## The phonology of standard upper Burmese (Mandalay-Sagaing dialect) with particular reference to its implications for Burmese historical phonology

## F. K. Lehman (F.K.L. Chit Hlaing) University of Illinois at Urbana-Champaign

## I. Introduction.

This paper embodies the results of a field study carried out at Mandalay in the Spring of 1988. I had never before taken any systematic notice of these Northern dialects though I speak one and have known, ever since the work of Maran (1971), that they might prove important for the comparativehistorical phonology of Burmese, and indeed of Lolo-Burmese more generally. During the Spring of 1988, however, I was attached, some of the time as a monk, to a teaching monastery at Mandalay, the Mahamyaing monastery, where the abbot and the elder teaching staff were all native speakers of fairly extreme varieties of the dialects in question, coming, as they all have originally, from rather remote village areas in the north of the Sagaing Division. Since my first purpose here is to put on record the facts of the dialects' phonology (I can find no published record of it anywhere), I shall get right to those facts. The possible theoretical implications will appear as needed, ultimately at the end of this paper.

## II. Peculiarities of the vowels.

I call the facts I shall set out peculiarities only because they are quite striking relatively either to the recorded vowel phonology of standard Burmese (and the non-standard dialects, such as Yaw, Tavoy and so on, which have been put on record in various places, though generally not published). One is immediately struck by the fact that the vowel ordinarily transcribed as /a/ ([ə], in these closed syllables, more usually) is radically fronted to /æ/ in syllables closed with a final written as a front stop or nasal. I put the matter this way in order to leave it open for the time being whether or not the

stops have all become glottal stops in this dialect, and the nasals simply nasalisation of the nuclear vowel, which is the usual description for the standard Rangoon (Yangone) dialect. or whether, as the sound spectrograms Maran produced in connexion with his original research suggest for more northern dialects, they maintain a (weak) front oral articulation — with the written bilabials collapsing upon the apicals. It can be argued that the fronting is a live phonological, or even phonetic rule, that would confirm Maran's tentative analysis of 1971, of course. Otherwise, the facts to be recorded here can serve at least to confirm that syllables standardly written with no modifying vowel sign (effectually indicating vowel /a/) and a front (apical or bilabial) stop or nasal final indeed ended phonetically with front consonants a lot more recently than mere comparative evidence is able to show. E.g., Std. Burmese  $[\tilde{l}\tilde{a}i] \rightarrow N'n$ .  $[\tilde{l}\tilde{e}Ni]$ , 'road' (WB  $\infty$ 6: B.  $[1\partial T] \rightarrow N'$ n.B. [1xTT], 'middle' (WB  $\cos$  llatl), where ':' = 'Heavy Tone,' high, long, breathy, and slowly falling before pause.

It is certain, then, that at least at one time in the past there must have been a rule of assimilative fronting of this vowel in the context of a following front syllable final consonant. The strict complementary distribution between [a] and [æ], the first always and only in open syllables, the latter always and only in closed syllables, at least suggests this may have been a fairly low-level rule, more nearly perhaps phonetic than phonological, and this suspicion is strengthened by the fact that even in the more standard dialects the vowel in question tends (there is a good deal of variation, here) to be at least slightly fronted and very slightly raised to [a], though never approaching the extreme low front vowel being here put on record. Whichever be the case, the rule in question is a perfectly natural one, assimilating a vowel to the front position of the following consonant. The rule in question could not plausibly have come into being after the supposed collapse of the finals to /l/ and nasalisation, respectively, since there is no natural process to describe it in that case. It would have to be proposed, for such an unlikely situation, that there was a 'feature-wise' quite arbitrary rule that fronted the vowel before 'anything.' That is because of the radical distinction between a nasalisation feature (either a feature of the vowel itself, or an underspecified postvocalic nasal consonant, which is more