

ON CERTAIN FUNCTIONS OF ‘A-CHUNG IN EARLY TIBETAN TRANSCRIPTIONAL TEXTS*

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1. INTRODUCTION

It is probably fair to say that there is currently considerable consensus among tibetologists on the graphic functions and even on the original phonetic values of the sounds represented by most of the letters of the Tibetan alphabet. An exception to this is the letter ཉ 'a, now often referred to as '*a-chung*'. And even in the case of this letter there is agreement on many points. For example, in Written Tibetan (WT) the syllables *dag* དག and *dga'* དྒା' are distinguished by placing '*a-chung*' in syllable final position after the letter *-g-*. And in WT transcriptions of Sanskrit, '*a-chung*' is subscribed to indicate the presence of a long vowel in the underlying Sanskrit syllable. In both of these cases, '*a-chung*' seems to function as an abstract graphic element or diacritic rather than as the bearer of a particular phonological entity. Furthermore, in a small number of words, which in many modern dialects have pure or smooth vocalic ingress rather than an initial consonant, '*a-chung*' indicates the absence of any other consonant, including ?- (written as ཉ, the so-called ?*a-chen*). Viewed from a purely graphic standpoint, '*a-chung*' in such cases carries the vowel where the system provides no other grapheme for this purpose. Similarly, it bears the second and third vocalic elements in diphthongs and triphthongs (as, for instance, in *rte'u* “little horse” and *me'a'o* “cat's mew”).

But beyond these widely recognized functions, '*a-chung*' can also occur in pre-consonantal position in WT texts, and on its function and value here there is significant disagreement, involving not only tibetologists but also sinologists, Tibeto-Burmanists, and others who for one reason or another have a stake in its interpretation. The majority of earlier investigators can perhaps be divided into two groups, i.e. those on the one hand who have taken as their starting point the historical-comparative study of modern Tibetan dialects, and those on the other hand who have framed the problem in some other terms, such as paleographic

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origins of the grapheme, Tibetan and Tibeto-Burman linguistic prehistory, and in several cases even the *a priori* assumption that '*a-chung*' in all its environments must have represented a single phonetic entity (i.e. a sort of "Unified Field Theory" of '*a-chung*'). Persons of the second, and more diverse, group have variously suggested that pre-consonantal '*a-chung*' represented 1) a vowel or essentially vocalic element of some sort, 2) a laryngeal fricative or glide, or 3) a glottal stop pre-initial. Members of the first group, noting that opposite WT '*a-chung* + consonant clusters certain modern dialects possess prenasalized consonants, have posited for the common ancestor of the dialects a set of prenasalized obstruents and then suggested that '*a-chung*' in pre-consonantal position was specifically a mark of nasalization or prenasalization. This approach has then been attacked on graphic grounds. For, say its critics, had the script framers intended to represent nasal sounds, they would more probably have chosen the already available nasal letters, *m*, *n*, *ny*, and *ng*, for this purpose. In comparing these various rather different schools of thought it is worth noting here that they do share common ground in one respect, i.e. they all seek to discover "how '*a-chung*' was pronounced." It is in their answers to this question, rather than in their framing of it, that they part company.

In studying the origins and early history of the Tibetan script and its relationship with the earliest known phonological stages of the language, it is important to take account not only of WT but also of texts of the Royal or Old Tibetan (OT) period. For it is the OT corpus which lies closest in time to the invention of the script, a process which is thought to have occurred over a relatively short span of time during the first half of the seventh century. As regards '*a-chung*' in particular, we know that the use of this letter in OT texts was not identical in every respect with its usual applications in WT. For example, we find in OT such non-canonical syllable types as *dba's* ད୍ବା'ସ, *dma's* ད୍ମା'ସ, and *mda'd* མ୍ଦା'ଦ. And we also note that '*a-chung*' was not normally or systematically used as a subscript to represent long vowels in transcriptions of Sanskrit (Hackin 1924:88). Perhaps its OT application as a pre-consonantal element might also be examined more closely. The present paper undertakes one aspect of this task, by examining the use of pre-consonantal '*a-chung*' in OT transcriptions of Chinese and Sanskrit words. The hope is that this may shed some light on the more general controversy regarding '*a-chung*' in Tibetan texts of various periods.

2 OT TRANSCRIPTIONS OF CHINESE

The study of Dunhuang manuscript and inscriptional Tibetan transcriptions of Chinese has a long and illustrious history, culminating most recently in the

comprehensive compendium of Tokio Takata (1988). And over the last half century it has often been noted that in these transcriptions Tibetan combinations of '*a-chung* + consonants' are used to render Chinese sounds which in Bernhard Karlgren's *Qieyun* 切韻 System (QYS) interpretations are represented as the nasal initials, *n*-, *m*-, and *ng*-. On independent grounds, these Chinese nasals are widely thought to have been prenasalized voiced stops during the relevant period (Maspero 1920:29), or perhaps, as more recently suggested, "post-stopped nasals" (Chan 1987). This of course accords well with the previously mentioned theory that similar combinations in native Tibetan texts originally represented prenasalized initials. Thus, the standard and often repeated characterization of pre-consonantal '*a-chung*' in Tibetan transcriptions of Chinese is that it "stands for nasality." This is all very well. But what is seldom mentioned in the literature is that there are many '*a-chung* + consonant' combinations in these materials which clearly do not function in this way. The following is a list of such "irregular" cases, arranged by Chinese initial types. Entries are where possible numbered as in Takata's tables. QYS interpretations are in Karlgren's system, as emended by F. K. Li. They are given for reference only; it is not claimed that they are historically correct representations of the underlying Chinese forms. Dunhuang Tibetan transcriptional texts and Old Tibetan inscriptional sources are identified using the following conventional abbreviations:

C = *Qianziwen* 千字文

DA = *Daoan fashi nianfo zan* 道安法師念佛讚

FP = *Fahuajing pumenpin* 法華經普門品

K = *Jingangjing* 金剛經

Kbr = Khotanese Brāhmī; all such forms follow Takata (1988).

NT = *Nantianzhu guo putidamo chanshi guanmen* 南天竺國菩提達磨禪師觀門

O = *Emituojing* 阿彌陀經

P = *Bore bolomiduo xinjing* 般若波羅蜜多心經

Pb = Tibeto-Chinese phrase books; forms from these texts have been assigned numbers agreeing with the order of Takata's data tables, with lower case letters added by us.

MT = Multiplication Table

S-T = Sino-Tibetan Treaty Inscription of 821-822

T = *Dasheng zhongzong jianjie* 大乘中宗見解

TD = *Tiandi bayang shenzhoujing* 天地八陽神咒經

Forms directly pertinent to our discussion are highlighted in boldface. For comparison, a selection of other, non-highlighted forms is given where available. In the case of the S-T data, pertinent examples where '*a-chung*' is subjoined rather than anteposed are also included.

Labials

0073	補	QYS	puo:	O: 'phu
0434	胞	QYS	pau, phau	TD: 'phye'u
0434a	豹	QYS	pau-	Pb: 'be'u “leopard, wildcat”
0481	不	QYS	pjœu, pjœu:, pjœu-, pjœuət	K, O, TD, NT, DA, P: pu; TD , DA: 'bu
0737	遍	QYS	pien-	O, TD: pyan; NT: 'byan
1141	卜	QYS	puk	TD: 'bug
0649	攀	QYS	phwan	NT: 'pwan
0077	菩	QYS	buo	K, O, TD, P: bu; O, TD: 'bu ; T: phu; NT: 'pl
0078	部	QYS	buo:	S-T: bo, 'bo
0222	排	QYS	bäi	NT: 'pyi
0284a	皮	QYS	bje ³	Pb: *皮轡頭 T: 'byi pyi tho'u “reins”
0304	比	QYS	bi ⁴ , bi ⁻⁴	C: bi; O, TD: 'byi ; TD: 'byi
0814	貧	QYS	bjen ³	TD: 'bin , byin; DA: byin
1027	白	QYS	bok	K: big; TD: beg; NT: 'beg ; Kbr: phehää, phihää
1042	平	QYS	bjwong	TD: beng; NT: 'byan T: pheng

Labiodentals

0151	夫	QYS	pju	C, TD, T: phu; TD: 'phu, 'bu ; S-T: pu, pu', p
0392	非	QYS	pjwei	K, O, T: phyi; O, TD: 'phyi ; K: phyi; Kbr: h̥vī; h̥vī
0394	誹	QYS	pjwei:	TD: 'phyi
0483	富	QYS	pjœu-	C, DA: phu; TD: 'phu
0572	法	QYS	pjwɒp	K, O, TD, T, DA, P: phab; TD: 'bwab ; NT: 'phwab, 'pwab ; Kbr: hva:bä, hva:pä, hvabä, hva:rä, hva:
0715	返	QYS	pjwon:	TD: 'ban
0730	發	QYS	pjwot	K: phar, 'phar, 'pher ; TD: 'phwad ; Kbr: hva:rä, hvarä
0847	分	QYS	pjuən	TD: phun; T: phun; NT: 'pun
0853	弗	QYS	pjuət	C: phur; O: 'bur , bur
0945	方	QYS	pjwang	O: 'bwang ; NT: 'pwo ; Kbr: hvā:, hvām: O: pug; TD: 'bug ; Kbr: hvū:hä
1173	福	QYS	pjuk	

0946	妨	QYS	phjwang	O: 'hwang, phung
0484	覆	QYS	phjœu-	T: phu; O: 'phu
0155	父	QYS	bju:	TD: 'phu; DA: phu
0485	浮	QYS	bjœu	TD: 'bu
0570	凡	QYS	bjwøm	TD, T: bam; TD: 'bam; Kbr: hvam:mä
0571	梵	QYS	bjwøm-	O, TD: bam; NT: 'pwam, wyam; Kbr: hvam:mä
0716	煩	QYS	bjwøn	C: ban; O: 'ban; T: phan; NT: 'pwan
0849	分	QYS	bjuən-	C: bun; K: TD: 'bun
0855	佛	QYS	bjuət	K, FP: bur; O: TD: 'bur; FP, T, DA, P: phur; Kbr: hvi:rä, hvirä, hva:rä, hvarä
0952	縛	QYS	bjwak	T: 'pwag
1175	復	QYS	bjuk	K, TD: 'bug; P: phug; Kbr: hvū:hä, hvū:hä, hvā:hä, hvā:hä
1193	奉	QYS	bjwong:	O: 'bung; Kbr: hvūm:nä

Dentals

0972	等	QYS	təng:	K, O, TD: ting; O: teng; T, NT: ding; NT: 'ting;
				Kbr: ttimgä
0003	陀	QYS	dâ	O: da, 'da; TD: da
0004	大	QYS	dâ-	NT: 'da'; TD: ta
0464	調	QYS	dieu	TD: 'de'u; DA: thye'u
0471	投	QYS	dəu	TD: de'u, 'de'u
0472	頭	QYS	dəu	TD: 'de'u; DA: thi'u
0619	達	QYS	dât	C, TD, T: dar; O: 'dar

Retroflex Stops

1156	中	QYS	tjung	K, O, T, P: cung; O, TD: chung; TD: jung; S-T: cung, c'ung ; Kbr: tūmñä, tūm
0140	住	QYS	dju-	K, NT: ju; NT: 'ju; chu
0342	持	QYS	d̪i	TD: j̪i, 'j̪i, 'j̪i; ci; T: chi; Kbr: kṣī, kṣī, kṣvyü
0551	湛	QYS	d̪äm:	NT: 'jam, 'jyam

Palatals

0112	諸	QYS	tʂjwo	K, O, DA, TD, P: ci; C, T, NT: cu; O: 'cu; Kbr: cū, cūm
1187	種	QYS	tʂjwong:	TD, NT: cung, jung; T: jung; TD: chung, 'jang; Kbr: tūmñä
0912	昌	QYS	tʂhjang	TD: 'chang
0806	神	QYS	dʐjen	TD, T, NT, P: shin; C, TD: śin; NT: 'shin; Kbr: śimnä; S-T: shin
0995	乘	QYS	dʐjøng-	K, T: shing; NT: 'shing; TD: ceng
0678	禪	QYS	ʐjän	T: shan; T, NT: zhan; NT: 'zhan
0917	常	QYS	ʐjang	TD: jang, 'jang, jyang, sheng; T: shong, shyong; S-T: shang; Kbr: sā
0357	始	QYS	ʂi:	TD: she, shi; NT: 'shi
0502	守	QYS	ʂjəu:	C: shi'u; S-T: zhí'u, sh'i'u,
0565	攝	QYS	ʂjäp	T: shab; NT: 'shwab
1010	識	QYS	ʂjæk	TD, T, P: shig; TD, T: sheg; TD: shig; NT: 'shig
1076	聲	QYS	ʂjäng	O, TD, FP, T: sheng; TD, NT, DA: she; NT: 'she; Kbr: sé, sái

Retroflex Fricates

0124	初	QYS	tʂhjwo	T: chu; NT: 'chu; HS: che
0930	莊	QYS	tʂjang	K, O: tsang, 'tshang Pb: *莊 田 人 T: cang ten zhin “farmer”
0127	所	QYS	ʂjwo	K, O: shi; O, TD: she; P: zhi; K: se'i, se; K, O, T: shu; NT: 'zho; Kbr: şū, śū

Sibilants

0794	進	QYS	tsjen-	O: tsin; T, NT: dzin; T: tshin; NT: 'jyin
0270	此	QYS	tshje:	K, O, TD, T: tshi; TD: tshi, tshe; NT: 'tshi; Kbr: tciysi, tciysä, siysä
0821	七	QYS	tshjet	O, TD, NT, MT: tshir; TD: tshir; NT: 'tshir; MT: tshi
0880	錯	QYS	tshâk	NT: 'shig

It seems possible that 錯 here has been misread as 昔 (QYS sjæk) or some such word.

0039	坐	QYS	dzuâ:	NT: 'dzwa
0348	字	QYS	dzi-	TD: dzi, 'dzi
0494	就	QYS	dʒjəu-	K, DA: dzi'u; O, TD: 'dzi'u

0797	盡	QYS	dzjen:	TD, FP, P: dzin; TD: 'dzin, 'dzin, dzin; Kbr: tsimnä
1123	寂	QYS	dziek	C, NT: dzig; NT: 'dzig, jig; T: tshig
0255	西	QYS	siei	C, O: sye; TD: se; NT: 'she; Kbr: si
0350	司	QYS	sii	S-T: s'i
0823	悉	QYS	sjet	K, TD: sir; NT: 'shir; Kbr: sirä
0906	相	QYS	sjang-	K, O, TD, T: syang; T: syong; NT: zho, 'zho; P: :

Velars and Laryngeals

0223a	怪	QYS	kwäi-	Pb: *怪 T: 'gwa'e "to blame"
0561	檢	QYS	kjäm: ³	S-T: kem, k'em
0878	各	QYS	kâk	O: kag, 'kag
0961	絳	QYS	kång-	S-T: k'ang
0094	苦	QYS	kuho:	TD, T: kho; DA, P: khu; NT: 'khu; Kbr: khū
0519	丘	QYS	khjœu	TD: khe'u; O: 'khe'u; Kbr: khyūvā, kyū
0377	期	QYS	gjii	DA: 'gye
0520	求	QYS	gjœu	C: gi'u; TD: 'gi'u; Kbr: khyūvā
0262	慧	QYS	yiwei-	TD, NT: hywe; NT: 'hywe, 'hye
0429	毫	QYS	yâu	TD: 'he'u
0552a	陷	QYS	yäm:	DA: h'am
0754	現	QYS	yien-	O, TD: hyen; T: hyan; DA: 'hyen
0896	黃	QYS	ywâng	T: hwong; NT: 'ho; Kbr: hvä:
0962	降	QYS	yång	K: 'heng; Kbr: ham:nä, òhaäm:nä, hamnä
0969	學	QYS	yåk	NT: 'heg, 'hog
0978	恆	QYS	yøng	C, O: heng; K, O: hing; TD: 'hing
1024	行	QYS	yøng	TD: 'heng; T: heng; O, TD: 'he; NT: 'he'u; DA, P: he'i; Kbr: he:
0104	呼	QYS	xuo	TD: 'ho
0139	虛	QYS	xjwo	K: he'i; NT: 'hye; DA: hyi; P: hi; T: hu; NT: 'hyu; Kbr: hyü:, hyü
0882	惡	QYS	?âk	K, TD, T: ?ag; O, TD: '?ag

In examining these data, we note immediately that the largest class of examples comprises Chinese syllables which are generally thought to have had labiodental initials in the underlying forms of Chinese. The Tibetans tended to represent these sounds as '*p(w)*', '*ph(w)*', '*b(w)*', or '*hw*'. And it is important to note in this connection that OT had no labiodental series. In these cases the transcribers were struggling to apply their script to sounds they did not possess in their own language. Almost as numerous in number as these labiodental transcriptions are those directed at the Chinese velar/laryngeal series. And it seems particularly pertinent that the majority of these cases involve the QYS initials *y-* and *x-*. Where these have escaped palatalization in the modern

northwest Chinese dialects, they are invariably realized as velar (rather than laryngeal) fricatives. It seems not unlikely that they were phonetically velar in earlier times. On the other hand, WT *h* most often corresponds to laryngeal fricatives in the modern Tibetan dialects, and it is probable that the OT value was laryngeal rather than velar. Thus, the combination '*h*' which we encounter so often in these transcriptions may well represent an effort by the Tibetans to signal an unfamiliar phonetic feature in the Chinese target forms. Another Chinese initial class which is well represented in our examples is the palatals. Here we may wonder if our Tibetan spellings such as '*c*', '*ch*', and '*j*' are intended to signal a difference between palatals or pre-palatals on the one hand and alveopalatals on the other. To cite a modern parallel, the palatal series in the modern Lhasa dialect strikes me as rather similar to the English alveopalatals and as noticeably different from the modern standard Mandarin palatals. Similar possibilities suggest themselves for the sibilants and retroflexes. Yet another striking feature of the data as a whole is the rather large number of Chinese syllables with voiced or murmured (i.e. *zhuo* 濁) initials. We must wonder if the phonetic quality of "voicing" in OT on the one hand and in the underlying Chinese dialects on the other was not rather different.

In summary, the function of '*a-chung*' in these forms would seem to have been to alert readers to the fact that the Tibetan consonant letters to which '*a-chung*' was attached were not to be pronounced in their "normal" way. There is no evidence here that '*a-chung*' represents either "nasalization" or, for that matter, any other common phonetic feature. And the particular idea that '*a-chung*' was somehow inherently nasal encounters further and even more vexing obstacles in examples such as the following:

0172	乃	QYS	nâi:	K: 'n e 'i; TD: 'de; DA, P: 'de'i; Kbr: dayi
0608	難	QYS	nân	O: 'dan; T: 'nan
0973	能	QYS	nøng	K, TD: 'ding; K: 'dîng; O, TD: 'ning; O: 'neng; T, P: ning; Kbr: dimñä
1151	農	QYS	nuong	C: 'nong; ZC: 'dong
0815	愍	QYS	mjen: ³	TD: 'myin
1064	名	QYS	mjiäng ⁴	O, TD: meng; K, O, TD, T: myi; K, TD, NT: mye; K: myi'; NT: 'mye; T: me; Kbr: mye

Here we have cases where Chinese nasals are rendered as OT '*n*-' and '*m*-'. Are we really to suppose that these combinations are intended to represent "nasalized nasals" or "prenasalized nasals"?! That the underlying Chinese consonants had what struck the Tibetans as special features of some sort seems

very likely, but we can hardly imagine that nasalization is the feature indicated by '*a-chung*' here.

But what of the numerous and often cited cases, alluded to above, where '*a-chung* + consonant combinations probably really do stand for prenasalized consonants in Chinese? Can we not, for sentimental reasons, retain the hitherto popular theory that '*a-chung*' represents the nasal feature here? This is of course a possibility; but is it not simpler and more consistent to assume that the underlying Chinese sounds here required special graphic representation, just as those in the examples cited above must have done? Why need we set up a special class of "transcribed nasals" in these and only these particular cases?

3 OT TRANSCRIPTIONS OF SANSKRIT

WT conventions for transcribing Sanskrit are fully codified and have frequently been cited by those who have hitherto discussed the nature of '*a-chung*'. OT transcriptions of Sanskrit, which often differ markedly from their WT counterparts, are not so well known. Our information on them comes in small part from occasional, isolated examples in early texts and in greater part from a Dunhuang manuscript now held by the Bibliothèque Nationale and catalogued as *Pelliot tibétain 849*. This text has been studied in detail by Hackin (1924). Facsimiles are available as plates 233-239 in Spanien and Imaeda (1978-79, vol. 1). The manuscript contains a rather large number of sample transcriptions of Sanskrit and is also supplied with a set of directions outlining recommended transcriptional renderings of individual Sanskrit sounds (i.e. lines 94-98). The following are those recommended forms which contain the letter '*a-chung*' as a pre-consonantal (or, in one case, subscripted) element. Each item is accompanied by a selection of illustrative examples from the text as a whole. In several cases, no actual applications of the recommended rendering appear in the text material. ?*A-chen* is not separately transcribed in these examples.

Tib. '**g**' = Skt. **gh** (vs. Tib. **g** = Skt. **g**), *no examples*

Tib. '**dz'** = Skt. **jh** (vs. Tib. **dz** = Skt. **j**), *no examples*

Tib. '**d**' = Skt. **ɖ** (vs. Tib. **d** = Skt. **ɖh**)

pu'-da-ri-ka
pyin'-da sid-ti

Skt. puṇḍarīka-
Skt. piṇḍasiddhi

Tib. **n'** (' is subscripted) = Skt. **ṇ** (vs. Tib. **n** = Skt. **n**), *no examples*

Tib. **'d** = Skt. **d** (Skt. **dh** to be rendered by Tib. **th**)

'de-ba no-pyi-ka	Skt. devanopika
'dag-khyi-na 'dzam-bu-ti-pa	Skt. dakṣinajambudvīpa
pur-ba-'dī-pa ar-rda-tsang-tra	Skt. pūrvadvīpārdhacandra
'di-ba tsag-kra	Skt. dvīpacakra
'de-ba-lo-ka	Skt. devaloka
pur-ba 'du'i-sha-ta ba-ri-sha a-'i-ba	Skt. pūrvadviśatavarsāyuḥ
'di-ba	Skt. deva
'da'-sa-ku-sa-la	Skt. daśakuśaka-
'das-sa-a-rta a-rtu	Skt. daśārthārtha

Tib. **'b** = Skt. **b** (vs. Tib. **b** = Skt. **bh**)

na-mo-'bu-tha-yā	Skt. namobuddhāya
'bu-tha-sa-yam-'bu-tha	Skt. buddhasvayambhūta
'bri-ya-spa-tü	Skt. br̥haspati
tsa-tur-'bar-ma-bya-ha-ri	Skt. caturbrāhma-vihāra
'ba-le-ra-dza	Skt. bālirāja
'byin-bal'i-sa-ga-ra-dza	Skt. bimbacakrarāja

Tib. **'zh** = Skt. **y** (Tib. **zh** not to be otherwise used in the system), *no examples*

Tib. **'b'** (the second ' is subscripted) = Skt. **v**, *no examples*

In addition to the recommended transcriptional usages, there are many “irregular” forms in the manuscript. Those involving pre-consonantal ‘*a-chung* are tabulated below, with illustrative examples for each:

Tib. **'dz** = Skt. **j**

tan-tra ma-ya 'dza-la	Skt. tantramāyājāla
'dag-khyi-na 'dzam-bu-ti-pa	Skt. dakṣinajambudvīpa
'dzam-bu-tri-pa tri-ko-na	Skt. jambudvīpatrikona
na-ga-ra-'dza	Skt. nāgarāja
a-na-'dza-ta-ka	Skt. aṇḍajātaka
a-sid-ti-byen-'dza-na lang-krī-da'	Skt. aśītivyāñjanālāmṛtaḥ

Tib. **'ty** = Skt. **dhy**

'tya-na-sid-ti	Skt. dhyānasiddhi
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Tib. **'th** = Skt. **dh**

ka-ma-'tha-du	Skt. kāmadhatu
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ru-pa-'tha-du	Skt.	rūpadhātu
a-ru-pa-'tha-du	Skt.	arūpadhātu
Tib. ' d = Skt. dh		
ba-dzra-ra 'da-ro-hang	Skt.	vajradharo'ham
Tib. ' g = Skt. g		
'gu-ya-ti-la-ka	Skt.	guhyatilaka
'gu-dzya sa-ma-dza mu-la tan-tra	Skt.	guhyasamājāmūlatantra
'gu-ya-kar-rba-tan-tra	Skt.	guhyagarbhatantra
a-pa-ra-'go-da-a-ba-ri	Skt.	aparagodāvarī
mang-'ga-la	Skt.	maṅgala
'de-ba 'ga-ti	Skt.	devagati
Tib. ' g y = Skt. jñ		
'gya-na-sid-ti	Skt.	jñānasiddhi
'gya-ni-e-ka-tsa-	Skt.	jñāniekāksa-
Tib. ' brī = Skt. mr̥		
ba-dzre-am-'brī-ta tan-tra	Skt.	vajrāmr̥tatantra
Tib. ' z = Skt. y		
'zo-go-'o-tro-tan-tra	Skt.	yogottarantra
(cf. zo-gi-ni tan-tra)	Skt.	yoginītantra)
Tib. ' dz = Skt. y		
'dza-ma ra dza'	Skt.	yamarāja
'dzo-gi-	Skt.	-yogi-
Tib. ' g = Skt. k		
u-tra-ra-ang-'gu-ra	Skt.	uttarakuru
Tib. ' b = Skt. v		
'byi-ro-ta-ka-ya	Skt.	virūḍhaka
'byi-snyu	Skt.	viṣṇu
'ba-yo	Skt.	vāyu
'bying-srag a-no-sta-na	Skt.	-vīṁśakānuṣṭhāna
'da-sa pa-lo-'byi-phu	Skt.	daśabalovibhū
'da-'ba-tüng-sad-	Skt.	dvatrimśat-
'brī-ta-da-ra-ka- sid-ti	Skt.	vṛddhadārakasiddhi
Tib. ' b = Skt. bh		
pan-tsa ma-ha-'bu-ta	Skt.	pañcamahābhūta
sa-ya-'bu-'dza-ta-ka	Skt.	svayambhūjātaka

Tib. '**tr** = Skt. **dr**

pan-cin-'trü-yā

Skt. pañcendriya

What is immediately noticeable in this material is that it all involves Sanskrit voiced sounds of some sort. Though OT had voiced consonants, the Tibetans felt that in many cases the pertinent letters should be accompanied by '*a-chung*'. This difficulty with foreign voiced consonants seems to mirror the situation found in the Chinese data. I believe the same principle is to be seen in the rather large number of forms in the text where '*a-chung*' occurs in syllable final position. Compare the following examples:

pan-tsi-'bu-tha'	Skt. pañcibuddha
shi-da'	Skt. siddha
'bu-da'	Skt. buddha
ar-rta-bya-ka-ra'-na	Skt. aṣṭavyākaraṇa
pan-tsa skan-da'-byi-tsa-ra-na	Skt. pañcaskandha-vivaraṇatantra
tsa-kra man-da'-la	Skt. -cakramanḍala
a-pa-ra-ko-da' pan-ja-sa-ta	Skt. aparagodāpañcaśata-
a-pa-ra ko-da'-a-ba-ri ra-dza	Skt. aparagodāvarīrāja
'dza-ma ra dza'	Skt. yamarāja
tre-za'	Skt. tejāḥ
man-da'-la	Skt. maṇḍala
dza-ra za'-ta-ka	Skt. jarajātaka
'da'-sa-ku-sa-la	Skt. daśakuśaka-

Here we must recall that, in the actual Tibetan forms, '*a-chung*' is written directly to the right of the initial consonant letters. What we see here may be nothing more than a variation on the types of renderings exemplified in our pre-consonantal '*a-chung*' data, with '*a-chung*' here placed after the affected consonant rather than before it. There are of course many other interesting points in the material. The Sanskrit labiodental *v* is singled out for special treatment, as Tib. '*b*' in the recommended spellings and as '*b*-' or '*by*-' in the actual text examples. As noted by Hackin (1924:102), Skt. *y* seems to have had a strongly consonantal or fricated realization in the underlying pronunciation of the text, and the Tibetans responded to this with '*- + z*' or '*- + zh*'. Skt. *ṇ*, a sound quite foreign to the Tibetan sound system, is supposed to be transcribed with subscripted '*a-chung*', etc., etc.

In the end, what is of primary concern to us here is that it is well nigh impossible to assign '*a-chung*' a phonetic value in all this material. It seems more likely that it is functioning as an abstract graphic marker for things the Tibetans found foreign or unusual. As for the possibility that '*a* may have

been a nasal of some sort, I find four examples in the data which might support such an assumption:

pu-'da-ri-ka	Skt. puṇḍarīka-
sa-ya-'bu-'dza-ta-ka	Skt. svayambhūjātaka
a-'dza-na-sid-ti	Skt. añjanasiddhi
a-sid-ti-byi-'dza-na	Skt. aśitivyañjana

But these pale before the massive body of examples, cited only in part above, where no such explanation is possible. And they disappear entirely when we realize that each of them is explainable as an example of the familiar marking of voiced consonants noted earlier.

4 CONCLUSION

Let us now summarize our findings. It seems clear that, when we view the Chinese and Sanskrit transcriptional corpora as a whole, the letter '*a-chung*' cannot be convincingly explained as representing a particular sound. Neither "nasalization" nor anything else can explain all the varied foreign elements represented in our data by '*a-chung*' plus following consonants. The only possible and reasonable conclusion would seem to be that '*a-chung*' functioned as an abstract marker which modified basic Tibetan consonant letters, alerting the reader that the usual or "normal" readings of these letters would be inappropriate. In other words, '*a-chung*' in the transcriptions was a diacritic. The implications of this conclusion now lead us back to the problems mentioned in our introduction.

5 PRE-CONSONANTAL 'A-CHUNG IN NATIVE TIBETAN TEXTS

In writing systems in general the concept of the diacritic is rather abstract. For a diacritic is in essence a purely graphic device, used to modify other graphic elements. It has no phonetic value of its own. On the contrary, by adding it to some other element, we signal that that element does not have the value normally associated with it. The material reviewed above indicates beyond doubt that the early Tibetans were aware of the diacritic as a concept and were able to use '*a-chung*' in this way in transcribing other languages. In a sense, this point should not surprise us, because, as indicated above, most tibetologists already believe that, in the spelling system of WT, '*a-chung*' functioned diacritically in certain environments. But our observation is necessary, because the majority of these same individuals have not viewed **pre-consonantal** '*a-chung*' as a diacritic in native Tibetan texts.

In recent years there have, however, been two important exceptions to this. In discussing the relationship between WT '*a-chung* + consonant complexes and the prenasalized obstruents of the Ndzorge Sæme Xyra Amdo dialect, Sun (1986:113-114) addresses the fundamental question of pre-consonantal '*a-chung* in the following passage:

...if the prescript “*a-čhūñ*” really represented prenasalization in CT [= Classical Tibetan], why didn't the originator(s) of the Tibetan script use a NASAL symbol for its representation? It is to be pointed out, in response, that the nasal phase of a prenasalized consonant BY DEFINITION must be of the same place of articulation as the oral phase of that consonant; in other words, its supraglottal articulation VARIES, depending on what comes after it (e.g. /nb/ = [mb], /ŋg/ = [ŋg], /ndz/ = [= ndz], etc.). In fact, speakers of languages with true prenasalized consonants may not even be conscious of them as anything other than inseparable units. It would therefore be somewhat counterintuitive to use, say, the DENTAL nasal symbol to represent this prenasal element in all places. All that was needed was something to mark the prenasalized series of CT onsets as DIFFERENT from their non-prenasalized counterparts. On the condition of making use of symbols already in the alphabet instead of creating special symbols, “*a-čhūñ*” seems to be just about the most befitting indicator of this prenasalization feature. “*a-čhūñ*”, in the first place , never seemed to have any distinct phonetic value. Unlike the other letters in the Tibetan alphabet, its function was NEGATIVE --- the mark for the ABSENCE of the glottal stop... Accordingly, “*a-čhūñ*” came to be used as a sort of “all purpose” orthographic device....

A very similar stance has been adopted by Sprigg (1987:52-53). He remarks:

The **Q** symbol is underemployed in its syllable-initial use...compared with almost all the other members of the (30) *gsal-byed sum-cu* set; Jäschke 1881/1934, for example, has only 67 entries for '- as against 140 for *k*-, to which may be added 61 for *ky*-, *kr*-, and *kl*-, and 233 for *k*- prefixed by *d*-, *b*-, *r*-, and *s*-, making a total of 434. Only *w*- has fewer entries than '-, with a mere 10. The symbol '-' , therefore, is well placed to double in some other function, such as homorganic nasality, to which the nasal-consonant symbols *ng*-, *ny*-, *n*-, and *m*- are ill-suited because each is associated with a single place of articulation, velar, palatal, dental/alveolar, and bilabial. ..the under-used *a chung* has, in my view, been pressed into service for the additional, and linguistically sophisticated, task of symbolizing homorganic nasality of five different locations [*ŋ*- *ɳ*- *n*- *ɳ*- *m*], not on phonetic grounds but on grounds of economy in symbolization. I see no need to search for a phonetic link between this prefix use of '-' and its initial and suffix

uses...; the link is orthographic, following the principle of economy in symbolization.

In the principles they espouse, these two passages not only agree with each other in their stance towards WT graphic usage, they also accord completely with our findings on OT transcriptional practice.

Let us review what we have learned here. From Sun in particular we gain the important insight that native speakers of languages possessing prenasalized obstruents do not by any means necessarily view these sounds as *combinations* of anything. On the contrary, such elements are more probably perceived as *unit phonemes*, standing in direct contrast with other units in the sound system, and in particular with those non-prenasalized obstruents which happen to share with them other features of manner and point of articulation. Viewed in this light, it would be entirely natural for speakers of a language having, for example, both /d/ and /nd/ to choose from some other writing system a graphic symbol, such as *d*, for the former phoneme and then to create for the latter one a new symbol, '*d*' (i.e., "modified *d*," "the other kind of *d*"). The insistence of outsiders, such as foreign tibetologists and linguists, upon analyzing prenasalized consonants into constituent elements of nasality + oral occlusion is in all likelihood a non-native and counterintuitive one.

In summary then, we concur with the views of Sun and Sprigg that '*a-chung* was an "all-purpose orthographic device," utilized for "economy of symbolization," whether we speak of WT or OT, of native texts or transcriptional texts. The long quest for the "pronunciation(s) of '*a-chung*' turns out to have been a search for the will-'o-the-wisp. And with Sprigg in particular we must agree that earlier schemes for establishing a phonetic link between all known uses of '*a-chung*' have been unnecessary and misdirected.

REFERENCES

- CHAN, Marjorie K.M. 1987. "Post-stopped nasals in Chinese: an areal study." *UCLA Working Papers in Phonetics* 68: 73-119.
- HACKIN, Joseph. 1924. *Formulaire sanscrit-tibétain du Xe siècle*. Paris.
- MASPERO, Henri. 1920. "Le dialect de Tch'ang-ngan sous le T'ang". *BEFEO*: 20.1-124.
- SPANIEN, Ariane and Yoshiro IMAEDA. 1978-79. *Choix de documents tibétains conservés à la Bibliothèque Nationale*. 2 vols. Paris.
- SUN, Jackson T.S. 1986. *Aspects of the Phonology of Amdo Tibetan: Ndzorge Sæme Xyra Dialect*. *Monumenta Serindica* No. 16. Tokyo.
- SPRIGG, R.K. 1987. "'Rhinoglotophilia' revisited: observations on 'the mysterious connection between nasality and glottality'". *LTBA* 10.1: 44-62.
- TAKATA, Tokio 高田時雄. 1988. *Tonkō shiryō ni yoru Chūgokugo shi no kenkyū 敦煌資料による中國語史の研究*. Tokyo: Sobunsha.