62,29; Nidd I 175,27* = 180,16*, sakkhati, Sn 319, 320; S IV 323,32-33, sakkhinti; Sn 28; sakkhī, Ja V 116,5* (Chaṭṭh sakkhisi); ⁹⁶ sakkhīti, M I 393,6,7, 11, 394,28, 29, 33 (Chaṭṭh throughout sakkhiti); sagghasi, Sn 834 (Chaṭṭh sakkhasi)

(2) $(\sqrt{a}p)$ pacchati, A IV 362,10 (E pajjati),⁹⁷ — (\sqrt{chid}) checcham, Ja III 500,23* (C^k B^{df} chejjam) = 519,2* (C^k chejjam, B^d chijjam); VI 51,17* (C^s chejjam); checchasi, Ja VI 453,22*-28* (C^{ks} throughout chejjasi); (ac)checchati, Ja III 209,2*; Th 761; Dhp 350, ucchecchāmi, D II 72,7, 20 (= ucchejjissāmi, A IV 17,16, 28), -(*\bhid*) bhecchāmi, Sn 443 (Chatth; Ee gacchāmi);⁹⁸ bhecchati, A I $8_{3,7,12,16}$, *bhejjati*, Ja III 430,30* (Chatth bhecchati), — (\sqrt{rud}) rucchati, Ja V 366,13* (Cks rucchiti, see Fausbøll n. 14); VI 80,13*99 $= 550,11^{*}, 13^{*}, 19^{*}, 21^{*} \# 15^{*}, 17^{*}$ (Fausbøll always *rucchiti* with C^{ks}); *uparucchanti*, Ja VI 551,28*/30* — (*√labh*) *lacchāmi*, Ap 124,11; Ja V 467,20*; M II 71,6; lacchasi, Ap 517,6 (pați+); Ja IV 61,8*; Pv 173; M II 71,1; lacchasī, Ja VI 483,30*; lacchati, Ap 344,26; Ja II 258,18*; D III 58,20/21; S I 114,19; II 268,8, 15; lacchāma, Ud 30,29 ... 34; Ja IV 292,21*; V 468,1*; S V 169,2; lacchanti, Vin III 15,14; lacchase, Ja IV 47,3* (pați+); V 345,7*; lacchate, Ap 479,27; lacchāmase, Vv 320, — (vas) vacchāmi, Ja VI 523,11*; vaccham, Thī 414, 425; vacchasi, Ap 609,16; Ja VI 172,19*, 518,6* (Ee

⁹⁶ It seems we have to postulate *sakkhihi* (< *sakkhisi*) and further *sakkhi<h>i* as intermediate stages.

⁹⁷ This future needs to be added to Berger's list (1961: 38).

⁹⁸ On the reading *bhecchāmi* see Norman 1983, pp. 144*f*.

⁹⁹ On this stanza see Čičak-Chand 1974: 28.

c'acchasi);¹⁰⁰ *vacchasī*, Ja IV 217,4*; *vakkhati*, Thī 294, — (\sqrt{sus}) *avasucchati*, Ja VI 80,14*, 16*¹⁰¹ = 550,20*, 22*.¹⁰²

10. Mere statistics strongly point to the fact that *no* Samprasāraņa at all is involved in the formation of the °*kkh*- and °*cch*-future. Of thirteen "roots" only two have an *-i*- after the future suffix. And these two °(*kkh*)*i*-futures¹⁰³ have °(*kkh*)*a*-futures besides them.¹⁰⁴ And it is surely not by chance alone that precisely these two °*kkhi*-futures, viz. *dakkhiti* and *sakkhiti*, have by-forms in °*kkhīti* and °*kkhissati*:¹⁰⁵

sakkhissasi, M III 269,15 (~ sakkhasi, S IV 62,29); Vin I 274,9, 12, 14; III 19,33, 20,21, 22,18

dakkhissāmi, D II 27,22; dakkhissam, Ja IV 395,21*; dakkhissasi, Ud 58,22; D II 27,26; M I 328,14; M II 201,4 (vv.ll. dakkhati, dakkhīti); III 5,10,11; S III 108,20,23; Vin I 185,26; dakkhissati, D II 27,18; Vin I 179,14; dakkhissāma, Ap 156,9; dakkhisāma, Ja III 99,7*; dakkhissatha, M II 60,5, Vin III 14,22; dakkhissanti, S II 109.

Other than the case of *sakkhati*,¹⁰⁶ that of *dakkhati* is sufficiently clear. Very soon it was no longer felt to be exclusively a future, but came to be used as present:¹⁰⁷

¹⁰³ °*cchi*-futures are not attested at all.

¹⁰⁰ So read with Alsdorf 1957: 39 (= Kl. Sch. p. 308) against CPD's (s.v.) acchati (< *ātsyate).</p>

¹⁰¹ On this stanza see Čičak-Chand 1974: 28.

¹⁰² L^k reads °*sujjhati* as do C^{ks} (see CPD s.v. *avasussati*). Note that *avasucchati* exhibits interference between °*kkh*- and °*cch*-futures.

¹⁰⁴ Moreover there occurs a large fluctuation in the manuscripts between -a- and -i- in the futures dakkhati/dakkhiti and sakkhati/sakkhiti (for random examples see Cone s.v. √dis² [fut. 3. sg. dakkhati³ dakkhiti¹]) — almost "selon les goûts des scribes et des éditeurs", as Smith (1952: 176) has put it.

¹⁰⁵ Also pavakkhissam, Cp 2, is a 'double' future that displays a present pavakkhati (< pravakşyati).</p>

¹⁰⁶ Was sakkhati understood as present by its nearness to sakkā "is able, can"?

dakkhāmi, Ap 532,26* (Chatth ikkhāmi); Nidd I 45,29 ([passāmi] ~ olokemi nijjhāyāmi upaparikkhāmi) = 47,21 ~ 84,7; dakkhati, Nidd I 74,7 ([passati] ~ oloketi nijjhāyati upaparikkhati) = 105,4; dakkhatha, Nidd I 50,14-15 ([passatha] dakkhatha oloketha nijjhāyatha upaparikkhatha); dakkheyya, Nidd I 302,9 (passeyya ... dakkheyya ... olokeyya ... nijjhāyeyya ... upaparikkheyya); dakkhassu, Nidd II ad Sn 1119; dakkhemu, Ja IV 462,8* = 463,2* = 464,6*; VI 229,27*, 312,13* (cf. [aor.] dakkhisam, Thī 84; dakkhiya, Thī 381; dakkhitāye, D II 254,7*; S I 26,25*; dakkhitum, Vin I 179,12 [in: dakkhitu-kāmo])

To distinguish the future from the present, ¹⁰⁸ *dakkhati* was not only amplified by adding the future suffix to yield *dakkhissati*, ¹⁰⁹ but an *-i*-was introduced too, which at once brought it into line with the aorist (*dakkhiti*:: *addakkhim*; cf. *sakkhiti*:: *asakkhim*). And this *-i*- is found only in 2nd and 3rd sg. and 3rd plural, exactly as in the *h*-future. Hence it can be surmised that its source was the °*hi*-future.

However, the future suffix °(*i*)*Sya*- is the *only* form where, according to the present-day view, Samprasārana -*Cya*- > -*CCi*- undoubtly worked.¹¹⁰ Given that we have to explain the development of that form otherwise, we have to dispense altogether with this phonological process for an explanation of Middle Indic.

II. Comparable to other cases of supposed Samprasāraņa, the development of °*sya*- into °*hi*- was due to a combined process of analogy and palatalization. The simplification of the cluster *-sy*- into mere *-s*- was mainly done in analogy with the aorist (see also below), while the change of -(sy)a- into *-(s)a- and further into -(h)i- was effected by the original *-y*- (on the *-h*- see pp. 186*f*.). It will suffice to give examples of

¹⁰⁷ This was surely also due to the similarity with *pekkhati* (see Smith *apud* Bloch, *Recueil* 103, n. 1).

¹⁰⁸ Note also the Chatth reading *daccham* at Th 1099 (see above).

¹⁰⁹ Cf. Bloch 1965: 227.

¹¹⁰ See von Hinüber 2001 : § 129; cf. Oberlies 2001 : 43-44.

the future to show the strong tendency for *-a-* to be changed into *-i-* by a preceding *-y-*:¹¹¹

— akkhissam (< ākhyāsyāmi), Sn 997; Ja IV 257,26*; VI 523,21*; Vin V 144,6*; Pv 529; akkhissati, Pv 579; vyakkhissam, Sn 600 (cf. ācikkhissam, Thī 434)

— upaññissam (< upanyasyāmi), Sn 701 = 716 (see Norman ad loc.)¹¹²

— sossi (< *sossisi < śrosyasi), Ja VI 423,8* (cf. sakkhī, Ja V 116,5*, on which see n. 96)

The examples also clearly show that the process of palatalization is often promoted by analogies, here by that of the °*iss*-future. This was also the case with the development of -i- out of -a- into the *h*-future, where the aorist with its -si- served as a model. But above all it was the final -i which forced -a- to change into -i- by means of retrograde assimilation (see p. 179).

12. What remains for clarification is the development of *-s*- into *-h*-.¹¹³ Assuming our interpretation of the facts is correct, there was an intermediate stage $*^{\circ}z_{\partial}$ - (< $^{\circ}sya$ -) which in Pāli developed into $^{\circ}hi$ - whenever the ending had a final *-i* (see p. 179). What can be surmised, then, is that the *i* was decisive for the development s > *z > h. In the course of which, the future became dissimiliar from the aorist with its *-si*-.

There are just a few examples of $h < s^{114}$ in all of Middle Indo-Aryan, the most important of which are the clusters *Sm* and *SN* which

¹¹¹ Norman's detailed lists (1976, 1983) do not have examples of the palatalizing effect of *l* and *h* for which see Oberlies 2001: 32 where (*e.g.*) *nilicchita*-, Ja VI 238,12*, 18* (~ *nilacchita*-, Thī 439) can be added.

¹¹² Cf. upaññissati (< upajñāsyati), Ja V 215,17*.

¹¹³ The "Verhauchung" of *s* which is widely attested has been treated in some detail by Kümmel (2007: 102-104).

¹¹⁴ The few instances in Middle Indo-Aryan (for which, see von Hinüber 2001: § 221) have been rather inconclusively discussed by Milizia (2011: 29–31).

developd into *mh* and *Nh*.¹¹⁵ And here occurs the most striking example of this sound change, which at least in Pāli is highly sporadic.¹¹⁶ It concerns the local suffix *°him*, which is part of

tahim,¹¹⁷ Ap 198,17, 295,12 (*yahim* ~); Ja III 529,13*, 530,2*; V 490,26*; VI 26,10*; Th 58, 309, 1135; Thī 254, 261; Pv 19, 343, 445, 631–63 (= Vv 1249–50), 751; Vin I 100,2*, 267,9*; II 144,14*; V 148,16*

yahim, Ja I 272,13*; D I 220,31, 238,26; Pv 631-632 = Vv 1249– 50; M I 400,21

kuhim, D II 343,18, 345,6, 357,4; M I 8,15, 486,21;, II 27,10, 28,20; S I 115,13, 122,18*; II 27,8*; Ja III 217,10*; Th 1133; Thī 304; Sn 311–412; Pv 246; Vv 739, 741.

Already Jacobi (1886: XXXIX) maintained that the Prakrit pronominal forms in *him* are "Apabhramśa", though it would have been more appropriate to call these forms "colloquial". They go back to *tamhi* (etc.) which had developed from *tasmi* (etc.), an old by-form of *tasmin*¹¹⁸ (see Alsdorf 1937: 33–37).¹¹⁹

What he completely overlooked is the sound-change -mh- / -Nh- < -Sm-/ -SN-.

- ¹¹⁶ The -h- of I sg. med. vāreyyāhe, D II 267,11, did not develop out of -s-, but arose from the analogy with the 1st sg. in -eyyāham (cf. yaṣṭāhe, Taittirīya-Āraņyaka I 4,11).
- ¹¹⁷ tahim was transformed into taham (attested in canonical texts only in the Vinaya [e.g. Vin II 34,12, III 232.3, IV 115,14, V 29,7]) on analogy with *iha*. Note that there is no yaham and at least in canonical texts no kuham. But there is kaham, which is widely to be found in old texts. So the connection between kuhim and kaham is a problem yet to be resolved.

¹¹⁸ See Oberlies 2001a: 367.

¹¹⁹ The explanation proposed by Smith, Sadd V 1332 (s.v. *kuhim*) — "kuh(am) x (tar)hi, cf. prkr. tahim" — is far from convincing. And Wackernagel's claim that *tahim*, etc., are true archaisms, which belonged together with Greek τόθι (1888: 148 [= *Kl. Sch.* p. 651] and 1910: 291 [= *Kl. Sch.* p. 276]; cf. AiGr. III 445, 551), has long (and rightly) been abandoned.

¹¹⁵ See Hock 2006.

The second example of h < s, viz. $k\bar{a}mehi$, Ja V 295,15* (see Chopra 1966: 111), is admittedly less sure. But the structure of the stanza

abbhu hi tassa bho hoti | yo anicchantam icchati akāmam rāja kāmehi | akanto kantam icchasi

is such that each of its verses ends with a verb. And indeed the corresponding stanza of the Mahāvastu (II $48_{I,11}*-12* = III 16_{,19}*-20*$) has 2sg. kāmesi: (vikṣepo tava cittasya) yam anicchantam icchasi / akāmām rāja kāmesi (naitam paṇḍitalakṣaṇam). Note that, in kāmehi, the s that developed into h is followed by -i- too.

Thus there seems to have been a close conjunction between *h* and *i* in these colloquial forms.¹²⁰ Hence it is evident that *s* changed into *h* in a process of a mutual influencing of *s* and *i*: $sya_i > *za_i > hi_i$. Finally, this brings us to the sound cluster *-hi*-. Here too, *h* exerted a palatalizing influence on neighbouring sounds,¹²¹ as noted already by the Saddanīti (629,9–10) which cites *tañ hi*, Sn 757, and *sañhito* (A IV 166, n. 7; Vin IV 15,10). One may add from the array of future forms

 $(\sqrt{h\bar{a}})$ hessāmi,¹²² Ja IV 415,19^{*}... 416,17^{*} (B^d hissāmi); V 468,21^{*}; VI 501,18^{*} (B^d hissāmi) ~ hassāmi, Ja V 465,7^{*} (B^{ds} hissāmi).

13. According to the evidence of the oldest Middle Indic texts in our possession, the *h*-future was unknown in north-western and western India. It seems to have been at home in the more easterly areas — the area of the *koinē gangetique* — from where it was taken over into Pāli. As with other forms of the proto-canonical Buddhist language, this future is scarcely attested in the texts of the Pāli canon and stands *beside* a form that is etymologically related, viz. the °*ass*-future (*dāhiti* ~

¹²⁰ The paucity of the change h < s tallies well with the scarcity of all colloquial elements in Pāli, such as *deśī* words (see Oberlies 2001: 5, n. 5).

¹²¹ On the palatal tinge of h in various New Indo-Aryan languages see Bloch 1965: 35.

 ¹²² It may be that also the younger future *jahissati* played a part in remodelling
*hassati (< hāsyati) into hissati (as maintained by von Hinüber 2001: §472).

dassati). From it the h-future developed by a process combining analogy and phonology. Throughout the history of the older Indo-Aryan languages (Vedic Sanskrit, Sankrit, Old Middle Indic) and throughout the area where these languages were in use,123 the aorist exercised a noticeable influence upon the future that resulted in various analogies. One of them was the degemination of Middle Indic -ss- of the future suffix, which was enhanced by the terminal weakness of this suffix. This process commenced in often-used verbs terminating in a long vowel (e.g. $\sqrt{d(h)\bar{a}}$, $\sqrt{y\bar{a}}$ and $\sqrt{h\bar{a}}$). Here it first gave rise to a ° $\bar{V}sa$ -future which was thus held together with other forms with a long vowel (e.g. dāpeti, dātum, dātabba-). Since, however, this form, attested only by faint traces in Pāli and Ardha-Māgadhī,124 possessed a hard-to-recognize suffix, it was evidently replaced by the h-future already within the koinē gangetique. The genesis of this form was a purely phonological process. The -y- of the future suffix -sy- coloured the following -a- into what must have originally been an ->- (yielding /-z>-/). Whereas in Asokan Prakrit this sound was represented by an -a-, in Pāli it was adjusted to the final -i of the endings resulting in -i-.125 This vowel contributed, in turn, to the 'Verhauchung' of -s- (more precisely, of the voiced sibilant /-z-/) into -h-. Thus did the vernacular h-future acquire its characteristic form °hi_i#, when it was taken over from the 'eastern' koinē gangetique into Pāli. From the h-future the -i- intruded into the futures dakkhissāmi/dakkhiti and sakkhissasi. Since in these forms too no Samprasāraņa (°)Cya- > (°C)Ci- has operated — and at present they are the sole certain examples we have for assuming this kind of phonetic

¹²³ Whether Girnār's kāsamti represents kāsanti or kāssanti, it points to a future that is formed in analogy with the aorist (see p. 177).

¹²⁴ $k\bar{a}samti$ in the Girnār version of RE V and kasati at Shāhbāzgarhī attest, it seems, to the $\circ V\bar{s}a$ -future also for the north-west and the far west (see p. 177).

¹²⁵ Much the same happened in "western" *esiti* (as proved by Gāndhārī *eşidi*) and *gamissiti* (as proved by Śaurasenī *gamissi*°), see p. 180.

change — we have to dispense with it altogether.¹²⁶ Instead it is the interaction between palatalisation by -y- and analogy that has yielded the supposed result of Middle Indic (°C)Ci-Samprasāraņa.

The labbreviations lof ltexts land lsigns lare lthose lof lthe l $Critical P\bar{a}li$ Dictionary. Additionally the following ones have been used: !

- #! parallel passage!
- x! crossed with

¹²⁶ Why, on the other hand, (°)*Cva-* > (°*C*)*Cu-* is well attested and its existence is beyond doubt (see von Hinüber 2001: §134 and Oberlies 2001: 33 [§9.14]) remains to be clarified.

LITERATURE

Alsdorf 1935–37	L. Alsdorf. "The Vasudevahindi, a Specimen of Archaic Jaina-Māhārāstrī". <i>BSOS</i> 8 (1935-37) 319– 33 (= <i>Kl. Sch.</i> pp. 56–70).
Alsdorf 1937	——. Apabhramśa-Studien. Leipzig 1937.
Alsdorf 1957	——. "Bemerkungen zum Vessantara-Jātaka". <i>WZKSO</i> I (1957) I–70 (= <i>Kl. Sch.</i> pp. 270–339).
Alsdorf 1960	
Alsdorf 1962	
Bechert 1961	H. Bechert. "Das Cullasutasomajātaka". <i>MSS</i> 42 (1961) 13–28.
Bendall 1888	C. Bendall. "The Tantrākhyāna, a Collection of Indian Folklore, from a unique Sanskrit MS. discovered in Nepal". <i>JRAS</i> 1888, 465–501.
Berger 1955	H. Berger. Zwei Probleme der mittelindischen Laut- lehre. München 1955.
Berger 1961	——. "Futurisches <i>gacchati</i> im Pali". <i>MSS</i> 42 (1961) 29–41.
Bloch 1950	J. Bloch. Les inscriptions d'Asoka. Paris 1950.
Bloch 1965	——. Indo-Aryan. From the Vedas to Modern Times. Paris 1965.
Bloch, Recueil	<i>Recueil d'Articles de Jules Bloch, 1906–1955.</i> Textes rassemblés par Colette Caillat. Paris 1985.
Bloomfield &	M. Bloomfield and F. Edgerton. Vedic Variants.
Edgerton 1930	Volume I: The Verb. Philadelphia 1930.
Bollée 1988	W. Bollée. Studien zum Sūyagada. Textteile, Nijjutti, Übersetzung und Anmerkungen. Teil II. Stuttgart 1988.
Caillat 1970	C. Caillat. <i>Pour une nouvelle grammaire du Pāli.</i> Turin 1970 (= <i>Selected Papers</i> pp. 1–24).

192	Thomas Oberlies
Caillat 1977/78	——. "Forms of the Future in the Gāndhārī Dharmapada". <i>ABORI</i> 58/59 (1977/78) = <i>Diamond</i> <i>Jubilee Volume</i> , pp. 101-106 (= <i>Selected Papers</i> pp. 125–30).
Chopra 1966	T. R. Chopra. <i>The Kuśa-Jātaka</i> . A Critical and Com- parative Study. Hamburg 1966 (Alt- und Neu- Indische Studien 13).
Čičak-Chand 1974	R. Čičak-Chand. Das Sāma-Jātaka. Kritische Aus- gabe, Übersetzung und vergleichende Studie. Bonn 1974 (Inaugural-Dissertation).
Emeneau 1968	M.B. Emeneau. "Prakrit Etymological Notes". <i>Katre Felicitation Volume. Part I (= Indian Linguistics</i> 29 [1968]), pp. 30–33.
von Hinüber 2001	O. von Hinüber. Das ältere Mittelindisch im Über- blick. Wien 2001.
Hock 2006	H.H. Hock. "Aspirate Sonorants vs. Sonorants + (h) in Middle Indo-Aryan". <i>Nyāya-Vasistha. Felicitation</i> <i>Volume of Prof. V. N. Jha</i> (ed. by Manabendu Banerjee). Kolkata 2006, 117–26.
Hoffmann 1976	H. Hoffmann, <i>Aufsätze zur Indoiranistik</i> . Hrsg. von J. Narten. Wiesbaden 1976.
Jacobi 1886	H. Jacobi. Ausgewählte Erzählungen in Mâhâ- râshtrî. Leipzig 1886.
Kümmel 2007	M. J. Kümmel. Konsonantenwandel. Bausteine zu einer Typologie des Lautwandels und ihrer Kon- sequenzen für die vergleichende Rekonstruktion. Wiesbaden 2007.
Leumann 1952	M. Leumann. "Morphologische Neuerungen im alt- indischen Verbalsystem". <i>Mededelingen der Konink-</i> <i>lijke Nederlandse Akademie van Wetenschapen, Afd.</i> <i>Letterkunde.</i> Nieuwe Reeks, 15,3. Amsterdam 1952.
Lüders 1911	H. Lüders. <i>Bruchstücke buddhistischer Dramen.</i> Berlin 1911.
Michelson 1909	T. Michelson. "Linguistic Notes on the Shāhbāz- garhi and Mansehra Redactions of Asoka's Four- teen-edicts". <i>The American Journal of Philology</i> 30 (1909) 284–97.

	The h-Future of Pāli 193
Milizia 2011	P. Milizia. "On the Origin of the Middle Indic Future Suffix - <i>hi</i> -". <i>JAOS</i> 131 (2011) 25–37.
Müller 1884	E. Müller. <i>A Simplified Grammar of the Pali Language</i> . London 1884.
Narten 1964	J. Narten. <i>Die sigmatischen Aoriste im Veda</i> . Wiesbaden 1964.
Norman 1976	K.R. Norman. "Middle Indo-Aryan Studies XIII: The Palatalization of Vowels in Middle Indo-Aryan", <i>JOIB</i> 25 (1976) 328–42 (= <i>CP</i> I 220–37).
Norman 1983	———. "Middle Indo-Aryan Studies XVI: The Palatalisation and Labialisation of Vowels in Middle Indo-Aryan". <i>JOIB</i> 33 (1983) 275-279 (= <i>CP</i> III 12–18).
Oberlies 1992	Th. Oberlies. "Eine Dissimilationsregel in den Aśoka- Inschriften". <i>WZKS</i> 36 (1992) 19–22.
Oberlies 1995/96	. "Der Text der Jātaka-Gāthās in Fausbølls Ausgabe (II) ". (<i>Stand und Aufgaben der Jātaka-</i> <i>Forschung</i> I, Teil 2). <i>BEI</i> 13/14 (1995/96) 269–305.
Oberlies 2001	——. Pāli: A Grammar of the Language of the Theravāda Tipiţaka. Berlin, New York 2001.
Oberlies 2001a	——. "Die Prakrit-Sprachen und das vedische Sanskrit". <i>Tohfa-e-Dil: Festschrift Helmut Nespital</i> . Reinbek 2001, 365–72.
Oldenberg 1881	H. Oldenberg. "Bemerkungen zur Pāli-Grammatik". ZvS 25 (1881) 314–27 (= <i>Kl. Sch.</i> pp. 1162–75).
Sakamoto-Gotō 1988	J. Sakamoto-Gotō. "Die mittelindische Lautentwick- lung von v in Konsonantengruppen mit Verschluß- laut bzw. Zischlaut". <i>IIJ</i> 31 (1988) 87–109.
Schulze 1904	W. Schulze. "Lit. <i>kláusiu</i> und das indogermanische Futurum". <i>Sitzungsberiche der Preußischen Akade-</i> <i>mie der Wissenschaften</i> 1904, 1434–42 (= <i>Kl. Sch.</i> pp. 101–109).
Schwarzschild 1953	L. A. Schwarzschild. "Notes on the Future System in Middle Indo-Aryan". <i>JRAS</i> 1953, 42–52 (= <i>Collected Articles</i> pp. 1–11).
Smith 1952	H. Smith. "Le future moyen Indien et ses rythmes". JA 1952, 169–83.

194	Thomas Oberlies
Takakusu 1900	J. Takakusu. A Pāli Chrestomathy, with Notes and Glossary Giving Sanskrit and Chinese Equivalents. Tokyo 1900.
Tedesco 1945	P. Tedesco. "Hindī <i>bhejnā</i> 'to send'". <i>JAOS</i> 65 (1945) 154–63.
Tedesco 1946	——. "Sanskrit <i>bāspa</i> - 'tears'". <i>Language</i> 22 (1946) 184–93.
Thieme 1981	P. Thieme. "Lexikalische und grammatische Bemer- kungen zu den Aśoka-Inschriften". <i>Studien zum</i> <i>Jainismus und Buddhismus. Gedenkschrift für</i> <i>Ludwig Alsdorf.</i> Wiesbaden 1981, 297–300 (= <i>Kl.</i> <i>Sch.</i> pp. 907–10).
Trenckner 1908	V. Trenckner. "Pāli Miscellany". JPTS 1908, 102–51.
Turner 1927	R.L. Turner. "The Phonetic Weakness of Terminational Elements in Indo-Aryan". <i>JRAS</i> 1927, 227–39 (= <i>Collected Papers</i> pp. 291–300)
Turner 1931	
Turner 1935-37	"Review of J. Bloch, L'Indo-Aryen du Veda aux temps modernes". BSOS 8 (1935–37) 203–12.
Wackernagel 1888	J. Wackernagel. "Miszellen zur griechischen Gram- matik". <i>ZvS</i> 29 (1888) 124–52 (= <i>Kl. Sch.</i> pp. 627– 55).
Wackernagel 1910	———. "Indoiranica". <i>ZvS</i> 43 (1910) 277–98 (= <i>Kl. Sch.</i> pp. 262–83).
Wright 1995	J.C. Wright. "Review of: O. von Hinüber, K.R. Norman (eds.). Dhammapada". <i>BSOAS</i> 58 (1995) 437–38.