

On some assimilations in a Far Western Nepali variety¹

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Introduction

The present paper is a preliminary study of assimilations between verb stem-finals and certain suffix-initials, which are more extensive in Far Western Nepali than in other varieties. It is based largely on information from a single speaker,² who was interviewed in Kathmandu, after punctual enquiries in the field.

The variety of Nepali described here is spoken in Chalsa, Bayala VDC, at the eastern edge of Achham district, near the Karnali river in Far Western Nepal. It can no doubt be roughly classified as a variety of Far Western Nepali (FWN). Far Western Nepali is often called “Dotyal”, a term which may also designate specifically the variety spoken in Doti proper, which is rather different from the variety spoken in Chalsa. In fact, FWN varies from village to village; some of its linguistic characteristics, including progressive assimilations of the type described here, have been catalogued by Madhav Pokharel (2001).

Throughout the paper I also cite standard written Nepali (WrN) forms, and spoken forms of the varieties used by mother-tongue speakers near Kathmandu (KN), with the understanding that neither is to be considered as necessarily representing the ancestor or the “underlying form” of FWN. Forms of WrN and Doti are cited in standard transliteration (except that the “inherent vowel” is transliterated “ə” rather than “a”); Chalsa and KN forms are cited in a somewhat hybrid phonological transcription.³

Three Chalsa verb forms will be considered: the base, the infinitive and the imperfect participle. The base is the unassimilated stem form which appears in finite forms, before a vowel or word boundary. The infinitival participle (KN -ne) undergoes the same assimilations as the infinitive but will not be cited here.⁴

For the sake of comparison, I will also present the infinitive forms of Doti proper, as cited in a small dictionary (Binadi n.d. [?1999]). These have much in common with the Chalsa forms, but also show some regular differences.

Chalsa Infinitives and imperfect participles

Most verbs in Chalsa have a single imperfect participial form, with the suffix generally strongly assimilated to the stem final, which itself may be influenced by the suffix. Verbs with open stems, or stems with final *n*, have only a single infinitive form, with the suffix *nu*: e.g. *kha-* ‘eat’, imperfect participle *khano*, infinitive *khānu*. But most verbs have two infinitive forms: inf1, in which the stem (essentially identical to the base) is followed by the suffix *nu* as in WrN, and inf2, an assimilated form, identical to the imperfect participle except for the suffix vowel — that is, identical in stem and in suffix-initial. I have no information concerning the distribution of the two types of infinitive in spontaneous speech. Examples:

¹ Research financed by the French National Research Agency, project ANR-06-CORP-030-01 “Epopeé Nepali”.

² I thank Mr. Bharat Kumar Saud, graduate student in the Department of Nepali at Tribhuvan University, Kirtipur, for his help in collecting and analysing data on the language of Chalsa and neighboring villages during 2008 and 2009. Annotated recordings of narratives and conversation from this area are available on the site <http://www.vjf.cnrs.fr/epopee>.

³ The phonological transcription of Ch. and KN is IPA-based except for the following South Asianist conventions: the affricates, pronounced [ts], [dz], are transcribed *c*, *j*, and the palatal glide (IPA [j]) is transcribed *y*. For an IPA transcription of KN, see Khatiwada 2009.

⁴ The terms “base”, “imperfect participle”, and “infinitival participle” are from Clark:1963, and have been adopted by subsequent English writers. Clark remarks that such terms are to be taken as conventional labels.

base *kat-* ‘cut’, imperfect participle *katto*, infinitives *kattu*, *katnu*; base *mər-* ‘die’, imperfect participle *məddo*, infinitives *məddu*, *mərnu*. We will examine here the assimilations found in the imperfect participle and in the infinitive form inf2. We will not discuss the question of whether the infinitives inf1 (*katnu*, *mərnu*) represent influence from WrN or KN.

The present paper is preliminary and descriptive in nature. To avoid distracting attention from the observed Chalsa forms, I will not propose morphophonological or internally reconstructed forms of the suffixes. In KN, the suffixes in question can be transcribed morphophonologically as <*nu*> ‘[infinitive]’ and <(V̄)do> ‘[imperfect participle]’, where V̄ indicates nasalization of the stem-vowel on open stems (e.g. KN *khādo* ‘eating’); this nasalization is related to the nasal initial of the Ch. suffix *no* (Ch. *khano*) used with such stems.

Open bases

With open bases, the infinitive suffix has the allomorph *nu*; the imperfect participial suffix has the allomorph *no*.

base	gloss	inf.	impf. part.
ja-	go	janu	jano
kha-	eat	khanu	khano

Table 1: open bases

Stop-final bases

After stop-final stems, the initial of both suffixes assimilates to the stem-final in voicing, aspiration and, after coronal⁵ stop-finals, in retroflexion. There is no assimilation in point of articulation to non-coronal stem finals: sequences **kk*, **gg*, **pp*, etc. do not occur. As mentioned above, the speaker usually gave two infinitive forms, one with the suffix *nu* as in standard Nepali, and the other showing assimilation.⁶

After unvoiced stop finals, the suffix-initial in both the infinitive and the imperfect participle is *t*.

base	gloss	inf1	inf2	impf. part.
bək-	mumble	bəknu	bəktu	bəkto
dhek- (WrN dekh-)	see	dheknu	dhektu	dhekto
kat-	cut	katnu	kattu	katto
sāt	exchange	sātnu	sāṭtu	sāṭto
kat-	spin	katnu	kattu	katto
nap-	measure	napnu	naptu	napto

Table 2: Base-final unvoiced unaspirated stops: *k*, *t*, *t̪*, *p*

⁵ Coronal refers to consonants articulated with the blade of the tongue. In Nepal, these are dental and retroflex occlusives, the affricates, and *s*.

⁶ In KN, the imperfect participial suffix assimilates similarly in voicing: e.g. *bəkto*, etc., but it is usually written *bəkdo*. Clark explicitly warns students of KN against retroflex assimilation (Clark 1963:65): “*cadhdā* ... pronounce [cadḍā]” (imperfect participle of *cadh-* ‘climb’).

Where the stem-final is an unvoiced aspirated stop, the aspiration spreads to the suffix-initial stop. (Note that although the stem final is then pronounced without aspiration (*rakthu*), there is probably no opposition between this and a hypothetical **rakhthu*. In the case of coronal stem-final aspirates, the suffix-initial can be regarded as totally assimilated (i.e. *tth* is phonologically equivalent to geminated *th*).

base	gloss	inf1	inf2	impf. part.
rakh-	keep	rakhnu	rakthu	raktho
uṭh-	rise	uṭhnu	uṭṭhu	uṭṭho
guth-	wrap (?to string)	guthnu	gutthu	guttho

Table 3: Base-final unvoiced aspirated stops: *kh*, *ṭh*, *th* (no example of *ph* recorded)

After stem-final voiced stops, the infinitive and imperfect participial suffixes are realized with voiced stop initials.

I am not entirely sure that voiced aspirates are never pronounced as stem-finals in Chalsa, but they do not appear to be heard before a following consonant, as in the forms considered here.

base	gloss	inf1	inf2	impf. part.
ṭhəg-	cheat	ṭhəgnu	ṭhəgdu	ṭhəgdo
chad-	leave	chadŋnu	chadŋdu	chadŋdo
təd-	look sidelong	tədŋnu	tədŋdu	tədŋdo
pəd-	fall, happen	pədŋnu	pədŋdu	pədŋdo
pəd-	study	pədŋnu	pədŋdu	pədŋdo
sod-	ask	sodnu	soddu	soddo
qub-	sink	qubnu	qubdu	qubdo
sub-	thrive	subnu	subdu	subdo

Table 4: Base-final voiced stops: *g*, *ṭ*, *d*, *b*

Base-final affricates similarly induce assimilation in voicing of the suffix-initial. The stem-final may optionally be de-affricated. (The absence from the data recorded in table 5 of either an affricated or de-affricated form for a particular verb may simply reflect an omission in elicitation.)

base	gloss	inf1	inf2	impf. part.
mic-	rub, knead	micnu	mictu, mittu	mitto
bāc-	live	bācnu	bāctu, bāttu	bācto, bātto
bhāc-	break	bhācnu	bhāctu, bhāttu	bhācto, bhātto
puch-	wipe	puchnu	putthu	puttho
bəj-	sound	bəjnu	bəjdu	bəddo
buj-	understand	bujnu	buddu	buddo
buj-	stop up	bujnu	buddu	buddo

Table 5: Base-final affricates: *c*, *ṭh*, *j*

Base-final *s* similarly induces devoicing of the suffix-initial.⁷

base	gloss	infl	inf2	impf. part.
bəs	stay	bəsnu	bəstu	bəsto
bas	crow	basnu	bastu	
ṭhos	poke (into fire)	ṭhosnu	ṭhostu	
hās	laugh	hāsnu		hāsto

Table 6: Base-final *s*

Sonorant-final bases

Base-final *r* assimilates to the suffix initial *d* in the imperfect participle and infinitive (table 7).

Some verbs with base-final *r* in KN have Ch. cognates with base-final *q* (*təd-*, *pəd-*, table 4). The conditioning of the correspondences KN *r* ~ Ch. *r* and KN *r* ~ Ch. *q* is not known to us (and is outside of the scope of the present paper).

Base-final *l* induces complete assimilation of the suffix-initial.

base	gloss	infl	inf2	impf. part.
mər-	die	mərnū	məddu	məddo
hər-	do	hərnū	həddu	həddo
tər-	cross	tərnū	təddu	təddo
phal-	throw	phalnū	phallu	phallo
bol-	speak	bolnū	bollu	bollo

Table 7: Base-final *r, l*

Nasal-final bases

Bases with velar or bilabial nasal finals have the suffixes *du*, *do* in the infinitive and imperfect participle forms. With coronal nasal finals, the suffix-initials assimilate completely (i.e. in both nasality and retroflexion): *ṇu*, *ṇo* or *nu*, *no*.

Nasal final stems show variation which remains to be investigated in detail. First, some verbs were observed with both nasal and oral stop-final stems. Thus the verb ‘beg’ was recorded with either the stem *mag* or the stem *mag*, with corresponding inf2 forms *magdu*, *magdu*. I regard these as a doublet, since such variation does not appear to be systematic. (See Bandhu et al. 1971:39 on doublets with nasal vs oral vowels in KN.) Second, and more systematically, there is variation between stems with nasal finals and stems in which voiced oral finals follow nasal vowels, e.g. *maṇ- ~ māq-* ‘knead’, with inf2 forms *maṇṇu*, *māqqu*. I do not know the extent of such variation in Chalsa; in table 8 I list only the nasal-final stems. On such variation in KN, see Bandhu et al. 1971:16. Note that stems with nasal

⁷ The speaker reported the existence of a further possibility, not involving assimilation, for bases in *s*: the stem-final could be realised as *i*, and the suffix-initial as an unvoiced aspirate (e.g. *bəithu* ‘to stay’). He himself did not use such forms. Realization of a syllable final *s* as *i* is common in FWN, e.g. *swaini* ‘woman’ (WrN *swasni*, Ch. *bəikini*), *chəi* ‘tu es [non-honorific]’ (WrN *chəs*).

vowels and unvoiced finals do not generally have variants with nasal finals. Therefore, I regard Ch. *hət̪*- and *həŋ-* ‘walk’ as a doublet.

base	gloss	inf1	inf2	impf. part.
maŋ	beg	maŋnu	maŋdu	maŋdo
naŋ	step over	naŋnu	naŋdu	naŋdo
ʈaŋ	stretch	ʈaŋnu	ʈaŋdu	ʈaŋdo
suŋ	sniff	suŋnu	suŋdu	suŋdo
maŋ	knead	maŋnu	maŋnu	maŋno
həŋ	walk	həŋnu	həŋnu	həŋno
hət̪	walk	hət̪nu	hət̪nu	hət̪o
chan	filter	channu		channo
bhən	say	bhənnu		bhənno
kam	tremble	kamnu	kamdu	kamdo
cham	feel, touch	chamnu	chamdu	chamdo

Table 8: Bases with nasal finals

The Dotyal infinitive

To get an idea of both the common traits and the divergences between two FWN varieties, we may compare the infinitive forms described above with those recorded in dictionaries of “Dotyali”. I have access to a large, encyclopedic dictionary by R.D. “Prabhas” Cataut (2001) and a much smaller dictionary by Candra Prasad Sharma Binadi (n.d. [preface dated 2055 VS/1999 AD]). The latter has the advantage of citing a base form in addition to the infinitive, so I use it as my main reference, occasionally citing forms from Cataut.

Binaudi states that (1) vocabulary has been collected from various places between Darchula and Achham, but the dictionary is based mainly on the speech of Doti proper, (2) variant forms of the same word have not been cited, and (3) special attention has been given to pronunciation, particularly where *ɖ* of the standard language is pronounced *ɳ*. In general, only one infinitive form is given for each verb, and, except for verbs with open stems or stems in final *n*, this form (like Ch. inf2) is never the same as the standard Nepali infinitive in *nu*.⁸ The infinitive forms cited appear to be quite consistent and no doubt reflect the speech of Doti proper. Whether the few variant or apparently aberrant forms represent other localities is an open question.

A typical dictionary entry for a verb reads as follows:

sāddu v. (*sār-du*) *sārnu* ['to move (intr.)']

The entry contains (1) [in bold:] the infinitive form, (2) the part of speech, (3) [in parentheses] (a) the verb base and (b) [after the hyphen] the appropriate allomorph of the infinitive suffix, and (4) a WrN gloss or definition, which is often the WrN spelling of the KN cognate.

After open stems, the infinitive suffix is *nu*. This means that many such infinitives are identical to KN. A number of such verbs — e.g. *khānu* ‘eat’, *jānu* ‘go’ (both cited by Cataut)

⁸ Whether this means that such infinitives are not used in Doti (contrary to our information from Chalsa) is unclear. Cataut often cites such infinitives (e.g. *phut̪tu/phut̪nu* ‘to burst’). Binadi may have omitted them as not belonging specifically to the Doti variety, as he appears to have done with many open-stem infinitives (see below).

— have been omitted by Binadi, probably for that reason. Examples from the dictionary: *sinu* ‘lie down’, *bukānu* ‘eat greedily’.

After stems with final *k* or *p*, the infinitive suffix is realized as a stop, but it is not devoiced as in Ch. (i.e. it is *du*, not *tu*, e.g. *pākdo* ‘to be cooked’⁹, vs Ch. *paktu*). Cataut exceptionally cites two infinitive forms, *pākdu* and *pāgdu*, for this verb; the latter variant helps remove any doubt as to the voicing of the suffix-initial.

For a few such verbs Binadi cites an alternative form in which the stem final is weakened to *u*; in these forms the suffix initial is (usually) unvoiced. Unvoiced aspirated stem-finals are followed by the suffix *du*; the suffix-initial is neither devoiced nor aspirated as it is in Chalsa.

One variant form is cited in which the suffix-initial is fully assimilated to a bilabial stem-final (*thəppu*, table 10); this form, also cited by Cataut, is unique in the dictionary.

Doti base	gloss	Doti infinitives	Chalsa inf2	WrN infinitive/gloss
pāk	ripen	pākdo	paktu	pāknū
rok	stop	rokdu	rokту	roknu
ṭhok	strike	ṭhokdu~ṭhoutu		ṭhoknu
cik	have coitus	cikdu~ciudu		ciknu
chek	block	chekdu~cheuntu		cheknu
tək	look	təkdu~təutu		(hernu)
tip	pick up	tipdu		tipnu
cep	press	cepdu		cyāpnu
cop	mix with liquid	copdu~coutu		copnu
chop	cover	chopdu~choudu		chopnu
thəp	add more	thəpdu~thəppu		thəpnu

Table 9: Unvoiced unaspirated velar and bilabial stop finals

After aspirated and voiced velar and bilabial finals, the infinitive suffix is also *du*.

Doti base	gloss	Doti infinitives	Chalsa inf2	WrN infinitive/gloss
cākh	taste	cākhdu		
lekh	write	lekhdu	lekthu	lekhnu
rākh	put, keep	rākhdu	rakthu	rākhnu
thəg	cheat	thəgdu~thəudu	thəgdu	thəgnu
dhog	bow to	dhogdu		
bəg	flow	bəgdu		
bhāg	flee	bhāgdu~bhāudu		
māg	ask for	māgdu	magdu, maŋnu	
dob	plant	dobdu		(ropnu)

Table 10: Aspirated and voiced velar and bilabial stop finals

After stems with coronal stop finals, including affricates and *s*, assimilation of the suffix-initial is complete (table 11).

Doti base	gloss	Doti infinitives	Chalsa inf2	WrN infinitive/gloss

⁹ Binadi lists a few infinitives with the suffix-vowel *o*.

kat	cut	kāṭtu	kaṭṭu	kāṭnu
bhiṭ	meet	bhiṭṭu		bheṭnu
met	erase	metṭtu		metnu
sāṭ	exchange	sāṭtu		sāṭnu
həṭ	walk	həṭṭu	həṭṭu	hīḍnu
hiṭ	walk	hiṭṭu	həṇṇu	hīḍnu
uth	get up	utṭhu	utṭhu	utṭnu
cūṭh	rinse mouth	cūṭṭhu		cūṭhnu
niməṭh	snip off	niməṭṭhu		nimoṭhnu
chəḍ	scatter	chəḍḍu		chərnū
chāḍ	abandon	chāḍḍu	chāḍḍu	chāḍnu
mod	bend, fold	modḍu		modnu, (dobryāunu)
pəḍ	fall, happen	pəḍḍu		pərnū, (dħelkənu)
pəḍ	read	pəḍḍu		pəḍhnu
pāḍ	make	pāḍḍu		pārnū
cəḍ	climb	cəḍḍu		cəḍhnu
bəḍ	grow (intr.)	bəḍḍu		bəḍhnu
bāḍ	increase (tr.)	bāḍḍu~bəḍḍu		bāḍhnu
oḍ	wrap on, wear	wəḍḍu~oḍḍu		oḍhnu
phəḍ	change	phəḍḍu		phernu, bəḍəlā linu
jot	plow	jottu		jotnu
khit	throw	khittu		(phālnu)
kath (?)	construct	kaththu†		(racnu, banāunu)
khed	chase	kheddu		(lakhetnu) (cf. khednu)
sod	ask	soddu	soddu	sodhnu

Table 11: coronal stop finals († from Cataut 2001)

Doti base	gloss	Doti infinitives	Chalsa inf2	WrN infinitive/gloss
khic	pull down	khiccū		khicnu
thic	crush	thiccu		thicnu
ghoc	poke	ghoccu		ghocnu
khoj	look for	khojju		khojnu
puj	worship	pujju		pujnu
bhij	prick	bhijju		bhijnū
buj	understand	bujju	bujju	bujhnu
ruj	get wet	ruddu		rujhnu
t̥āj	organize	t̥āḍdu		
səūjh	remember	səūḍdu		səmjhənu
phəs	be trapped	phəssu		phəsnū
ṭhos	poke (into fire)	ṭhossu~ṭhosdu	ṭhostu	ṭhosnu
jhos	kindle, burn	jhossu		jhosnu
ghəs	smear on	ghəssu~ghəsdu		ghəsnū
bəs	stay	bəṭṭhu		bəsnū

Table 12: Affricated and s finals

Stem-final / induces assimilation of the infinitive suffix-initial. Bases in final *r* generally have allomorphs in final *n*, *d*, or *n~d* in the infinitive. It may be that *r*-final bases in general allow both types of infinitive. (One, *ər* ‘do’, is listed with *n~r* alternation.) Presumably the stem in *r* appears in other forms of these verbs.

No verb is cited as showing variation between a dental and a retroflex stem-final in the infinitive form.

Doti base	gloss	Doti infinitives	Chalsa inf.	WrN infinitive/gloss
cil	sting	cillu		cilnu
umal	boil	umallu		umālnu
ciphəl	slip	ciphəllu		ciphlənu
ər	do	ənnu~ərnu	həddu	gərnu
tər	cross	təddu	təddu	tərnu
tar	take across	tannu		tārnu (river, etc.)
musar	stroke	musannu		musārnu
kor	comb, dig	konnu~koddu		kornu
*cor	steal	connu~coddu		cornu
pher	wander	phennu~pheddu		ghumnu, phernu
sər	move (intr.)	səddu		sərnu
sar	move (tr.)	saddu		sarnu

Table 13: Stem-final resonanats *r, l*

The form *sū:do* appears for expected *?suñdu* or *?sūgdu* (cf. Cataut: *suñdu, suñnu*); I did not find any other stem of this kind (or with final *n̄*) in Binadi's dictionary. (Cataut cites the forms *tāñiu, tāñdu, tāñnu* 'hang'.) Note also the unique assimilation in the variant *ghummu*.

sū:n̄	sniff	sū:do		sūghnu
gən̄	count	gənnu		gənnu
goñ	cultivate, dig	goñnu		goñnu
giñ	cut in lengths	giñnu		giñnu
bun̄	sink	buddu~buñnu		(dubnu)
ben̄	coil	bedđu~beñnu		bernu
tən̄	cross	təñnu		tərnu
niphən̄	winnow	niphənnu		niphənnu
jhan	heat oil	jhannu		jhannu
pin	grind	pinnu		pīdhnu
tham	stop	thamdu		thāmnu
ghum	go around	ghumdu, ghummu		ghumnu
kam	tremble	kamdu	kamdu	kăpnu [kamnu]

Table 14: Stem final nasal consonants: *ŋ* (?), *n̄*, *n*, *n̄*.

The formation of Chalsa inf2 and the Doti infinitive are summarized in table 16.

base-final C	Ch.	Doti	note
Ø	Vnu	Vnu	
k, p	Ctu	Cdu, udu	D. pp (1 ex.)
g, b, ŋ, m	Cdu	Cdu	D. mm (1 ex.)
kh	kthu	khdu	no ex. of -ph
t, t̄, d, d̄, l, n, s	CCu	CCu	progressive assimilation
th, th̄	CChu	CChu	progressive assimilation
c	ctu, ttu	ccu	
ch	tthu	?	
j	jdu, ddu	jju	

s	ssu	ssu	
ɳ	ɳɳ	ɳɳ, ɖɖ	
r	ddu	ddu, nnu	

Table 15: Synopsis of Chalsa and Doti infinitive formation

Conclusion

The assimilatory phenomena discussed are some of the large number of variables to be taken into account in a detailed study of Nepali dialects. Comparison of the infinitive form (the only morphological form for which relatively complete data can be found in a dictionary) in two FWN varieties, from Chalsa in Achham and from Doti, shows considerable overall similarity, but also regular differences.

In both varieties, but to differing degrees, voicing, mode, and place assimilations are most extensive in forms with coronal base-finals, where base-final and suffix initial are closest in point of articulation from the outset. When the articulatory distance between base-final and suffix-initial is below a minimum threshold, it is as if a “strong force” takes over, leading to further assimilation or gemination as listed below. (The formulations below assume a basic infinitive suffix *du* for Chalsa inf2 and Doti, but can be adapted to fit other hypotheses.)

- (1) Articulation: Coronal finals induce assimilation in point of articulation (retroflex vs dental) in the infinitive suffix in both Chalsa and Doti, while velar and bilabial finals do not induce any such place assimilation.
- (2) Voicing: Coronal unvoiced stem-finals induce devoicing of the suffix-initial in Doti; velar and bilabial unvoiced stem-finals do not. (In Chalsa inf2, all unvoiced stem-finals induce devoicing.)
- (3) Aspiration: Coronal unvoiced aspirated stem-finals induce aspiration of the suffix-initial in Doti; velar and bilabial unvoiced aspirated stem-finals do not. (In Chalsa inf2, all unvoiced aspirated stem-finals induce aspiration.)
- (4) Nasalization: Coronal nasal stem-finals induce nasalization of the suffix initial in both Chalsa inf2 and Doti; velar and bilabial nasal stem-finals do not.
- (5) Affrication: In Chalsa and in Doti (as in KN), affricates and fricatives are coronal, so there is no question of comparison with other points of articulation. In D., but not in Ch, affricated stem finals induce affricated suffix initials. In Ch. affricated stem-finals may de-affricate, again leading to total assimilation/gemination. The fricative *s* induces gemination in both varieties.

The data presented here is obviously far from sufficient to define “Achhame” vs “Doteli”, given the number of other varieties that surely exist around and between the two studied here, and the number of other parameters to be taken into account. Even in the data presented, we have seen sporadic hints of further possible assimilations, like gemination of *p* and *m* (resulting from progressive assimilation of the suffix-initial), and of phenomena such as the vocalization of stem-final *s*, or the vocalization of stem-final velar and bilabial stops, which no doubt prevail in some neighboring Doti or Achham villages. We wish success to the Linguistic Survey of Nepal in bringing such phenomena to light.

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8/02/2011 v. 1.00