



Towards a panchronic perspective on a diachronic issue: the rhyme in Old Burmese

Frederic Pain

► To cite this version:

Frederic Pain. Towards a panchronic perspective on a diachronic issue: the rhyme in Old Burmese. 2014. hal-01009543

HAL Id: hal-01009543

<https://hal.science/hal-01009543>

Preprint submitted on 18 Jun 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

TOWARDS A PANCHRONIC PERSPECTIVE ON A DIACHRONIC ISSUE: THE RHYME <-UIW> IN OLD BURMESE

Pain Frederic

Academia Sinica, Institute of Linguistics — Taipei
Laboratoire *Langues et Civilisations à Tradition Orale* — Paris¹

1. Theoretical background: Panchrony and "Diahoric" Studies

This paper aims at introducing to the panchronic perspective based on a specific problem of historical linguistics in Burmese. Its purpose is to demonstrate that a diachrony is not exclusively indicative of systemic internal contingencies but also a medium through which a socio-cultural situation of the past surfaces. In this sense, I will argue that both internal and external factors of a specific diachrony belong to both obverses of a same panchronic coin and that a combined analysis of both diachronic factors generates powerful explanatory models.

1.1 The panchronic perspective on language change

1.1.1 *Synchrony and Diachrony rather than Synchrony vs. Diachrony*

The panchronic program is based on an inductive method aiming at analyzing a comprehensive set of diachronic and synchronic data as well as their socio-cultural conditions of attestation. A strong panchronic trend is induced from a comprehensive survey of diachronic events from which General Linguistics must attempt to isolate common conditions under which these events may occur. Its ultimate goal, universalist, is to list a set of objective linguistic laws valid for *toutes les langues et pour toutes les époques* (Haudricourt 1940:70). In short, the panchronic method sets out to confront the ongoing changes in nowadays dialects to what we know of their diachrony, or in Haudricourt's words (1940:70), [...] *se fonder pour établir ces lois (panchroniques) sur les dialectes actuels dont on connaît la phonétique, la phonologie et la morphologie, et confronter les résultats avec ce que l'on sait de l'histoire des langues mortes*; he developed this idea further in his 1975 paper. Ferlus' paper (2009) on the Four Divisions of the *Qièyùn* is exemplary of the panchronic approach. Indeed, two panchronic key-ideas form the body of this seminal study on historical phonetics of Chinese. (1) First, a strong panchronic trend according to which a phenomenon of contrastive syllabic tension played a crucial role in the diachronic developments among many East and Southeast Asian languages, including and originally in Chinese before spreading in various ways through other languages of the Chinese sphere of influence. (2) Then, the study of diachronic phenomena still observable today in several Mon-Khmer languages allows to understand a diachronic phenomenon of the past; his paper illustrates in a staggering way the innovative light a panchronic perspective casts on a diachronic puzzle.

¹ This paper was funded by a Postdoctoral Fellowship, Institute of Linguistics, Academia Sinica. My warmest thanks to Michel Ferlus (CNRS), Alexis Michaud (CNRS), Guillaume Jacques (CNRS), James Matisoff (Berkely), David Bradley (La Trobe), Graham Thurgood (CSU), Christian Bauer (Humboldt Universität, Berlin) and Andy Hsiu for their precious comments on an earlier draft. Any remaining errors are our sole responsibility.

1.1.2 *The Internal factors of change.* *Frequency and systemic equilibrium*

What are the factors that favour the diachronic developments according to the panchronic phonology? Those are the *frequency* of a phoneme (a word, or a linguistic structure) and the tendency to the systemic symmetry. The panchronic phonology fits into the current of the *Usage-based Phonology* (Bybee 2001, Bybee & Hopper 2001) where the frequency is a privileged explanatory principle of phonetic changes. This frequency must also be quantified in a widest possible inventory of linguistic phenomena in space and in time. The more frequent is a word, a phoneme or a linguistic structure, the better chance it has to maintain itself. When Bybee writes (2001:110) that *low-frequency irregulars either regularize, or fall out of usage and disappear from the language*, she indicates that she adheres to the panchronic theory according to which the most frequent words (phonemes, structures) maintain themselves whereas the low-frequency borrowings are *accomodés à la phonétique de la langue* through the *attraction du plus fréquent* (Haudricourt 1940:71) or fall out.

This tendency of a low-frequency structural irregularity to merge with a high frequency regularity implies a tendency to the symmetry of the system in which the meaningful oppositions must hold in order to allow an optimal communication efficiency. It is what Martinet ([1955] 1964:98) calls the *intégration phonologique* and Labov (2001:20) the *preference for symmetry*. In other words, the more phonemes join together in correlation nets, the more stable the system will be (Martinet [1955] 1964:101). These chain dynamic changes tending towards the symmetry occur in order to maintain margins of security which allow to uphold the efficiency of communication. A well-known example of this tendency is the transphonologizations of the contrast between voiceless and voiced plosives in initial into a register or tonal opposition. The loss of a correlation on the phonological feature voiced vs. voiceless in initial position was offset by a correlation on a register or tonal opposition high series vs. low series on the vowel following the genuine voiced plosive. In outrageously schematic terms, /ga/ and /ka/ merged into /ka/ and the "voiced vs. voiceless" contrast that distinguished them was replaced by a suprasegmental contrast on the vowel: /ka/ will now contrast with /kà/, where /-à/ features a low series tone, a breathy register or any other features associated with a low register (such a prediphthongization) (Hagège & Haudricourt 1978:74-111 ; Ferlus 1979, 1998; Michaud 2011, 2012).

In summary, the very structure of a linguistic system can hinder or promote a diachrony (that is, an innovation). Innovations are indeed intelligible when they appear in familiar (or made-familiar) contexts. An innovation or a change is accepted by a linguistic community when it has been perceived as familiar, that is when it matches the constraints of a given linguistic system. The symmetry of the linguistic system gives the speaker this impression of "familiarity," of "it sounds familiar to me." An innovation takes time to be accepted and goes through the following stages: *exposure, reproduction and contagion* (Enfield 2003:18). It is a diabolically complex process during which any change is put to the test of the internal systemic constraints.

1.1.3 *External socio-cultural factors*

I will now deal with the causes of these changes, in essence external. They are essentially socio-cultural or, as Thomason & Kaufman (1988:15) wrote, the *social factors can and very often do overcome structural resistance to interference at all levels*. This is not surprising, as

language is an inherently socio-cultural phenomenon (Lévi-Strauss 1958:65); this is besides what Chomsky (1979:191) claims when he writes that the *questions of language are basically questions of power*, reminding us in a way of the fundamental importance of language within the social fabric. It therefore makes sense that an evolution of the socio-cultural structures brings about a diachronic change in the linguistic structures in its wake.

The panchronic approach lends a fundamental importance to the socio-cultural conditions of a linguistic change; Haudricourt (1973:23) means nothing but this when he writes that [...] *dans les études de phonologie diachronique, la sociologie et l'histoire devraient intervenir*. In this sense, the panchronic approach replaces Linguistics within the disciplines belonging to General Anthropology such Sociology, History, Physical Anthropology, Social and Cultural Anthropology, and so forth; it also starts from the premise that the comprehension of a linguistic fact cannot dispense with the understanding of the anthropological facts which form the breeding ground of it. An example to illustrate this might be useful at this point. The evolution of the Vietnamese preglottalized plosives cannot be fully understood if we don't replace its diachronic analysis in its very socio-cultural context; so, we have to analyze the diachrony of the Vietnamese preglottalized plosives [ɸ ɗ] in two stages, both of which are an assertion of, firstly, a social identity and, secondly, an ethnic identity (Hagège & Haudricourt 1978:152-154). The first diachronic stage reflects the *assertion of a social identity* from the tenth century AD onwards; the Vietnamese preglottalized plosives yielded nasals ([ɸ- > m-] and [ɗ- > n-]) in the sociolect of the Vietnamese literati elite imbued with the influence of the Chinese language which didn't, and still doesn't, have these consonants; this peculiarity diffused to the rest of the social fabric through a process of imitation. The second phase of the diachrony, from the twelfth century onwards, fell within the framework of a phenomenon of *assertion of an ethnic identity*; during this phase, the voiceless plosives [p t] preglottalized ([p > ɸ] and [t > ɗ]) and consequently resupplied the Vietnamese consonant paradigm with preglottalized plosives, consonantal "landmark" of the Mon-Khmer languages. As made clear here, the comprehension of the Vietnamese social and ethnic anthropology is essential to the understanding of this multilayered diachrony.

As far as panchronic linguistics is concerned, the main cause of a linguistic change is *bilingualism* (and *diglossia*, or *inegalitarian bilingualism*); these are two linguistic situations through which socio-cultural factors most easily act on the linguistic system. Indeed, the various socio-cultural groups (consequently linguistic groups) are usually exposed to the habits of other neighboring communities; moreover, the members of a community are exposed to innovations by those who build a bridge between two or more language communities, namely the bilingual speakers (Enfield 2003:15-16). The socio-cultural, whence linguistic, systems are in a constant disequilibrium as was shown, in Anthropology, in the seminal study by Leach ([1954] 1965). As Hannerz (1987) recalls us, the phenomena of *hybridization*, *creolization*, *interculturalization* (whatever this phenomenon is named) are the norm rather than the exception, and as any society or any culture that produces it, language is therefore hybrid or syncretistic. Any language materializes in a shape of coherent and structured sounds a set of socio-cultural abstractions which vouch for the various interactions that shaped the socio-cultural group that speaks this language.

1.1.4 Panchronic Linguistics as a diahoric study of language

It is in his seminal 1973 paper that Haudricourt clearly established the *transdisciplinarity* as an essential factor in any panchronic perspective. Panchronic Linguistics is intrinsically a

transdisciplinary science that flouts the fortifications separating the various anthropological disciplines from each other. The panchronic discipline is fundamentally "diahoric," i.e. it moves through (*dia*) the [disciplinary] boundaries (*hóros*). The panchronician must arm himself with the largest range possible of anthropological tools to examine a linguistic fact; he addresses himself to the sociological, ethnic, political, historical and cultural environment, in which the linguistic fact occurs. This includes de facto the *exhaustiveness* of the data which is an essential parameter for a panchronician and which prevents him from distorting a linguistic model.

Some examples to illustrate the importance of the transdisciplinary approach as well as the intermingling of anthropological and linguistic facts might be useful at this point. I have shown elsewhere (author) that the Khmer dialect convergence could not be explained according to a perspective that would solely account for the internal contingencies of the linguistic system. Indeed, from an internal point of view, there is no systemic pressure for a "less innovative" dialect to tend towards a "more innovative one;" if it were the case, if I may somehow overdraw the strokes, Low German (Dutch) would have once tended to converge towards High German (German) which is more innovative in regards of its treatment of some Proto-Germanic plosives; this also may somewhat apply to Southern Min or Hakka in Taiwan which would have tended to converge towards Mandarin Chinese, more innovative. However, Dutch and German remained separate for reasons rooted in an awareness of a distinct ethnicity and the reasons why Mandarin tends to supplant Southern Min or Hakka in Taiwan is to be found in a socio-political contingency which owes little to internal systemic constraints. For a dialect to converge, there must be a deliberate preference from the speakers to abandon their own dialect in favor of another and this choice is motivated by external factors whose origin is to be found in an anthropological determinism related to ethnicity. The panchronician therefore capitalizes with delight on the opportunity offered to him to exploit the anthropological data (cultural, social, historical, ethnic, etc) from a community of which he examines the evolution of its language. Panchronic linguistics is a powerful tool which gives the anthropologist an exciting window into the socio-cultural reality as it surfaces through linguistic diachronies.

Some words about the importance of the exhaustiveness of data in framing a linguistic model. The panchronic program, indeed, requires the most diachronic occurrences possible to be collected alongside an exhaustive listing of the anthropological (socio-cultural, political, etc.) backgrounds in which these diachronies may occur. Vietnamese diachrony provides us with a stimulating illustration of the danger to blindly model diachronic patterns on any language and for any period disregarding the anthropological conditions of their occurrence. Let's illustrate this with the Vietnamese "Drang nach Osten" and the impact this had on genetically related Việt-Mường (Vietic) dialects to which Vietnamese belongs. Cases are pretty varied but let's examine the "Vietnamization" of a probably Pọng-Chứt² language in Centre-North Vietnam (Vinh, Nghệ An province). The case of this Vietnamese dialect is of the highest interest as judiciously demonstrated in Ferlus (1991). This dialect is characterized by an irregular and incomplete propagation of a diachronic process which differentiated Vietnamese from the other Việt-Mường languages. This very process is the spirantization phenomenon identified by Ferlus (1982); briefly speaking, in a medial position

² There remain little of Pọng-Chứt but some words specifically belong to this Việt-Mường, such *nốc* "small boat," *lòn* "unglutinous rice." The word *gụ* "bear" also worth mentioning; it attests the Pọng-Chứt low series tone whereas it is a high series tone in the other Việt-Mường languages. The evolution of the prestine initial clusters *plos. + r > plos. + l* is also characteristic of these languages.

of a sesquisyllable, the proto-Việt-Mường plosives and sibilant yielded spirant consonants³. In the case of the Vietnamese dialect in Vinh, (1) the plosives maintained where spirants would have been expected instead, and (2) diachronically unjustified spirants are attested in the Vinh dialect where Vietnamese attests plosives in line with the diachronic rules. The case of the Vinh Vietnamese dialect is a fascinating example where the diachronic rules that shaped a hegemonic dialect (North Vietnamese) cannot be applied as such to a dominated dialect (Vinh Vietnamese). The contact scenario between these two dialects is quite specific: a Pong-Chút type of language was subjected to the pressure of North Vietnamese during the Vietnamese conquest of what is now Vietnam; this language has been being subjected to the pressure of a hegemonic language and has now become nothing but a dialect of the dominant North Vietnamese. The contact scenarios are devilishly complex and varied and this turns out to be particularly true in the case of the Southeast Asian *Sprachbund*. Besides, it is what makes it a bottomless pit of wonder for the panchronicians.

Panchronic Linguistics thus provides us with a comprehensive view into the linguistic phenomena as inherently social facts. It sets forth a wide range of conditions under which a linguistic change may occur. In its method, the panchronic discipline assumes that the linguistic phenomena cannot be studied outside its socio-cultural context of utterance; it therefore advocates for a careful analysis of its contexts of occurrence which it considers fundamental in explaining the "why" of a particular diachrony. The reader is referred to Haudricourt's papers as well as to recent contributions by panchronicians such Ferlus (2009), Michaud (2012), Jacques (2011), Michaud, Jacques & Rankin (2012) and François (2005).

1.2 The present study

I have just described the panchronic mood in which this paper will be written. In order to demonstrate that this stimulating and captivating panchronic perspective opens an innovative window into diachronic unsolved puzzles, I will now analyze the problem of three Old Burmese rhymes (-uiw -uik -uiñ) which have kept on intriguing linguists.

1.2.1 Interdisciplinary boundaries and their negative aftermath.

The Old Burmese example

The phonetic content of the rhyme <-uiw> (and therefore -uik -uiñ) in Old Burmese has been offering an intriguing problem to linguists since the beginning of the Burmese studies. There have been two distinct answers to this question. On the one hand, some scholars claimed that <-ui(w)> encoded an Old Burmese phoneme such /-ʌj/ (Wolfenden 1929), /-uʊ/ (Gong 1980), /-iʷ/ (Pulleyblank 1963) or /-ə-/ (Dempsey 2001). Other authors, on the other hand, argued that <-ui(w)> transcribed the phoneme /-a/ (Bradley 1985; Hill 2012) or /-ou/ (Yanson 1990). As far as the words ending with the rhymes <-uik> and <-uiñ> are concerned, some scholars have asserted that they belonged to a common Proto-Tibeto-Burman lexical stock, as Benedict (1972) and Matisoff (2003), who derived these rhymes from PTB /*-u:k/ and /*-u:ŋ/, respectively, while others such Pulleyblank (1963) and Bradley (1985) preferred to identify it as a Mon or a Shan loan. That the Burmic (that is Southern Burmish - Northern Burmish, see Chart 2) words ending with the rhymes in velars <-uik -uiñ> may or may not belong to the TB lexical stock is a

³ In concrete terms, in the Old Vietnamese CQV(C) sesquisyllables, [p]>[β], [t]>[δ], [c]>[ɟ] and [k]>[ɣ]. These spirant consonants, intrinsically unstable, then evolved towards more stable units in Modern Vietnamese: [β]>[v], [δ]>[z/j], [ɟ]>[z/j] or [ɣ]>[ʃ]. This consonantal stabilization is quite recent as Alexandre de Rhodes' *Dictionarium* (1651) vouches for a language state where the spirants are still partially attested.

controversial topic. While Matisoff (p.c.) admits this layer of the Burmic lexicon appears mostly in loanwords from Mon and Shan, he also sheds light on the fact that the TB (especially Mizo) words with these rhymes show direct evidence for the length of the vowel (PTB /*-u:k *-u:ŋ/).⁴ This said, whether they belong or not to the Tibeto-Burman lexical stock has no incidence on my hypothesis and I will leave the question open and claim that they might not belong to the PTB lexicon as within the Burmic group, the comparanda are too limited to defend an hypothesis to the detriment of the other and somehow confirm any of both claims.

Those above-mentioned diverse responses to one single diachronic problem are indicative of a methodology that essentially focused on the internal systemic factors of change. As I shall see, the analysis of the problem exclusively looked at from the point of view of the *regular sound change* leads to a dead end. Indeed, the internal analysis based on the comparison with the genetically closest dialects leads us to reconstruct the phoneme /-o/ for the Old Burmese stage; however, the straightaway question raised is why Old Burmese encoded the phoneme /-o/ in a graphic sequence <-uiw> transcribing the phoneme /-u/ in Old Mon, from which the Old Burmese borrowed their writing system. An approach which exclusively accounts for the internal systemic contingencies may not provide an accurate answer to this problem. Conversely, relying solely on the reconstructed Old Mon pronunciation /-u/ for this graphic symbol and copying it in Old Burmese also leaves the question of why this graphic sequence was borrowed wide open and tragically unresolved. Indeed, it is not a novel discovery to assert that Mon and Burmese belong to different language families and that a diachronic scenario in of the both may not be relevant to the other. The analysis of the internal factors of linguistic change is important as it provides a hint, namely that the rhyme <-uiw> must have encoded an Old Burmese phoneme /-o/. Yet, the internal perspective raises questions for which it turns out to be unable to provide answers. To this analysis of the internal factors of change, an approach accounting for the relevance of the external factors should be added; that is, the socio-cultural setting of the 12th-century Burma when Old Burmese borrowed its writing system from Old Mon.

1.2.2 *The panchronic response to the problem*

As just mentioned, the problem these rhymes raise should be tackled in a panchronic approach according to which the diachronic utterance must also be analyzed in its comprehensive anthropological context (socio-cultural, historical, political and ethnic).

The enigma. The problem is eventually simple. Why did the Old Burmese borrow an Old Mon graphic sequence which encoded the Old Mon phoneme /-u/ (in complementary distribution) to encode the Old Burmese phoneme /-o/?

The linguistic data. Indeed, the method of reconstruction based on the internal comparison (with the Southern Burmish languages), and the external comparison (with the Northern Burmish languages) leads us to reconstruct the OB phoneme /-o/ for the rhyme <-uiw>. In the same way, the same method applied to Old Mon points to the reconstructed phoneme /-u/ or /-u/ in complementary distribution. The data which the internal analysis of the linguistic system provides therefore gnaw at the linguists. The panchronic method goes

Matisoff (2003:284-9; 356-64) and especially the PTB root *m-du:ŋ "sit" with cognates all over TB, including in Luish and Jingpho (2003:288). Thurgood (1974:101-2) remains careful; though he admits he can't assemble a sufficient set of comparanda, he prefers not to dismiss the PTB rhymes [*-u:ŋ *-u:k].

beyond the linguistic system and examines the socio-cultural context of the period when the Old Burmese adapted a Mon prototype of writing to their language. This period roughly stretches along the 12th century AD. The panchronic perspective reminds us that a diachronic occurrence is also a medium through which an anthropological (socio-cultural, political, ethnic, etc.) situation surfaces.

The Socio-cultural data. Hence, to get a good grip on the problem, the linguistic problem must be replaced in its socio-cultural and historical context of a 12th-century Burma which constructed its ethnicity. The Pagán period which stretches along the 12th century is a fascinating period to examine. Indeed, it was during this specific period that a Burmese elite seems to have become aware of belonging to a common Burmese culture and linguistic community. The Old Burmese elite was initially soaked with the Old Mon socio-cultural (whence linguistic) prestige before slowly liberating itself from it in favor of an economic, social, political and linguistic homogeneity thought and desired by the Burmese king Narapatisithu (r. 1173-1210)⁵. The 12th-century Pagán era was intellectually so fertile that the Burmese (that is the *Myanmā* ethnic group) shifted from *orality* to *literacy*. At the dawn of the 12th century, they borrowed a prototype of Mon writing (which the Mons had themselves borrowed from the South Indian Pallava) and tried to encode the phonemes of their own language. The role of the Mons was ultimately confined to the socio-cultural sphere and to the Pagán elite. Their influence began to be felt during the reign of king Kyansittha (r. 1084-1111)⁶ who left us a significant amount of inscriptions engraved in Old Mon, and somewhat dwindled during the reign of Narapatisithu who resolutely opted for a "reburmanization" of the elite. As it is the case in any civilization, the transition to the stage of literacy first affected the political elite. It is therefore within this political elite and between the reign of Kyansittha and Narapatisithu that my analysis will focus. First of all because it is at the beginning of that period that the Mon writing system was borrowed to encode Burmese phonemes. Secondly, it is at the end of that period that the Mon influence weakened; indeed, the Burmese political elite increasingly disregarded the Mon influence and opted to emancipate from this (so-felt) socio-cultural subordination.

Toward a panchronic response to the puzzle. The crossing of the internal linguistic data and of the external socio-cultural factor provides us with a bird's-eye view which allows to sketch out the working hypothesis developed through this paper. The way the Old Burmese adapted the Mon writing is indicative of the linguistic customs of the socio-political literati elite. The Old Mon phoneme /**ṽ-ṽ**/ was unknown in Old Burmese and was imitated by the Burmese literati elite because this phoneme was inherently representative of Old Mon. This sociolectal practice was limited to a socio-cultural micro-level and, I believe, fairly outlived⁷ the reburmanization of the elite. The rhyme <*-uiw*>, therefore, had two pronunciations depending on the sociolectal status: the literati elite "Old Burmese High Sociolect" pronounced this rhyme in a Mon way /**-ṽ**/ whereas the "Old Burmese Low Sociolect" spoken by the rest of the social fabric pronounced this rhyme /**-o**/ in its regular autochthonous pronunciation. The hybrid encoding of the rhyme <*ui*> based on a sociolectal difference left traces in the Old Burmese epigraphy, in the phonetic treatment of this rhyme in borrowings from Mon and Pāli as well as in the Shan phonetic use of this written rhyme. I believe that the "monized" (or "monizing") phoneme /**ṽ-ṽ**/ didn't overstep

⁵ Per *Zatadawbon Yazawin* quoted in Aung-Thwin (1985:22).

⁶ Per *Idem*.

⁷ The high-sociolectal reading [**ṽ-ṽ**], however, did not completely died out; indeed, it seems to have remained at least until the 15th - 16th century, if we rely on the use of it made by the Shans who borrowed their writing from the Burmese through the circulation of Buddhist texts.

the sociolectal barriers because of three main reasons. (1) The Old Mon phoneme was introduced via a situation of diglossia in Old Burmese, now diglossia is a contact situation which is less likely to promote a loan diffusion; (2) the borrowed phoneme was reproduced in a socio-cultural micro-level and finally, (3) the prestige value assigned to this phoneme had a relatively short life and hardly outlived the ethnic-oriented venture by Narapatisithu.

My demonstration will be like a relay race marked out with four relay stations. **First station:** the socio-cultural and historical backgrounds of the linguistic problem will be fathomed out; the importance of Old Mon among the Old Burmese elite will be highlighted (§2.1); the Burmese conquest of the Mon writing and the shift of the *Myanmā* ethnic group from orality to literacy will be analyzed (§2.2); finally, the Old Mon origin of the graphic innovation <-uiw> will be demonstrated (§2.3). **Second station:** the socio-historical foundations of the linguistic problem set up, I will then address myself to the problem looked at from the internal point of view of the Burmese linguistic system; I will use the method of reconstruction based on the principles of the regular sound changes and the comparison, both internal (within Southern Burmish §3.1) and external (within Northern Burmish §3.2, Loloish, Tibetan and the Chinese transcription §3.3); in that way, the Old Burmese Low Sociolect will have been sketched out (§3.4); then, it will be demonstrated that the Old Mon writing had at its disposal some symbols to encode Old Burmese rhymes such /-o(w) -ok -oŋ/ (§3.5). Our **third relay station** will be devoted to the second sociolectal obverse of the Old Burmese coin; I will examine the Old Burmese High Sociolect as worked out of the epigraphic data (§4.1) and on the basis of the Shan adaptation of the Burmese writing (§4.2). The **arrival point** will be the confirmation of my explanatory hypothesis viewed from a panchronic perspective according to which a diachronic utterance is not exclusively due to internal systemic constraints but is also a medium through which socio-cultural situations of the past surface (§ 5).

Notes, abbreviation and conventions:

- The Northern Burmish comparative data are drawn from Dài *et al.* (1992)
- Abbreviations: **TB** "Tibeto-Burman," **PSOB** "pre-Standard Old Burmese," **OB** "Old Burmese," **SB** "Standard Burmese" (or **CB** "Central Burmese"), **TG** "Taung'yo," **DN** "Danu," **DW** "Dawè," **AR** "Arakanese," **IT** "Intha," **MR** "Marma," **MG** "Mergui," **YW** "Yaw," **PM** "Proto Mon," **OM** "Old Mon," **MM** "Middle Mon," **RM** "Recent Mon" (immediately preceding the register stage), **SM** "Spoken Mon (in Burma)," **LT** "Literary Tibetan," **PT** "Proto Tai."
- Southern Burmish data: [-ŋ] in nasal rhymes marks a nasalization [-ṽ]; [-ṽ] indicates a level tone, [-ṽ̃] indicates a heavy tone and [-ṽ̃̃] a creaky phonation. Spoken Mon data: [ṽ̃̃] marks a breathy phonation.

2. The socio-cultural and historical settings of a linguistic problem

2.1 Mon elite and Burmese quest for ethnic identity The Pagán Kingdom period

Lingering over the 12th-century Pagán era is justified for two main reasons. Firstly, for socio-cultural reasons; it is during this stretch of time that the Burmese (i.e. *Myanmā*) identity began to take shape and has been echoed till nowadays, as the '*burmanization*' process still largely roots its myths down into that period. Some ethnic groups round the Inle Lake such the Intha, Pa-O or Taung'yo still symbolically construct their interethnic dynamics through their Oral Tradition according to their alledged arrival in the region with (or before)

king Alaungsithu (r. 1111-1167)⁸. Then, for linguistic reasons, this is the period when the Burmese linguistic genius began to emerge through (1) the encoding of their language through a Mon writing which poorly fit the phonological constraints of their language; (2) it is also the period when the prestige of the Old Mon language was its height in the upper echelons of the Mediaeval Burmese society. Finally, (3) it is the very period when the Burmese language was felt and used as an ethnic marker and "national" glue which consequently led to the beginnings of an emancipation from the Old Mon culture and language.

2.1.1 *The Mons: an influence 'from above'*

The Mon influence was restricted to the Court and to the upper echelons of the Burmese society. The importance of Old Mon was such that King Kyanzittha chose it as the language of the Court and the inscriptions were written in Old Mon, in a far more sophisticated style and content than those written in Old Burmese which was rather used to list donations and slaves. This Old Mon influence in the microcosm of power and knowledge may have been facilitated by the fact that the Mons brought with them a significant knowledge of the Pāli texts and culture; many Pāli words besides entered Old Burmese through Mon. Only the upper layers of the Old Burmese society got significantly "monized." As I shall demonstrate, the digraph <ui> was borrowed from Old Mon into Old Burmese to transcribe the Burmic /-u/; the Old Mon phoneme /-ʌ -u/, non-existent in Old Burmese, was interpreted as a mark of prestige and a sociolectal indication of the highest spheres of the Burmese society. A sort of *Posh Old Burmese* somehow. The population, meanwhile, was far less affected by this "monization," which explains why the Burmese language, except in the lexicon, was slightly affected by Mon. Jenny's studies (2010) demonstrate that the Burmese syntax was not affected by Mon, except in the southern regions of Burma. Contrary to the highest literati echelons, the population, I believe, kept on pronouncing the phoneme transcribed <-uiw> in its Burmic phonetic shape /-u/.

However, the importance of the Mons at the Court drastically faded from the reign of Narapatisithu round 1173. Indeed, re-burmanizing the Court was part of his broader ethno-political scheme. The orthographic standardization was a part of the standardization of the entire Old Burmese society; this orthographic standardization surfaced in the epigraphy through the shift from pre-Standard Old Standard to Standard Old Burmese (§2.1.2). As to the fading of the influence of the Mons at the Court, it caused a transition from a quadriglossic to a triglossic situation (§2.1.3).

2.1.2 *From pre-Standard to Standard Old Burmese* *Mirror of a socio-cultural situation*

Burmese belongs to the Burmic branch of Sino-Tibetan. It is the official language of the Union of Myanmar and is the mother tongue of about 32 millions Burmese (Bradley 2002:97-8); it is also spoken as a second language by ethnic minorities in Myanmar.

Judging from mostly epigraphic and orthographic grounds, we can distinguish three periods in the history of the Burmese language. (1) The Old Burmese stage spanning from the twelfth to the fifteenth century, (2) the Middle Burmese period extending from the sixteenth to the eighteenth century and, finally, (3) the Modern Burmese phase with its Burmese

⁸ Cf. Robinne (2000; 2010) and author.

dialects, including standard Burmese which is based on the dialect Mandalay. I will mainly focus on Old Burmese and on the fundamental difference that should be made between pre-Standard Old Burmese and Standard Old Burmese. The transition between both can be featured by a shift from a "quadriglossic" to a "triglossic" state.

On epigraphic grounds, the Old Burmese phase can be divided into two periods, a pre-Standard and a Standard one. The split between both periods is a first attempt to standardize the Old Burmese orthography around 1173 AD, when Narapatisithu ascended the throne of Pagán after many years of political disorder (Ba Shin 1962:25). This first orthographic standardization which, *inter alia*, favored the use of the digraph <-uiw> at the expense of <eī ei i ī u ū uī>, took place in a particular period of the history of the Pagán kingdom. This period was particular because Old Burmese began to supplant Old Mon at the Court during this king's reign; from then on, the royal lithic documents and virtually all others were written in Old Burmese and not in Old Mon anymore⁹. It was also a period of expansion and conquest to secure a strong agricultural base for a kingdom which had suffered cruel internal divisions and chronic political upheavals (Aung-Thwin 1985:25). Therefore, when Narapatisithu ascended the throne, he had to face the diabolically complex task to reunite the kingdom in all domains. This unification was not only based on socio-political grounds, but also on linguistic ones by standardizing the Old Burmese orthography and, probably, by imposing the dialect of the Court, which Luce (1959:95) postulated to be a Burmese dialect from Kyauksè.

2.1.3 From a "quadriglossic" to a "triglossic" State

This first orthographic standardization marked the transition from pre-Standard Old Burmese to Standard Old Burmese. As a corollary, this standardization also marked a change in the linguistic landscape of Medieval Burma.

Until Narapatisithu's accession to the throne, Medieval Burma must have been a polity where "quadriglossy" prevailed among the literati elite. This phenomenon must have yielded situations of linguistic tensions characterized by the appearance of "very high," "high" and "low" sociolectal varieties¹⁰. Indeed, when Old Burmese had been first written down round the 12th century, the sociolectal situation in the kingdom must have been as follows. (1) Pāli undoubtedly took over a "very high" linguistic status. Pāli was considered prestigious since it was the language of the Tipiṭaka, the language of the *Samgha*, and—to a lesser extent—of the royalty. The first Pāli words to come into the Old Burmese lexicon were religious terms and proper names, for the most part; the semantic field of the loanwords gradually expanded to astrology, medicine, philosophy, and even grammatical morphology (as exemplified in the *Nissaya*)¹¹. (2) Old Mon had enjoyed a "high" status at the Court, at least until Narapatisithu's reign; the Mons had reached a high degree of Theravāda Buddhist influence when the Burmese established their power in the region of Pagán. Let's also skim over the fact that Old Mon in Pagán was not a homogeneous language but rather a bunch of dialects, as Bauer (2010) has convincingly demonstrated. (4) The third sociolect to be mentioned is "Literary Old Burmese," which is a written form of the Old Burmese spoken at the Court, and enjoying a "low" sociolectal position; this form of "Court Old Burmese" might have been featured by a more important "pālization" than "Vernacular Old Burmese,"

⁹ Luce (1953:17).

¹⁰ As Bradley (p.c.) and Thurgood (p.c.) rightly noticed, it is not certain Pāli was actually "spoken" at the Court and the register difference between Literary and Vernacular Old Burmese was not as clear-cut as it might seem.

¹¹ U Hla Pe (1961), Okell (1967) and Yanson (1994; 2002) should be consulted.

as noted in Yanson (1994:369). Moreover, "Literary Old Burmese" was probably based on a regional dialect, namely that of Pagán. (5) Finally, in a "very low" sociolectal position, "Vernacular Old Burmese" was spoken by the *vulgus pecus*; this sociolect might have been dialectalized and might have been less affected by Pāli and Mon.

To rattle off, the shift between pre-Standard and Standard Old Burmese should be considered as a first hunch of a political maturity, as the hegemonic Myanmā ethnic group began to assert its political and ethnic autonomy. Traditionally, the pre-Standard Old Burmese period opened with the reign of King Kyanzittha (1084 – 1111 AD) who is renowned for his language skills in Old Mon and Pāli (Stargardt 1970), and ended up with the first text engraved in Old Burmese in the two steles of Rājakumāra (1111/2-1113 AD); this phase is characterized by a major cultural and linguistic influence from Old Mon among the literati elite (Luce 1953). As far as the the Standard Old Burmese period is concerned, it began with Narapatisithu's ascension to the throne and featured a political maturity of an ethnic community which increasingly, though not entirely, freed itself from a Mon socio-cultural prevalence.

<i>Sociolectal Status</i>	Very High	High	Low	Very Low
<i>Languages</i>	Pāli	Old Mon	Literary Old Burmese	Vernacular Old Burmese
<i>Social Milieu</i>	Royalty <i>Saṃgha</i>	Royalty (<i>Saṃgha</i>)	Royalty	population
	(writ., spok.)	(writ., spok.)	(writ., spok.)	(spoken)

2.2 From Orality to Literacy.

An 'Indo-Mon' script for a Burmic language

One of the most obvious consequences of the socio-cultural influence of the Mons among the Old Burmese political elite is the shift of the *Myanmā* ethnic group¹² from an orality to a literacy stage. Conventionally, the first utterance of written Old Burmese are the so-called quadrilingual steles of Rājakumār or Myazédi, dated round AD 1111/2-1113. As Aung-Thwin (2005:185) noticed, written Old Burmese was attested before that date but the transition from orality to literacy through the borrowing by the Burmese of a Mon writing system corresponds to a period of consolidation of the Kingdom of Pagán and dates back to the turn of the 11th-12th centuries.

A writing system is indicative of the relationships a linguistic community brings out towards its language; it gives a bewitching glimpse into the thoughts of a linguistic community about what makes the linguistic specificity of its language. For example, the Old Khmers hardly seem to have been interested in how they would fit a writing system designed to encode Inda-Aryan phonemes to the typical phonological features of their language,

¹² I strongly insist on the very fact that I am dealing with the ethnic **Myanmā** literacy and not on the raise of literacy in Burma (seen as a modern nation-geographic area).

whereas the Thais clearly showed a great intellectual pleasure in doing it. The latter innovated, they created new graphic symbols to encode the phonemes of their language in the most accurate way¹³. As to the Burmese adaptation of the Mon writing, it is indicative of their history and relationships with the Mons from the 11th to the 12th century.

2.2.1 *The Mon alphasyllabary*¹⁴

The Mon alphasyllabary is derived from a *Pallava* prototype of writing that was used in Southern India in the middle of the fifth century AD. The first evidence of an adaptation of this alphasyllabary to the Old Mon language is attested in two fragments of inscriptions found near Nakhorn Pathom in Central Thailand, supposedly dated from the sixth century AD. Old Mon, a Monic language belonging to the Austroasiatic phylum, therefore attests a long literary tradition. Besides the first inscriptions found in Central Thailand, Old Mon has also been attested in Northeastern Thailand since the eighth century, in Southeastern Burma since the tenth century and Northern Thailand as early as the twelfth century. It was in Burma, during the Pagán area, that Classical Old Mon developed (Shorto 1971: ix-x). Moreover, Bauer (2010) has brilliantly demonstrated that Classical Old Mon was not a single homogenous Old Mon dialect but rather consisted of several dialects. The Mon writing system was borrowed into Old Burmese during its pre-Standard stage, when the importance of the Mons at the Court was at its height. As a corollary, the Old Mon phonetics served as a standard for the choice of an Old Mon graphic symbol to encode particular Old Burmese phonemes.

2.2.2 *Old Mon vs. Old Burmese phonology*

In its broadest extension, that is before the velars, the **Old Mon** vowel system consisted of nine simple vowels /a i u e o ɔ ʌ ʊ/ (the last two in complementary distribution) and of a diphthong /ai/ (Shorto 1971:xvii). To this paradigm, a non-phonological [ə] in presyllabic position must be added.

The Old Burmese vowel paradigm may probably have included four diphthongs in open syllables /aj ej ow aw/ and five vowels /a i u e o/; to this paradigm, a [ə] in presyllabic position should be added. Moreover, the diphthongs monophthongized in open syllables round the 17th, if not 18th century¹⁵: /aj>ɛ:/ /ej>e:/ /ow>o:/ /aw>ɔ:/.

¹³ The Thai peoples were creative in adapting a Khmer prototype of writing as well as, later, a Mon type of writing to the linguistic features of their language. Cf. Ferlus (1988a, 1988b, 1999).

¹⁴ An *alphasyllabary* is a type of writing system where one single symbol encodes both a consonant and its inherent vowel.

¹⁵ According to Yanson (1994:368), the monophthongization in open syllable would date from the 16th century. However, a careful analysis of the *Yishǐ Jǐyú* 譯史紀餘 (Miller 1958) and the *Huáyí yǐyǔ miǎndiàn guǎn yǐyǔ* 華夷訳語緬甸館訳語 (Nishida 1972; Ōno 1967) leads us to address ourselves to this problem more cautiously. These two Chinese works date from the late 17th century and the vocabularies which are therein mentioned may date back from the 16th century. There are some inconsistencies in the data. Indeed, some monophthongized Burmese forms are attested: 吉 *jí* [ci] for *kray* [cè:] "star"; 裂媽 *liè mā* [lǐè-ma] for *ray-mak* [jé: mɛʔ] "soldier"; or still 情 *duò* [tɕ] for *to*: [tɕ:] "forest". But diphthongized Burmese forms are also attested alongside the monophthongized forms, such a second utterance of 革來 *gélái* [kjǎj-láj]>[kəláj] for *kray* [cè:] "star" (Miller 1958); 刺乖 *làguāi* [là-kuaɿ] for *la-kway*: [lɔgwé:] "the moon is waning"; 麥類 *màilèi* [màj-lèj]>[məlej] for *mrwe* [mwè:] "snake"; or 南到 *nándào* [nám-tàw] for *nan-to* [nándɔ:] "palace." At most we can deduce from these Chinese transcriptions that the monophthongization would have begun round the 16th century but it had not yet come to an end in the 17th century.

Even though the two Old Mon vocalic units /**ḥ-w**/ were in complementary distribution, they were completely absent in Old Burmese, and may therefore have been considered as a prestige-bearer Old Mon feature imitated by the literati socio-political elite at the Court of Pagan, where Old Mon held a position of prestige. These Old Mon sounds /**ḥ-w**/ were encoded in the graphs <eī ei eū i ī u ū>, as well as <uī ui>. During the standardization of the Old Burmese orthography in 1174, the symbol <ui> (or <uiw uik uiñ> in composition) was chosen over the other¹⁶. Compare the pre-Standard and Standard Old Burmese attestations below¹⁷.

pre-Standard OB	Standard OB	Standard Burmese	Translation
<kuiw> <kuīw> <keiw> <keīw> <kuw>	<kuiw>	<kui> [kò:]	"<objectival suffix> "
<luiw'> <luiw> <lū> <lūw> <liw> <līw>	<liw> <luiw>	<lui> [lò:]	"to desire, to wish"
<thein>		<thuiñ> [tʰaín]	"stupid"
<reiñ> <ruin>	<[kulā] ruin>	<ruin> [jaín]	"savage, uncivilized"
<cheiñ>	<[ṇa] chuiñ>	<chuiñ> [sʰaín]	"across"
<tuin bāñ> <tiñ pañ>	<tuin pañ>	<tuin pañ> [taín bìn]	"deliberate"
<lik> <luik>	<luik>	<luik> [laɪʔ]	"follow; continuative suf."

I postulate that the Old Burmese literati elite borrowed the Old Mon graphs <eī ei eū i ī u ū uī ui> to imitate the Old Mon /**ḥ-w**/, which didn't exist in Old Burmese. These graphic symbols were borrowed because they were representative of Old Mon, the language of prestige at the Court. Adopting this graphic symbol, and hence their phonetic content, was integrating a strictly Old Mon phonetic segment into Old Burmese for a reason of prestige. Therefore, I postulate that it was a prestige-induced phonetic loan strictly restricted to the Court.

¹⁶ According to the Dictionary by the MLC (1996:xiv, §57), though **-ui** could be found without **-w** in a few Bagan period inscriptions it was not standard. **-uiw** was used from the Bagan period to about 1150 ME (1787 AD) in the Konbaung period. **-ui** without **-w** came to be seen in writing from about 1000 ME (1638 AD). However, the combination <-uiw> was still usually used into the 18th Century (Bradley, p.c.).

¹⁷ Examples from Luce Collection, MS 6547, box 7, folder 44.

In the following paragraph, I will demonstrate that the digraph <ui> is an Old Mon innovation. I will base my diachronic reasoning on the evolution of the final liquids /-r -l/ to a labio-velar /-w/ <-uiw>, as it is mirrored in the epigraphic data where the written rhyme <-uiw> alternates with <-uir> and <-uil>.

2.3 An Old Mon graphic innovation

Determining the Old Mon or Old Burmese origin of the graphic innovation <ui> is crucial in diagnosing the OB phoneme encoded in this digraph. I will give out diachronic arguments which will, I believe, clearly demonstrate that the symbol <-ui- > is an Old Mon graphic innovation. Consequently, I will provide some linguistic counter-arguments against the influential thesis by Aung-Thwin which derives the Burmese alphasyllabry from a prototype of Pyū writing; this theory is presented in his Chapter 2 (2005:13-42) devoted to the systematic annihilation of any Mon contribution to the Burmese civilization during the Pagán era in the exclusive favor of the Pyū¹⁸.

2.3.1 The puzzle: <-ui- > Old Mon or Old Burmese innovation ?

The graphic complexes <-uiw -uik -uin> are not attested in any alphasyllabary of Indian origin. The *Pallava* script, from which the Indic scripts in Southeast Asia derive, does not attest such a graphic innovation.

Shorto (p.c. to Pulleyblank 1963) initially believed that this was an Old Burmese innovation that would afterward have been taken over by the Mons. He later changed his mind, as he clearly writes in his *Dictionary of the Mon Inscriptions* (1971:xii),

Mon innovations are the consonant b —originally a modification of b, though its later forms resemble a modified w— and the vowel digraph ui, which occurs sporadically in Old Mon and more extensively in later stages of the language.

The reluctance to identify the Mon origin of this digraph is probably due to the fact that it was extensively used in the oldest Old Burmese lithic documents while it is barely attested in the Old Mon epigraphy. Indeed, in the current state of Old Mon epigraphic knowledge¹⁹, the digraph <ui> is attested five times in the inscriptions of the Kyanzittha's palace at Pagán, probably dating from 1102 AD (inscription **IX**). There is also one attestation in the inscription **XI** from Kyauksè (thirteenth century?) and two occurrences of it in a lithic document recounting a gift of slaves from the early 14th century AD. Finally, the Mon inscription (1129 AD) discovered at Myinkaba (mound #1216), north of the Nagayon, attests two instances of the digraph.

On the contrary, there are five attestations²⁰ of this innovation in one of the earliest written attestations in Old Burmese, the quadrilingual steles of Rājakumāra (1111/2-1113 AD), or Stele of Myazédi.

¹⁸ As far as the Pyū are concerned, see Stargardt (1990).

¹⁹ See Chart 4.

²⁰ (1) Myazédi B.5, 9, 17, 22, 23 <thuiw>, "the, that;" (2) Myazédi B.17 <'atui>, "1st pers. plur., 'we';" (3) Myazédi B.18 <(h)nac klui>, "to be glad;" (4) Myazédi B.22 <tui>, "plural suffix;" (5) Myazédi B.26 <henbuiw>, "Henbuiw," name of one of the three villages (rwoh) mentioned in the stele of Myazédi.

I strongly believe that the digraph <ui> is a strictly Old Mon innovation on the basis of a diachronic criterion. To put this hypothesis forward, I will consider the use of the graphic symbol <-w>, which checks the rhyme <-ui-w> and its variants <-ui-r> and <-ui-l>. It will also be demonstrated that the final graphic variants <-l-r-w> in the Old Burmese trigraphs <-uiw>, <-uil> and <-uir> cannot be explained but by the evolution of /-l-r/ to /-w/ in Old Mon; this diachrony of the trill and the lateral surfaces in the Old Burmese epigraphy where <-uil> and <-uir> evolved in <-uiw>.

2.3.2 Inscriptions at Pagán

Loans from Sanskrit-Pāli and <-uiw/l/r> graphic symbols

Some Pāli and Sanskrit terms found in Pagán period (11th–13th century AD) inscriptions will serve as an analytical sample for my demonstration. I will focus on the rhymes <-uir> and <-uil> and their variant <-uiw>. I will use the Old Burmese epigraphic utterances rather than the Old Mon ones, as the latter are divergent. For example, Pāli *balavāhana*- "troops, army" is attested in the OM <balabaḥ, ballabaḥ, billabaḥ> [bəlɪɪbaḥ] (Shorto 1971:260), whereas the Old Burmese attestation is <puiwpa>. The Sanskrit *prahara*- "division of time (about 3 hours)" surfaces in the OM <pahar, pahir> [pəhər] (Shorto 1971:229), while Old Burmese attests <pahuir>.²¹

Let's first consider the Old Burmese attestation of Sanskrit *mṛgaśīrṣa*- "Constellation of Mṛgaśīrṣa" in the Burmese epigraphy at Pagán. This word is attested in three variants:

- (1) Rhyme in <-uir> : <mrikkasuir> "name of a year" attested in an inscription from 1225
- (2) Rhyme in <-uiw> : <mrikkasuiw> also attested in an inscription from 1225
- (3) Rhyme in <-uil> : <mrikkasuil> attested in an inscription from 1297

Let's have a look to some additional examples. The Old Burmese attestations of Sanskrit *saṃgrā*- "to support" where rhymes in <-uiw> and <-uil> alternate: <saṅkruiw> attested twice in an inscription from 1255 and <saṅkruil> attested once in an inscription from 1241. Also noteworthy is the alternation of the rhymes <-uil>, <-uir> and <-uiwr> in the Old Burmese attestations of Pāli *saṃvacchara*- "a year": <saṃwacchuir> attested in an inscription from 1147; <saṃwacchuil> in an inscription from 1225 and <saṃwacchuiwr> attested once in an inscription from 1249.

It's remarkable that the rhymes <-uil -uir> alternate with <-uiw>, occasionally in the same epigraph; moreover, this alternation involves the lateral /-l/ <-uil> and the trill /-r/ <-uir> on the one hand, and the labio-velar /-w/ <-uiw> on the other. How could this alternation be explained? In the following section, I will turn to the Old Mon historical phonetics to answer this question.

2.3.3 Diachronic explanation of the graphic variants

In this section, I will discuss the evolution of /-r -l/ to /-w/.²² First of all I will demonstrate that the evolution /-r-l/ > /-w/ is a Mon diachronic feature; secondly, it will be shown that the graphic innovation <ui> was phonetically motivated.

²¹ The Old Burmese epigraphic attestations are drawn from Than Tun Win (1995).

²² Mon also attests an genuine semi-vowel /-w/ distinct from final /-w/ </-r -l/ (Shorto 1971:xvi ; xix).

(1) OM rhymes /-ʌr/ <-uir> and /-ʌl/ <-uil> evolved in MM /-ʌw/ <-uiw>

The graphic variants <-uil>, <-uir> and <-uiw> can only be explained by the Mon historical phonetics according to which the OM rhymes /-ʌr -ʌl/ evolved to /-ʌw/, whose evolution is graphically rendered. In Mon, the final lateral /-l/ and trill /-r/ remain quite unstable. According to Ferlus (1983:55-62), nine rhymes in /-r/ and /-l/ can be reconstructed at the Proto-Mon level but I will only tackle the PM rhymes /*-ar *-al/ and /*-ur *-ul/ because they are encoded in the trigraphs <-uir>, <-uil> and <-uiw>, if not during the Old Mon period, in any case during the Middle Mon stage.

The reconstruction of the Proto-Mon rhymes /*-ar *-ur/ and /*-al *-ul/ is mainly justified by the Nyah Kur²³ attestations, and by the comparison of the Old Mon and Middle Mon data. For example, let's consider the reconstruction of PM *gǎr "to shine," *tǎl "to plant," *bʔūr "salt" and *kūl "to give, to pay" as examples:

Proto-Mon	Old Mon	Middle Mon	Mon (Burma)	Nyah Kur
*gǎr	<i>gir</i> [gʌr]	<i>guir, guiw</i> [gʌw]	<i>guiw</i> [kɜ]	kʰər
*tǎl	<i>tal, til</i> [tʌl]	<i>tuiw</i> [tʌw]	<i>tuiw</i> [tɔ]	təl
*bʔūr	—	<i>buiw</i> [bʌw]	<i>buiw</i> [bɜ]	pəʔur
*kūl	<i>kil, k(u)l, keil</i> [kʌl]	<i>kuiw, kuil, kuir</i> [kʌw]	<i>kuiw</i> [kɔ]	kul

As made clear above, the Mon /-w/ evolved from /-r -l/, and this dachrony is clearly attested in written records: the rhymes written <-uir -uil> are subsequently rendered by <-uiw>²⁴.

(2) The graphic innovation <ui> was phonetically motivated

As demonstrated, the digraph <ui> was an Old Mon innovation. In addition, this Mon digraph was designed to encode the OM phonemes /ʌ-w/ in complementary distribution. The question I will now tackle is whether the creation of this digraph was phonetically motivated or not. I will answer this question in the affirmative.

Firstly because this digraph <ui> is also attested in pre-Angkorian Old Khmer to encode the phoneme /w/. This digraph is only attested in pre-Angkorian, once in a slave name and once as an equative verb <gui> [gwi:] "to be, was (equal to), to consist essentially of, etc." (Jenner 2009:96-7; 98)²⁵. As Bauer (p.c.) acknowledges, <gui> is not attested in Angkorian Old Khmer and is not attested either in Dvāravatī Old Mon, nor in pre-Pagán Old Mon in Thailand. On the other hand, this equative verb belongs to a set of high frequency grammatical terms and can therefore not be characterized as an aberrant form whatsoever. In addition, as <gui> was attested in pre-Angkorian, centuries before the first Old Mon

²³ An archaic Monic dialect, see Theraphan L. Thongkum (1984) and Diifloth (1984). According to Shorto (1971) and Ferlus (1983), the PM rhymes /*-ar *-al *-ul/ evolved towards /-ɔw/ in Recent Mon (i.e. immediately preceding the register stage) and towards /-ɔw -ɜw/ in register Mon; these rhymes pose no particular problem. As far as the Nyah Kur dialects are concerned, they kept the final liquid unchanged.

²⁴ Except in hypercorrect etymological orthographies, for example in OM <kil, k(u)l, keil> [kʌl] written <kuiw, kuil, kuir> [kʌw] in Middle Mon, where the attestations ending up in a trill or a lateral <kuir, kuil> alternate with a form with a labio-velar final <kuiw>; this demonstrates that the liquids were not pronounced anymore.

²⁵ Other attested forms: <gi gī giy giū giū>.

attested forms in <ui>, it can't possibly be a loan or an imitation-based borrowing due to a contact phenomenon, neither from Old Khmer to Old Mon, nor vice versa.

Secondly, traditional scholars who tried to encode the phonemes of their own language through graphic symbols (whether in alphabetic systems or alphasyllabic ones) were faced with the problem of encoding vowels which did not correspond to the symbols available in a Roman-based alphabet or an Indo-Aryan alphasyllabary (i.e. *a e i o u*). This remark is relevant for Khmer or Mon with their digraph <ui> to transcribe the phoneme /*ʷ*/ but also for Germanic where Rhineland German encoded the phoneme /*y*:/ in the Latin digraph *ui* in some toponyms (e.g. *Duisburg* [dy:ʃbʊɐk]) (Bauer p.c.). Whether in Rhineland, Khmer, or Mon areas, the linguists had the hunch that the combination of the graphs *u* and *i* encoded either a tense or higher sound (Rhineland German [y:] and Mon-Khmer [ʷ]) with an acceptable degree of accuracy. The digraph <ui> is therefore a phonetically motivated encoding of [ʌ-ʷ] and is in no way exceptional, as it is attested in the encoding of the Pre-Angkorian Old Khmer [ʷ], or the Rhineland German [y:].

	<i>Old Mon</i>	<i>Old Burmese</i>
<i>Historical phonetics</i>	$\begin{array}{l} [-r] > [-w] / [-0] \\ [-l] > [-r] > [-w] / [-0] \end{array}$	<i>No diachronic rule accounts for this graphic alternation</i>
<i>Graphic alternation</i>	<div style="border: 1px dashed black; padding: 10px; display: inline-block;"> $<-uir> \sim <-uil> \sim <-uiw>$ </div>	

2.4 The socio-cultural scene has now been set

The analysis of the socio-cultural context in which a Mon writing was adapted to Old Burmese allowed us to highlight several important points. Firstly, the Mons had a significant cultural importance among the political elite, at a socio-cultural micro-level then. It ensues from it that we can postulate a Mediaeval Burma where two sociolects were spoken: an Old Burmese High Sociolect spoken by the political elite under a Mon cultural influence and an Old Burmese Low Sociolect spoken by the rest of the Burmese social fabric, less affected by the Mon influence. This Mon influence was such that the Old Burmese Myanmā borrowed their writing from the Mons and whence shifted from orality to literacy. Then, it's at the end of the 12th century that the literati socio-political elite, which Narapatisithu was representative of, considered its own ethnicity; this fact is crucial because this awareness of a Myanmā ethnicity dragged a deletion of the Mon influence at Court in its wake and therefore high-sociolectal linguistic usages based on the prestige of Old Mon faded.

As the socio-cultural scene have now been set, I will address myself to the internal diachronic analysis of the Burmese linguistic system. As mentioned above, the way linguistic community makes use or adapts a writing system is not only indicative of the psychology of this community towards its own language but also provides pieces of information on the socio-cultural situation during the borrowing. In the specific case dealt with here, the way the Old Burmese used the Mon writing is indicative of the prestige status of the Mons at the Court which surfaced through the borrowing of a graphic innovation encoding a phoneme /ʌ-ʷ/ that internal analysis can't possibly justify in the case of a Burmic language. This is

what will be demonstrated in the next paragraph while analyzing the phonetic shape of the Old Burmese Low Sociolect.

3. Internal Data: Burmic language family and regular sound change. The Old-Burmese Low Sociolect

3.1 Southern Burmish comparative data

3.1.1 Southern Burmish languages: What are they?

Southern Burmish consists of all the so-called Burmese dialects. In addition to Central Burmese (or Standard Burmese) and its dialects, among which the Mandalay-Sagaing dialect (Lehman 1992), there is also a set of Burmese dialects which Bernot and Bruneau (1972:415) called "Old Burmese type of dialects," in the sense that they have maintained some archaic features. These dialects are: (1) *Arakanese* [ʃaʔ kʰaɪn] spoken in Arakan, *Marma* [maɪmaʔ] spoken in Bangladesh²⁶; (2) *Intha* [ʔɛn θá:] spoken in the Inle Lake area²⁷; (3) *Dawe* [dāwɛ:] in the region of Taninthayin in Southwestern Burma²⁸; (4) *Yaw* [jɔ:] spoken in the East of the Arakan Mountains on the plain extending between Saw and Seikpyu²⁹. To the Southern Burmish branch also belong: (5) *Taung'yo* [təʊɔ:] spoken on the western hills of the Inle Lake plain, around Heho and in Nyaung Shwe³⁰ and (6) *Danu* [tʰəny] in the region of Pindaya³¹. Each of these Southern Burmish languages maintained archaic Old Burmese features and are also characterized by loans from neighboring languages such *Intha* from Shan, *Arakanese* from Hindi or Bengali or *Danu* from Mon-Khmer.

We know very little about the history of the Southern Burmish dialect dispersion. At most we can analyze it as a result of a long series of migrations and displacements according to the strategic choices of the central authorities. What remains certain is that the Burmese descended from the region stretching from Pagán to Kyauksè in Upper Burma towards Taungoo during the Pagán period. This influx of population to Lower Burma has lasted until the contemporary period. The Burmese descent from Upper Burma to Lower Burma may explain the wide distribution of the Central Burmese dialects (Nishi 1997:992).

²⁶ On *Arakanese* and *Marma*, Okell (1995:4-54), Bernot D. (1957/8 ; 1965), Denise & Lucien (1958), Houghton (1897), Taylor (1921:91 ; tables), Buchanan ([1799] 2003:43-45), Forbes (1878:212-224), Löffler (1976), Bradley (1985) and Jones (1972) should be consulted. As far as the history of Arakan and the ethnography of the Marma are concerned, Leider (2004) and Bernot L. (1967) should be respectively consulted.

²⁷ On *Intha*, Okell (1995:54-94), Jones (1972), Denise & Lucien Bernot (1972) and Taylor (1921:91 ; tables) should be consulted. On an ethnography of the Intha, Bernot & Bruneau (1972) as well as Bernot L. (1980) should be consulted. For an analysis of the interethnic relationships between the Intha and other surrounding ethnic groups, see Robinne (2000).

²⁸ On this topic: Buchanan ([1799] 2003:43-45) (under the ethnonym *Tanayntharee*), Forbes (1878:212-213), Taylor (1921:91 + charts), U Pe Maung Tin (1933), Okell (1995:94-135) and Bernot D. (1965).

²⁹ On *Yaw*, see Okell (1989), Yabu (1980), Taylor (1921:91 ; charts), Forbes (1878:212-213) and Buchanan ([1799] 2003:43-45).

³⁰ On *Taung'yo*, see Yabu (1981a), Taylor (1921:92; charts) and author; my data collected in the isolated hamlet of Lak Mong Kwe in the mountains are substantially divergent to Yabu's.

³¹ On *Danu*, Yabu (1981b), Taylor (1921:91 ; charts) and Forbes (1878:212-213), author should be consulted.

3.1.2 The rhyme <-ui> in open syllable (Old Burmese: <-uiw>)

The various Southern Burmish languages present an almost generalized treatment of the rhymes <-ui> in /-o:/; the only exception is the Taung'yo dialect where the rhyme <-ui> actualizes itself as /-ɜ:/.

-ui	SB	DW	AR	IT	MR	MG	YW	DN	TG
	-o:	-o:	-o:	-o:	-o:	-o:	-o:	-o:	-ɜ:

Examples :

<khruī> "horn": BS [ɰò:], AR [ʔəgɰò:], YW [cʰò:], TG [ʔəcʰɜ:], IT [ʰjò:], DW [cʰò:].

<takhyui> "some": BS [təcʰg], DW [təcʰg], YW [təcʰg], TG [təcʰɜ/təkʰɜ].

<kuiy> "body": BS [kò:], AR [kò:], IT [kò:], DW [kò:], YW [kò:], TG [ʔəkɜ:/kɜ:].

<hmui> "mushroom": BS [ʰmò:], AR [ʰmò:], IT [ʰmò:], DW [ʰmò:], MG [ʰmò:].

<kui> "nine": BS [kó:], AR [kó:], IT [kó:], DW [kó:], YW [kó:], DN [kó:], TG [kɜ:].

On the basis of the phonetic content of the digraph <-ui> in the Southern Burmish languages, I propose to reconstruct the phoneme /-o:/ or the diphthong³² /-ow/ at the Old Burmese stage.

3.1.3 The rhymes in velars: <-uik> and <-uiñ>

Words rhyming in <-uik> and <-uiñ> are mainly found in loans from Shan or Mon-Pāli. Their analysis, however, calls for some targeted commentaries, including (1) the rhyme confusions and the dialect classification; (2) the importance of *Marma* forms in the identification of the phonetic content of these rhymes in Old Burmese, and (3) the importance of the "Burmanization" process of the Southern Burmish languages based on the dialect of the central government. I will deal with these three topics below.

Rhyme Confusions and Classification. In several Southern Burmish languages, the rhymes in velar <-uik> and <-uiñ> merged into other rhymes. The origin of the mergers might be that the Burmese rhyme system began to deplete quite early, as some borrowings from Pāli would suggest, conceivably towards the end of the 13th or early 14th century. Depending on the type of rhyme merger, I will classify the Southern Burmish languages into three categories.³³ (1) The rhymes <-uik> and <-uiñ> did not merge with any other rhyme; (2) the rhymes <-uik> and <-ap-at> as well as the rhymes <-uiñ> and <-am-an> merged; finally (3) the rhymes <-uik> and <-ac> as well as the rhymes <-uiñ> and <-añ> merged.

³² A diphthongized sound is still its nowadays phonetic actualization, e.g. in Taung'yo (Yabu 1981a) [-ɜũ] or Danu [-oũ] (Yabu 1980; 1981a; 1981b).

³³ It is rather about a classification based on areal convergence due to language contact. For example, the Intha and Taung'yo (Yabu 1981a) languages attest identical rhyme confusions probably due to the dominant economic position of the Intha in the Inle Lake region; indeed, Bernot L. (2000) has shown that one of the consequences of the wealth acquired by the Intha mastery of agricultural, horticultural and piscicultural was the ostentatious participation to religious festivals and the construction or maintenance of Buddhist monasteries, which is considered as the prestigious deed par excellence. This Intha economic domination gives their language a 'lingua franca' status and provides them with a control on the local rituals, therefore spoken in the Intha language (Goudineau 2001:407-408).

First group: Central Burmese, Dawe, Yaw, Danu and Mergui:

The rhymes <-uik> and <-uiñ> remain distinct from all other rhymes. In Central (Standard) Burmese, <-uik> and <-uiñ> actualizes the phonetic sequences /-aɪʔ/ and /-aɪn/ respectively; in Dawe /-aɪʔ/ and /-aɪn/ and in Yaw /-aɪʔ/ and /-aɪn/. These rhymes didn't merge with any other.

Second group: Intha and Taung'yo³⁴ (Yabu 1981a):

In Taung'yo, the rhyme in velar plosive <-uik> /-aɪʔ/ merged into the rhymes <-ap -at> /-aɪʔ/ and the rhyme in velar nasal <-uiñ> /-aɪn/ with <-am -an> /-aɪn/. Intha attests similar rhyme mergers: <-uik> /-aɪʔ/ merged with <-ap -at> /-aɪʔ/ and <-uiñ> /-aɪn/ with <-am -an> /-aɪn/.

Third group: Arakanese and Marma³⁵:

In Arakanese, the rhyme in velar plosive <-uik> /-aɪʔ/ merged with <-ac> /-aɪʔ/ and the rhyme in velar nasal <-uiñ> /-aɪn/ into the rhyme <-aɲ> /-aɪn/. Marma attests analogous mergers: <-uik> /-aɪʔ/ merged with <-ac> /-aɪʔ/ and <-uiñ> /-aɪn/ into <-aɲ> /-aɪn/.

Marma data³⁶ and phonetic content of the rhymes <-uik -uiñ> in Old Burmese. Marma is of interest because it is a dialect separated from the other Southern Burmish languages since about 1500 AD when Arakan conquered Chittagong. This language seems to be an archaic form of Arakanese as shown by the confusion of the rhymes <-uik> / <-ac> and <-uiñ> / <-aɲ> identical in both dialects. According to Bradley (1985:180), the Marma group would have first migrated from Arakan to the Chittagong Hill Tracts by the early sixteenth century and then after the Burmese conquest in 1785. They live mainly in the Chittagong Hill Tracts where they form the main ethnic group. According to Lucien Bernot (1967), their clan names suggest that many of them were part of the suite of the Court of Arakan. This author (1967:41) tells us that, according to the Marma, there is no doubt that they come from Arakan. The Marma also believe that, before living in Arakan, their ancestors inhabited the region of Pegu, so they were Mon. Incidentally, one of their "clans" (<'amyui:> [ʔəmjó:] names is <taluiñ: sã:> [təlɕen θá:] ("Son of the Talaing [=Mons]"), genealogy which, however, remains to be proved³⁷. Because of a lack of contact since the Burmese conquest of Arakan in 1785, the Marma dialect (with its Northern and Southern dialects) has substantially diverged from the Arakanese dialect. The Marma dialect might feature the most accurate Arakanese as it was spoken before the resumption of major contacts with the Burmese and before the massive linguistic Burmese influence since 1785.

It is not to be dismissed that the Marma forms /-aɪʔ/ and /-aɪn/ for <-uik> and <-uiñ> respectively might be a remnant of an archaic Arakanese form³⁸ which would itself render more accurately the Old Burmese phonetics of the rhymes <-uik/n> before the

³⁴ Our data on the Taung'yo dialect spoken in Lak Mong Kwe don't allow us to group this language with any other as it attests rhyme confusions which are totally unattested in any other Southern Burmish language (author).

³⁵ Both languages were the same languages up to 1780's (Bradley, p.c.).

³⁶ A Marma lexicon can be consulted in Denise & Lucien Bernot (1958:54-127).

³⁷ Bernot L. (1967:657). It should be noticed with Bradley (p.c.) that many Burmans are doubtless Burmanized Mons.

³⁸ Arakanese was initially considered among various authors (Forbes 1881; Houghton 1897; Taylor 1921; Bernot 1967) as a "purer," "more archaic," or "older" Southern Burmish language than Central Burmese, for the Arakanese phonetics corresponds more closely to the written form, including the preservation of the initial consonant clusters in plosive + [r/l].

diphthongization before a velar (/–ok –oŋ/ evolved to /–ɔeʔ –ɔen/) took place³⁹. According to this hypothesis, /–aɪʔ/ and /–aɪn/ for <-uik> and <-uiñ> respectively, might be due to the pressure of Standard Middle Burmese from the Mandalay region. Taung'yo and Marma, more outlying and therefore relatively sheltered from the central Mandalay administration, were precisely not affected by the change of /–ok –oŋ/ towards /–aɪʔ –aɪn/.

Process of "burmanization" based on the dialect of the central government. This pressure of Middle Burmese standardized on the dialect of Mandalay is part of a broader process of "burmanization" based on a dialect imposed by the central government. In addition, this process largely depends on the political function attributed to Theravāda Buddhism, including the *Nat* worship, which contributed to endow the political power with a symbolic legitimacy⁴⁰. This Buddhist foundation of the central government went through the dissemination of Buddhist texts (canonical and astrological) written in Pāli-Burmese, translated and commented in the standard dialect of the central government⁴¹. This process is also characterized by displacements of populations or exile of communities felt under the central authority⁴². The linguistic consequences which ensue from the "burmanization" are of importance. The successive "burmanizations" make of the diachronic study of Burmese quite a complex task in the sense that the consecutive standardizations based on reference dialects changed according to the relocalization of the successive centers of power, and eventually blurred the identification of the various linguistic layers. This constitutes, I believe, a significant cause of the depletion of the Burmese rhyme system.

3.1.4 Conclusion

Before setting forth on our analysis of the Northern Burmish data, let's make a pause and sum up. Firstly, the comparison within the Southern Burmish branch leads us to postulate a phoneme such /–ɔː/ or /–ow/ for the rhyme <-uiw> in open syllable at the Old Burmese level. I would suggest a rather diphthongized phoneme /–ow/ as there remains a trace of the phonetic diphthongization in some Southern Burmish dialects, such [–oũ] in Danu or [–ɔũ] in Taung'yo.

Secondly, based on the phonetic actualization of the rhymes <-uik/-uiñ> in two archaic and eccentric dialects, Marma /–ɔeʔ –ɔen/ and Taung'yo /–aʔ –an/, I would propose to reconstruct <-uik> /–ok/ and <-uiñ> /–oŋ/ at the Old Burmese level, though, as Bradley suggests (p.c.), both rhymes should first be dealt with as a mark of a Pāli loan and

³⁹ I suggest this possibility very tentatively. Indeed, it may be a contact phenomenon between Marma and neighboring languages in Bangladesh.

⁴⁰ See de Mersan (2010).

⁴¹ It should be noted with Robinne (2000:26) that, in the region of the Inlé Lake, all works on astrology preserved in the monasteries, houses or on the shelves of bookshops are written in Pāli-Burmese and mostly originate from Mandalay. The dialect used in those works is therefore a Burmese dialect from Mandalay.

⁴² We do not have any reliable written sources to understand the circumstances of the Southern Burmish migrations, the migratory routes taken, the dates in and out from one region to another. We are largely dependent on the oral Traditions whose pieces of information are to be taken with the utmost caution. Thus, according to their oral tradition, the Marma would originate from the Mon Pegu; the Intha would be the descendants of the Dawè who settled around the Inle Lake while the Dawè claim to originate from Arakan. The Taung'yo pretend to be from the west side of the Inle Lake, where they are still located today. The Yaw would come from the Chin plains; they would be Chin that would have adopted the Burmese language 400 or 500 years ago (Taylor 1921:91). The problem of the Southern Burmish migrations is a rather complex one.

whence mostly actualized according to a pristine Pāli phonetics /-aŋ ~ -aŋ/ in learned readings of Pāli loans.

Finally, the problem is that the pressure of the dialects of the central authority upon the whole Southern Burmish dialect realm can obscure the identification of the actualization of the phoneme in the rhymes <-uiw -uik -uiñ>. In concrete terms, does the phoneme /-ow/ <-uiw> in open syllable (or /-ok/ <-uik> /-oŋ/ <-uiñ> in a syllable closed with avelar) represent an innovation from a dialect of the central authority that would have been imposed upon other Southern Burmish dialects of its area of domination, or is it a phoneme which would belong to a common vocalic paradigm that would have followed the same evolution in all Southern Burmish languages? The analysis of the data from Northern Burmish, the closest relative to Southern Burmish, will provide a clear answer this question.

3.2 Northern Burmish comparative data

3.2.1 Northern Burmish and its relationships with Southern Burmish

As Bradley (1997:41-42) pointed out, the languages of the Northern Burmish populations are, to varying degrees, influenced by the Jingpho and Shan languages. The Northern Burmish populations are, in all cases, integrated into the socio-cultural complexes in contact, whether Kachin or Shan. The Atsi (autonym ၵၵၵၵ²² ၵၵၵၵ¹), the Maru (autonym ၵၵၵၵ¹ ၵၵၵၵ²²), the Lashi (autonym ၵၵၵၵ¹ ၵၵၵၵ²²) and some Achang (autonym ၵၵၵၵ¹ ၵၵၵၵ⁵⁵) are functioning as a clan within the Kachin⁴³ cultural group and use Jingpho as a literary language; the influence from Jingpho is not to be underestimated. As for the Bola and the Chintau⁴⁴, they are found in China, where they mingle with Atsi⁴⁵ and Achang respectively; their language is therefore influenced by Atsi and Achang. The Phun (speaking two dialects: a northern⁴⁶ and a southern one) are inhabiting the Upper Irrawaddy gorges north of Bhamo; they were, according to Taylor (1921:92) endangered in the 1920s. Additionally, the Northern Burmish languages underwent various external and internal influences. External influences are from Jingpho or Shan; internal influences are from Achang and Atsi in Chintau and Bola. Consequently, establishing correspondence rules between the various Northern and Southern Burmish languages is not easy.

Phylogenetically, Northern Burmish is most closely related to Southern Burmish; the Northern and Southern branches would have split in Upper Burma. According to Tadahiko Shintani (p.c.), *le maru, le lashi et l'atsi sont du birman resté au-dessus*; the Northern Burmish languages, according to this linguist, would therefore be languages that would have remained mainly in China with some extensions in Upper Burma while the Southern Burmish languages would have migrated toward Central Burma. According to Luce (1985:104), one of the consequences of the 南詔 *Nánzhào* attempts to absorb the Proto-Burmese would have forced the Myanmā to migrate down toward Kyauksè in Central Burma; it would also have made some Northern Burmish groups go into exile from the Nmaikha river gorges which are looked upon as their homeland. Some Northern Burmish populations are currently located in

⁴³ Let's recall that the term *Kachin* is rather used to describe a cultural complex.

⁴⁴ According to Bradley (p.c.), Chintau turns out to be a (sub-)dialect of one China dialect of *Āchāng* 阿昌, the *Husa* or *Maingtha* (*muin̄sā*;) dialect.

⁴⁵ While the *Atsi* have adopted the Kachin feudal political system of the *gumsa* and even sometimes the Jingpho language (Bradley 1979:9).

⁴⁶ Cf. Henderson (1986).

the Kachin and Shan States in Upper Burma⁴⁷ as well as in the Yunnan Dehong Dai and Jingpho Autonomous Prefectures in China.

3.2.2 The rhyme <-ui> in open syllable (Old Burmese: <-uiw>)

Despite some exceptions possibly due to language contact, Standard Burmese <-ui> /-o:/ corresponds to /-aw/ in Achang, Chintau, Atsi⁴⁸ and Bola⁴⁹, to /-ow/ in Lashi (/a:w/ for verbs and adjectives), to /-uʔ -oʔ/ in Maru (the development of final glottal plosive is a strictly Maru feature⁵⁰) and /-u:/ in Phun (*cf.* Chart 1).

SB <nui. 'uñ> [ng ʔoñ] "breast"
[naw³⁵ tʃu³⁵] in Achang
[naw⁵⁵] in Atsi
[naw³⁵] in Bola
[now⁵⁵] in Lashi
[nuʔ⁵⁵] in Maru
[ʔəñù: / ʔəñó:] in Phun⁵¹

SB <sū khui:> [θəkʰó:] "thief"
[tʃo⁵⁵ xaw³¹] in Achang
[kʰaw²¹ su⁵¹] in Atsi
[kʰaw³¹ pju⁵⁵] in Bola
[kʰow⁵⁵ xəp⁵⁵] in Lashi
[kʰuʔ⁵⁵ xəp⁵⁵] in Maru
[lúʔ kʰù:] in Phun

SB <mī: khui:> [mí: gó:] "smoke"
[ni³¹ xaw³¹] in Achang
[hni³¹ xaw³¹] in Chintau
[mji²¹ kʰaw²¹] in Atsi
[mji³³ kʰow⁵⁵] in Lashi
[mji³⁵ kʰuʔ⁵⁵] in Maru
[mèʔ kʰù: / mí(?) kʰù:] in Phun

SB <mui:> [mó:] "sky"
[maw³¹] in Achang
[maw³¹] in Chintau
[maw²¹ kʰuŋ⁵¹] in Atsi
[mow³³ kʰuŋ³³] in Lashi
[maw³¹ kʰauŋ⁵⁵] in Bola
[mùʔ tàŋ / mú: tàŋ] in Phun

SB <nwā: nui. > [nwá: ng] "rain"
[hno³¹ ŋaw³¹] in Achang
[no³¹ naw³¹] in Chintau
[no²¹ naw⁵⁵] in Atsi
[no³¹ naw³⁵] in Bola
[nə³³ now⁵⁵] in Lashi
[nuŋ³⁵ nuʔ⁵⁵] in Maru
[tǎmù: wáʔ] in Phun ("to rain")

SB <ñui> [ñò:] "to cry"
[ŋaw⁵⁵] in Achang
[ŋaw⁵⁵] in Chintau
[ŋaw⁵¹] in Atsi
[ŋaw⁵⁵] in Bola
[ŋa:w³¹] in Lashi
[ŋuʔ³¹] in Maru
[ŋóʔ / ŋúʔ] in Phun

SB <khyui> [cʰò:] "horn"
[kʰzaw³⁵] in Achang
[ʔa³¹ kʰzaw⁵⁵] in Chintau
[kʰjuj⁵¹] in Atsi
[kʰju:55] in Bola
[kʰjow³³] in Lashi
[kʰjoʔ³¹] in Maru
[ʔǎxúʔ/ʔǎxú(h)] in Phun

SB <khyui:> [cʰó:] "turtledove"
[pʰuŋ⁵¹ kjuj²¹] in Atsi
[pʰauŋ³¹ kju:35] in Bola
[pʰəŋ⁵⁵ kjow⁵⁵] in Lashi
[pʰauŋ⁵⁵ kjuʔ⁵⁵] in Maru
[ʔù: xu:] in Phun

⁴⁷ On Northern Burmish, see Yabu (1988) and Dempsey (2003).

⁴⁸ /-uʃ/ after alveopalatal initials.

⁴⁹ /-u:/ after alveopalatal initials.

⁵⁰ Burling (1966); /-oʔ/ after the initials [kʰj-] and [ʔŋ-].

⁵¹ The *Phun* data are drawn from Henderson (1986).

SB <mu chui: ma> [m̥ s ^h ó: m̥] "widow"	SB <khyui> [c ^h ò:] "sweet"
[c ^h uj ²¹ mo:55] in Atsi	[c ^h uj ²¹] in Atsi
[c ^h u:35 ma:31 m̥:35] in Bola	[c ^h u:55] in Bola
[c ^h ow ⁵⁵ mo:55] in Lashi	[c ^h a:w ³³] in Lashi
[c ^h u?55 m̥:55] in Maru	[c ^h u?31] in Maru

There are further examples that could be listed, but are not provided due to space limitations. The following correspondences are largely regular and are attested in the common lexicon:

Central Burmese:

/-o:/

<i>Atsi</i>	<i>Bola</i>	<i>Lashi</i>	<i>Maru</i>	<i>Phun</i>	<i>Achang</i>	<i>Chintau</i>
/-aw/	/-aw/	/-ow/	/-u?/	/-u -o/	/-aw/	/-aw/
(/-uj/)		(/-a:w/)	(/-o?/)			

Basing himself on Northern Burmish correspondences, Mann (1998:90-91) proposes to reconstruct /*-o/ in Proto Northern Burmish. On the basis of the diphthongized feature of the vowels in the correspondences, I would suggest to reconstruct the diphthongized phoneme /*-ow/ in Old Burmese.

3.2.3 Words rhyming in <-uik> and <-uiñ>

The correspondences within Northern Burmish with Burmese words in <-uik> and <-uiñ> are desperately scarce. There may be two potential cognates for the rhyme <-uiñ> and one cognate for the rhyme <-uik>, but a phenomenon of borrowing is not to be excluded.

	"to sit"	"to succeed"
Burmese (wr.)	<thuiñ>	<kuñ>
Burmese (St.)	t ^h aɪn	kaɪn
Achang		kuan ⁵⁵
Atsi	tsuŋ ⁵¹	kon ²¹
Maru	tsauŋ ³¹	
Bola	tsauŋ ⁵⁵	
Lashi	tsɔ:ŋ ³³	ku:n ³³

Other possible correspondences. SB <'are tuiñ.> [ʔəjè: daɪn] "wrinkle," [ʔa³¹ tsuŋ⁵¹] in Achang; SB <wum: puik> [woðn baɪʔ] "belly," [bəuʔ mà: / pàʔ mà:] in Phun. Contrary to the words rhyming in <-ui>, which are massively attested within TB, words in rhymes <-uik> and <-uiñ> are extremely sparse. The might be a pair of correspondences in some Tibetan dialects: SB <tuik> [taɪʔ] "to collide" might be related to the Literary Tibetan *thug* and rGyalrong Japhug [ʔatwɣ] "to meet" or <puik> [baɪʔ] "belly" which may be related to rGyalrong Situ [təpɔk].⁵² However, <tuik> and <puik> are attested neither in Loloish nor in Northern Burmish.

Should I reconstruct these rhymes at the Burmic level, unfortunately on the basis of the half-dozen or so Burmic attestations, I would postulate /*-ok/ and /*-oŋ/ at the time of

⁵² Jacques (p.c.).

the borrowing from Southern to Northern Burmish or conversely. This would consequently somehow confirm Benedict's (1972) and Matisoff's (2003) reconstructed PTB rhymes */*-u:k/* and */*-u:ŋ/* respectively.

In section 3.3, I will go further up the Tibeto-Burman phylogenetic tree and examine what the Loloish and Tibetan data teach us. I will also analyze the Chinese transcriptions of Burmese words ending in these rhymes.

3.3. Tibetan and Loloish data (and Chinese transcriptions)

The Loloish languages tend to confirm that the digraph *<-ui(w)>* should encode the phoneme */-o/* in Old Burmese. This is not surprising, for Bradley (1979:177) reconstructs */*-o/* in Proto Loloish, which also put forward by Burling (1967:51-52) for Proto Burmic and Proto Lolo-Burmese. The following examples illustrate the relevance of the reconstruction proposed by Bradley and Burling.

Exemple⁵³:

SB *<nui.>* [nɯ] "milk"
Phunoi / Bisu [nù lǎ]

SB *<hmuī>* [h̥mò:] "mushroom"
Phunoi / Bisu [h̥mú]

SB *<khui>* [kʰò:] "pigeon"
Lisu [ʔa¹ gu:⁵]
Bisu [kʰón kʰàw]
Akha [kʰâ gû]

SB *<mī: khui:>* [mí: gó:] "smoke"
Lisu [mu⁵ kʰu⁵]
Phunoi / Bisu [bəkʰàw]
Akha [ʔû kʰê]

SB *<khyui>* [cʰò:] "horn"
Bisu [ʔǎ cʰáw]
Akha [cʰê]

SB *<'ui:>* [ʔó:] "pot, jar"
Phunoi / Bisu [ʔù lǎ]
Akha [ʔê lâh]

SB *<mui:>* [mó:] "sky"
Lisu [mu⁵ kwa³]
Phunoi/ Bisu [mò tʰà]
Akha [mû]

SB *<'arui:>* [ʔəjó:] "bone"
Phunoi / Bisu [ʔǎ jàw]
Akha [sʰâ jê]

The Burmese words ended in the rhyme *<-ui>* are mostly of Tibeto-Burman origin; these words regularly correspond to the Literary Tibetan rhyme in *-u* (example LT *dgu* "nine" vs. *<kui:>* [kó:], LT *sku* "body" vs. *<kuiy>* [kò:]) or correspond to the rGyalrong Japhug⁵⁴ /w/ (Japhug [kwngwt] "nine," [tws kʰrw] "body;" in Japhug /w<u/). Some words are also attested in Sinitic, such [kuwʔ] "nine" in Middle Chinese (Pulleyblank 1991:161), which was borrowed into the Southwestern Tai languages such Tai Khamtī or Lao [kaw^ɕ] or into Mon-Khmer, such the Khmu [káu], borrowed through Lao.

Chinese sources dealing with Burma also encourage us to postulate */-o/* or */-ow/* for the rhyme *<-ui(w)>* valid for Middle Burmese as the 譯史紀餘 *Yishǐ Jìyú* or the 華夷譯語 緬甸館訳譯 *Huáyí yìyǔ miǎndiàn guǎn yìyǔ*, both Sino-Burmese vocabularies taken as premier source by Yanson (1990) and Miller (1954), date from the late seventeenth century.

⁵³ From Bradley (1979).

⁵⁴ Jacques (2004; 2008).

They do not teach us much about the pronunciation of the digraph <ui> in Old Burmese but rather in Middle Burmese.

To our knowledge, Chinese sources don't attest any Burmese word rhyming in <-uik> and only one transcription of a Burmese word in <-uiñ>. The word attested in the Chinese sources is the Standard OB <tanluin> "Mon." This word is transcribed 登籠 *Dēnglóng* and must have been pronounced [təŋlúŋ] during the Yuán dynasty in the 13th century⁵⁵. It is attested in the 元史 *Yuánshǐ*, annals of the Yuán Dynasty (1279-1368), whose writing was completed by 1370. Also attested is the 得楞(子) *Déléng(zǐ)* "(son) of Taluing," which may have been pronounced [tǎj lán] during the Yuán dynasty and which is also attested in the 南詔野史 *Nánzhào Yěshǐ*, whose writing was completed by 1585 and which briefly recounts the intervention of the Nánzhào armies to help Pagán to drive back the Sri Lankan forces during the 1165 invasion⁵⁶. I dare not say, however, that it would be a transcription of an Old Burmese pronunciation rather than an Old Mon one. It should also be noted that the (obsolete) Siamese form [təʔ le:ŋ] "Mon," seems rather late and is obviously genuinely Burmese (<taluiñ> [talaín]).

The Chinese sources, although of great historical interest, provide us with little information about the pronunciation of the Old Burmese rhymes <-ui(w) -uik -uiñ>. The Chinese transcriptions of Old Burmese <tanluin> do not either necessarily reflect an Old Burmese pronunciation but rather an Old Mon one. The Yuán evidence is ambiguous but interesting.

3.4 The Old Burmese Low Sociolect

The method of comparison-reconstruction has provided us with a linguistic outline of the Old Burmese Low Sociolect as a member of the Burmic family.

3.4.1 Words in rhyme <-ui(w)>

The Burmic as well as the Loloish and Tibetan comparative data (confirmed by the Middle Chinese transcriptions of some Burmese words), lead us to propose /-o/ or /-ow/ for the phonetics of the rhyme <-uiw> in Old Burmese. This rhyme is not really problematic from a diachronic point of view. The main question, however, remains to explain why the Old Burmese opted for the Old Mon spelling <-uiw> transcribing a phoneme /-u -a/ distinct from the Burmic /-o/ while Old Mon provided the opportunity to encode this rhyme properly as will be discussed in §3.5. I believe that the phonetics of the digraph should be analyzed in its sociolectal environment: a high sociolectal environment marked by the influence and prestige of the Mons at the Pagán Court and a strictly Burmic low sociolectal environment. The example of the following borrowing from Middle Mon⁵⁷ <ko> [kɔ] "elder brother" in Middle Burmese <(et)kuiw> shows very clearly that the rhyme <-ui(w)> in Middle Burmese was pronounced /-o:/ or /-ow/.

Moreover, and this is of inordinately compelling interest, some hesitant pronunciations from stone engravers speaking the low sociolect, but whose work was to engrave the Old Burmese high sociolect, is indicative of some sociolectal confusions. This is

⁵⁵ Reconstructions by Pulleyblank (1991:198).

⁵⁶ Guillon (1999:138); Luce (1969:120-125).

⁵⁷ Shorto (1971:52).

deeply stirring that an engraver, an obscure Old Burmese craft worker, translated a high sociolectal phonetics in his low sociolect; his low sociolectal murmur has simply come through the Ages to give the panchronician the key he needs to differentiate both sociolects. As an illustration, let's consider the various epigraphic attestations⁵⁸ for "banana (*Musa sapientum*)" in Old Burmese. Besides the "normal" (from a diachronic point of view) pre-Standard Old Burmese attestations <(hñāk) pyow> and <(hñā) pyow>, the Standard Old Burmese attests an etymologically justified <hñak plyaw> and an etymologically aberrant <hñak plyuiw> with a rhyme <-uiw>. The modern form is <hñak pyo:> [ʰŋɛʔ pʲɔ̃:]. The attestation <plyuiw> cannot but intrigue besides the <pyow>, <plyaw> and <pyo:> utterances⁵⁹. This indicates that <-uiw> encoded a phoneme that was closer to the rounded-lax Burmic /-o/ (or /-ow/) than to the Old Mon unrounded-tense /-ʌ -u/ that the rhyme <-uiw> was supposed to transcribe. The Old Burmese engraver may probably have confused two sets of graphs which transcribed, in his presumably low Old Burmese sociolect, the phoneme /-o/ (/ -ow/).

3.4.2 The words in rhymes <-uik> and <-uiñ>

The few cognate words which belong to this group might have been read <-uik> /-ok/ and <-uiñ> /-oŋ/. This also turns out to be confirmed in Southern Burmish attestations, especially Marma, which has been separated from the other Southern Burmish languages and from Standard Burmese influence since at least the early 17th century. The use of the trigraphs <-uik/ñ> to transcribe the rhymes /-ok -oŋ/ must have happened naturally as it is assumed that the rhyme <-uiw> transcribed the phoneme /-o/.

3.4.3 Stability of the Proto-Burmic phoneme /*-o/

The stability of the phoneme /*-o/ from Proto-Burmic to Old Burmese in the open syllable <-uiw> might be surprising. However, as I have demonstrated, there is no indication that would suggest that the Old Burmese vowel system has ever known any tense vowel /-ʌ -u/ which would be due to the evolution of the proto-phoneme /*-o/ reconstructed by Mann (1998) at the Proto Burmic stage, by Burling (1967) and Matisoff (1969) at the Proto Lolo-Burmese stage or by Bradley (1979) at the Proto Loloish stage. At most, comparative data lead us to reconstruct a single vowel /*-o/ which would have allegedly diphthongized at the Proto Burmic stage /*-ow/ and kept unchanged in Old Burmese before monophthongizing in /-o:/ in the modern Southern Burmish dialects, some of which keep a vestige of it in the form of a slightly diphthongized rhyme [-oũ] or [-ɜũ].

3.5 The rhymes /-ow -ok -oŋ/ in Old Mon and Old Burmese

This above mentioned reconstruction seems paradoxical, for it raises the question of why a digraph encoding the Old Mon phoneme /-ʌ -u/ was borrowed to encode the Burmic phoneme /o/. This borrowing remains particularly disturbing as appropriate Old Mon graphic symbols could have been borrowed to encode the OB phoneme /o/. This is what will be demonstrated through the following lines.

⁵⁸ Luce (nd.), ms. 6547, Box 7, Folder 44, Page 044.

⁵⁹ Other attestations include (Luce 1981:25), *pyow*, *plyiw*, *plyuiw*, *byāw*.

3.5.1 In open syllable /-ow/

The Old Burmese scholars could have easily encoded the Burmic rhyme /-ow/ by using Old Mon symbols transcribing this same phonetic sequence. Among the choices available, the Mon rhymes written <-or, -ol, -ow> (the semi-vowel /-w/, as we have seen, evolved from /-r -l/) could have been easily used to encode this Old Burmese rhyme.

VM-MM <tol, twor, twow> [tor > tow] "cotton yarn" (DMI:179)

VM-MM <linwor, linwow> [lɔr > lɔw] "to worship" (DMI:334)

VM-MM <p'or, p'ow> [pʔor > pʔow] "to send; to cause" (DMI:242)

This implies that the evolution /-r -l/ > /-w/ had already taken place at the beginning of the 12th century when the Burmese language borrowed the Mon alpha-syllabary. This early evolution is confirmed by alternating rhymes <-uir, -uil, -uiw> which is rather common in the early Old Burmese attestations; it indicates that Old Mon no longer distinguished the rhymes in /-r -l/ from the rhymes in semi-vowel /-w/ (</-r -l/) as early as the early 12th century. Nevertheless, the evolution of the rhymes /-or -ol/ > /-ow/ remains relatively complicated to date.

3.5.2 Rhymes in velar /-ok/ and /-oŋ/

In order to understand the lack of correspondence which we observe in these words in rhymes <-uik> and <-uin> with other Tibeto-Burman languages, we must first restore the Old Burmese system of diphthongs in open syllables. The comparison with the various Northern Burmish languages allows us to reconstruct four diphthongs in open syllables for Old Burmese (until around the 17th century):

-ay/-ai /-aj > -ɛ:/

-iy/-e /-ej > -e:/

-uiw /-ow > -o:/

-aw/-āw /-o /-aw > -ɔ:/

The case of the diphthong <-uiw> /-ow > o:/ in open syllable, as we have seen, is rather complex because a phenomenon of imitation due to the prestige emanating from the higher levels of the Burmese society came to disrupt the table. The speakers using the Old Burmese high sociolect used the Mon phoneme /ɰ w/, which Old Burmese did not know, as a sign of their status. If there is no correspondence with <-uik> and <-uin>, I believe it is because <-uiw> encoded a diphthong which exclusively existed in open syllables. Therefore, there was no reason to use <-uik> and <-uin> to transcribe the rhymes /-ok/ and /-oŋ/, the place of which was already occupied in the system by the velar rhymes <-ok> and <-oŋ> also pronounced /-ok/ and /-oŋ/ in Old Mon. The rhymes <-uik> and <-uin> were alternately and randomly pronounced /-ok/ and /-oŋ/ because of a simple graphic analogy with the words ending in <-uiw>.

Now we must examine why the Old Burmese scholars preferred to use the Old Mon digraph <-ui- > /ɰ-w/ to encode the Burmic phoneme /o/. The transition from orality to literacy is typical of a socio-political and/or religious elite (Goody 1968; Ong [1982] 2012), which endeavours to consolidate its power; this fact is obvious and needn't any further developments. This elite, in mediaeval Burma, was precisely under the influence of the Old Mons who pronounced this rhyme /ɰ-w/. Besides the inclination of language to develop "a

complex resistance to interference" (Weinreich [1953] 1963:44), the very fact that the Old Mon prestige was the most important at a socio-cultural micro level for a short period of time (up to the reburmanization to this elite in the 12th century and the loss of the influential socio-cultural position held by the Mons) explains why the "monized" phoneme didn't diffuse in Old Burmese through all its speakers despite the social barriers. The comparative analysis of the data this elite left us will provide us with the last key to the puzzle. The socio-political liteati elite is postulated to have spoken a sociolect that I have named "Old Burmese High Sociolect."

4. The external factor: prestige at a socio-cultural micro-level The Old-Burmese High Sociolect

In the next paragraph, I will analyze the Old Burmese loans from Old Mon and Pāli. The analysis of the borrowings will lead us to postulate that the vocalic nucleus of the rhymes <-uiw -uik -uiñ> must have been read according two distinct ways. (1) On the one hand, in a phonetics influenced by Old Mon with a tense-unrounded vowel /ʌ-ʍ/ which, I hypothesize, was a high sociolectal feature of the nobility and the clergy. (2) On the other hand, a strictly Burmic phonetics characterized by a lax-rounded vowel /u-ɔ̃-aũ-aw/, which, I believe, represents an endeavour to encode a vowel whose phonetic shape bordered that of the Burmic lax-rounded vowel [ɔ̃]. However, it is important to note that transcriptions are inherently imperfect.

4.1 The Epigraphic data

Epigraphy is a fascinating pit of information for the linguist. A well-honed command in the diachronic discipline combined with a refined knowledge of the epigraphic sources lead to seminal works, as evidenced in the breathtaking study by Bauer (2010) on the Old Mon dialectology in Pagán. I will consider the epigraphic data (including those evidencing the Pāli and Old Mon loans into Old Burmese) as emblematic of the High Sociolect because they were precisely ordered by the political elite. Moreover, they remain an extremely interesting meeting point of an elite which ordered the steles with the craftsmen who engraved them; indeed, it is obvious for any linguist that the one who engraved the stele and the one who ordered it or composed the content of it didn't belong to the same social status and, at least in the case of Old Burmese, spoke separate sociolects. The analysis of the Old Burmese epigraphic data opens a window into a fascinating world where a low sociolect leaves subtle traces in a high sociolect.

4.1.1 Borrowing from Old Mon

In the borrowings from Old Mon, the OB rhyme <-uiw> regularly corresponds to the OM rhymes <-uw -iŵ -īŵ -ew -uiw> encoding the phoneme /ʌ-ʍ/. Let's take as an example, among many others, the OM <tapīw> [təpʌw] "a trumpet, animal horn fitted with reed and sounding note of fixed pitch" (Shorto 1971:141), which was borrowed in the Standard OB <tapuiw> (Standard Burmese <thapui:/ tam̐ui:/> [təbú:]). It should be noticed that a large amount of words in rhymes <-uik> and <-uiñ> entered Old Burmese through Old Mon. These rhymes regularly correspond to Old Mon /-ʌk/ and /-ʌŋ/ respectively and do not require any particular development.

However, this regular correspondence OB <-ui> ~ OM <-u -i -ī -e -ui> /ʌ-ʍ/ (whether in open syllable or in velar rhymes) suffers from some irregularities of high interest

in the topic at hand because it attests a pronunciation fluctuating between a "monized" or "monizing" phonetics [ʌ-ʍ] and a Burmic phonetics [o]. Let's illustrate these irregular correspondences with some examples of telling loans:

1. the borrowing from OM <*kajnu*, *kajnu*'> "the mesua" and <*ḍūñ*, *ḍuñ*> "city and its area of influence, kingdom, country, principality, province" into OB <*sanuiw*, *sanuw*> and <*tuin*> respectively;
2. the borrowing from Mon <*phau*> into OB <('ut *kā* *phuiw*)> "a fireplace;"
3. and finally the borrowing from OM <*dirlac*, *dirlec*> into OB <*tuluik*> "hall, antechamber."

(1). Correspondence OB <-ui> and OM <-u-> /-u-/ as exemplified in the OM <*kajnu*, *kajnu*'> [kəʒnuʔ] "the mesua" which was borrowed into the Standard Old Burmese <*sanuiw*, *sanuw*> (Standard Burmese <*sānuī*:> [θənoʔ]) (Shorto 1971:28). The interest of this example is that Old Burmese used the trigraph <-uiw> to transcribe the phoneme /-u/ from Old Mon, which confirms the hypothesis that the trigraph <-uiw> was used to transcribe a Burmic sound approaching /-o/. The trigraph <-uiw> is not attested in the Mon epigraphy for this word; the graph <-u> is the only vocalic attestation from Old Mon to Modern Mon throughout. The Old Burmese <*tuin*> (SB <*tuin*> [təɪn]) "city and its area of influence, kingdom, country, principality, province (modern: division)" confirms this correspondence; the attestations <*ḍūñ*> and <*ḍuñ*> [ḍuŋ] in Old and Middle Mon show that the rhyme <-uin> in Old Burmese encoded a rounded-lax sound such /-oŋ/ and not an unrounded-tense one as /-ʌŋ/ because of the OB very choice of the rhyme <(t)ui(n)> to transcribe the Old Mon rounded-lax vowel [(ḍ)u(ŋ)].

(2). Correspondence OB <-uiw> and SM <-au> [-aʊ]. The example of the standard Old Burmese <'ut *kā* *phuiw*> (SB <*phui*> [pʰu:ɪ]) "a fireplace" is also of interest. According to Hla Pe (1967:85), it would be a loan from Mon <*phau*> [pʰaʊ]. However, the Mon <*phau*> is not attested in the epigraphy and it is difficult to say which language borrowed from the other. Nonetheless, the Nyah Kur and Thai languages provide us with indications of the highest interest; the various Nyah Kur dialects attest [pʰɔw] and the Southwestern Tai languages: [pʰaw⁶⁰] "to burn," as in Lao, Siamese, White Tai and Dehong Tai (Shan). This word is not of Mon-Khmer origin⁶⁰ but pristine Proto Tai; Li (1977:88) reconstructs PT [*pʰraw⁶⁰]. Whether a loan into Old Burmese from Mon or Thai (or a borrowing into Nyah Kur from Siamese), the Mon or Thai rhyme encoded in the Old Burmese <*phuiw*> must have been read something like [-aw], a rhyme such /-ow/ which I postulate for the Old Burmese <-uiw>. Again, this is the vocalic feature rounded-lax which the Old Burmese engraver endeavoured to encode.

(3). Correspondence OB <-uik> and OM <-ac/-ec> /-ɔc/. The example of OM <*dirlac*/*dirlec*> [dərɪɔc] which was borrowed into the Old Burmese <*tuluik*> "hall, antechamber" illustrates the last correspondence. This correspondence shows that OB rhyme <-uik> was used to transcribe the Old Mon rhyme <-ac/-ec> /-ɔc/, which allows us to postulate the phonetic content /-ok/ at the Old Burmese stage.

The analysis of the borrowings from Old Mon displays some clues that the digraph <-ui-> was used to transcribe (1) a rounded-lax vocalic nucleus /-u- ɔ- aʊ -aw/ whose phonetics tended toward the Burmic /-o/ and (2) a tense-unrounded vocalic nucleus /-ʌ-/

⁶⁰ Ferlus (p.c.) and Bauer (p.c.).

whose phonetics was strictly Old Mon. It would seem therefore that the Burmese craftsmen somehow got in a right muddle when they engraved the steles and hesitated between their Burmic low sociolectal pronunciation, and a "monized" high sociolectal one, which was the pronunciation of those who ordered the epigraphs.

4.1.2 Indirect loans into OB from Sanskrit-Pāli through Old Mon

(1) Old Mon intermediate of the Pāli-Sanskrit loans in Old Burmese

A significant amount of Sanskrit-Pāli terms displayed in the Burmese lexicon entered the language through Old Mon. It once more highlights the significant position held by the Mons in the diffusion of the "indianized" (if not "theravadic") culture in Burma. Identifying the Mon intermediate of a Sanskrit-Pāli loan in Burmese is not easy and requires a knowledge of the historical phonetics of the Mon language. I will, as an illustration, (1) discuss the metathesis phenomenon peculiar to some Old Mon dialects and (2) analyze the treatment of the Sanskrit-Pāli rhyme *-iC(a)*.

Phenomenon of metathesis as a Mon dialect feature. Let's first analyze an example of metathesis in the OB utterances <kratuik, krātuik, kratuīk> (also <kritikka>) "name of the first year in Jupiter's period of revolution" attested in the Burmese epigraphy as early as 1215⁶¹. These OB occurrences are a loan from Sanskrit *kārttika* "12th month, October, November" through an Old Mon dialect in Pagán displaying an archaism peculiar to the Mon dialect of Lamphūn, namely the metathesis of *-r-* in a medial position: *kār-* became *kra-* through metathesis. It is therefore about an epigraph written by a Mon craftsman speaking a dialect which preserved an archaism featuring the Old Mon dialect of Lamphūn. Sanskrit *kārttika* is also attested in Old Mon <kārtik> [kərtʌk] "name of the eighth lunar month" and a metathetic form <gratuik> [gəʔʌk] is attested in Middle Mon in an inscription found in Thailand and dated 1504 (so three centuries after the metathetic Burmese attestation).

Treatment of the Sanskrit-Pāli rhymes in -iC(a). Then, Let's have a look to the treatment of a Sanskrit-Pāli rhyme in *-iC(a)* (*-i* + consonant + thematic vowel that fell during the loan). The correspondence between the Sanskrit vowel *i* of *kārtt-i-ka* and the rhyme <-ui-k> in the OB attestation <kratuik> is pretty revealing. This points to the fact that the Sanskrit word would have been borrowed in OB through Old Mon, for Old Mon interpreted the Sanskrit rhyme *-ik(a)* with one of the OM phonemes corresponding to this rhyme <-ik>, /-ʌk/ in its phonetic encoding. During the orthographic stabilization in Mon, the rhyme /-ʌk/ initially encoded in <-ik> (OM <kārtik>) was re-written <-uik> (MM <grat-uik>) due to the influence of Burmese. This is therefore the Mon influence which accounts for some Burmese words encoding the Sanskrit-Pāli rhyme *-iCa* in <-uik>.

Other example:

Sanskrit-Pāli *sucarita* "good action, virtuous behavior:" OM/MM <sūcarit> [sucəʔʌt] (Modern Mon <sūcaruit, socaruit> [saŋcəʔʌt]); OB <caruit>, Standard Burmese <caruik> [zəjaɪʔ].

Importantly, as Bradley (p.c.) rightly points out, the Burmese borrowings from Sanskrit-Pāli and Mon words in rhymes <-uik -uīn> should be considered separately from the words rhyming in <-uiw> in the particular case of the learned readings. Conversely,

⁶¹ The epigraphic attestations are from Win Than Tun (1992:18-19).

the rhymes <uiw -uik -uiñ> should be considered intertwined when used or read in their "popular" or "vernacular" context.

(2) Digraph <ui> in Old Burmese: encoding of Sanskrit-Pāli [ʌ] or [u]

The twofold treatment observed in the borrowings from Mon is also true for the loans from Sanskrit-Pāli. It is remarkable that the twofold use of the digraph <ui> to encode both Sanskrit-Pāli vocalic nucleus [-u-] or [-ʌ-] is only observed in Sanskrit-Pāli terms attested only in Old Burmese and not in Old Mon and are therefore not likely to be a borrowing from Sanskrit-Pāli through Old Mon.

The Old Burmese words in rhyme <ui- + consonant> of Sanskrit-Pāli origin regularly encode the Sanskrit-Pāli rhyme -aC(a) (= [-ʌ] + consonant + the thematic vowel [-ʌ] regularly falling in vernacular use). For example, the OB <yamuik> is a loan from Pāli *yamaka-* [jʌmʌkʌ] "double, the sixth book of Abhidhammapiṭaka;" the Burmese rhyme in <yam-uik> adequately encoded the Pāli rhyme *yam-ak(a)*. In some Old Burmese utterances⁶², however, the digraph <ui> turns out to transcribe the Pāli phoneme /u/ as in OB <saṁmruiw, samaruuiw> borrowed from Pāli *samaru(hati-)* "to ascend;" or OB <samui> from Pāli *samutti-* "delimitation of a boundary," where OB <ui> transcribes the Pāli vowel [u]. The same remark also applies to the borrowing from Pāli *kattū(rika-)* "musk" encoded in <katteuiw, kattuiw> in Old Burmese. It seems therefore obvious that Old Burmese used the digraph <ui> to transcribe a vocalic nucleus [-ʌ-], in a Mon learned reading, and a vowel [-u-], whose rounded-lax feature indicates a vernacular Burmic reading bordering the [-o-] phonetics.

The above-mentioned examples clearly point to a fluctuating pronunciation between a learned "monized" or "monizing" phonetics [ʌ] and a native vernacular Burmic phonetics [u]. These observations support, I believe, my sociolectal approach on the encoding of these rhymes.

4.2 The Shan Trail

The Shan data are of captivating interest in the issue I am dealing with. The Shans had access to a Burmese prototype of writing system through the circulation of Buddhist texts read by Burmese whose pronunciation of the rhyme <ui> fluctuated between the monized high-sociolectal /ʌ-w/ and the Burmic low-sociolectal /u/. There are, indeed, linguistic and cultural evidence of intimate relationships between the Shans to the Burmese. That's what the last part of this paper will examine.

4.2.1 The Shan writing systems

An ancient form of Burmese writing was shaped to a Thai language in Upper Burma round the 15th - 16th centuries⁶³; this first adaptation of a Burmese writing to Shan came up with a Shan prototype of writing, from which the Northwest Thai writings, among which Shan, Tai Ahōm, Tai Nüa, Tai Khamtī, etc. derived. The Burmese alphasyllabary was

⁶² Not attested in Old Mon (Bauer, p.c.).

⁶³ When the Shans borrowed a writing system is a contentious question. According to the tradition claimed in their Annals, the Ahōm Buranji, the Tai Ahōm would have brought their own writing system with them when they left their Tai Maw homeland for Assam around 1215 AD. However, on linguistic grounds, Ferlus (1988) questions this hypothesis and postulates the 15th-16th century for the date of the borrowing of a writing system. I will follow him.

adapted to the Shan languages without creating new symbols, leading to a glaring indigence of this writing. The languages to which this Burmese writing prototype was adapted had already undergone the devoicing of the initial voiced plosives and the revoicing of the voiceless sonorants, which led to a patent inaccuracy in encoding, among others, the tones. The Tai Ahōm writing, supposedly the oldest and the most archaic Shan alphasyllabary, is derived from a Shan prototype of writing and is indicative of these encoding deficiencies. Much more, the Tai Ahōm language in Assam is isolated from the rest of the Thai languages and remained therefore conservative, which incremented this graphic indigence. Moreover, additional snag for the linguist, Tai Ahōm died out as a spoken language by the 17th century and has been (somewhat unsuitably) read through the filter of an Assamese phonetics⁶⁴.

4.2.2 Burmese Origin of the Shan alphasyllabary

As Ferlus (1988a) noticed, the encoding of the preglottalized plosives [ḃ-] and [ḍ-] in Tai Ahōm⁶⁵ is indicative of the Burmese origin (and not Mon) of the Shan writing. The Old Mon phonetic paradigm was tooled up with two preglottalized plosives [ḃ-] and [ḍ-], encoded in <ba> and <da> respectively; the innovation <ḃa>, consisting of adding a "point" in the center of the graphic symbol <ba>, was the first graphic innovation to encode an autochthonous phoneme in a Southeast Asian language. However, to encode these preglottalized plosives, Tai Ahōm did not make use of these symbols which had been available for a long time in the Mon alphasyllabary but rather borrowed graphic symbols which graphically resemble to the Burmese <ba> and <da>. Had they borrowed a Mon prototype of writing, they would unquestionably have used the Mon symbols to encode these very preglottalized plosives. Another feature of Tai Ahōm⁶⁶ is the encoding, in some words, of the diphthongized rhymes in [-j] ([-ɔj], [-oj] and [-uj]) through the symbol <-ñ>. This feature can only be explained by a Burmese treatment of some rhymes in <-ñ> pronounced [-ɿ], in a graphic opposition, since the 15th century⁶⁷, to the newly created symbol <-ñ> encoding the rhyme [-in]⁶⁸.

PT *lɔj^a "to swim" written <loñ> in Tai Ahōm.

PT *ɰɔj^b "to help" written <coñ> in Tai Ahōm.

PT *hɔj^c "to hang" written <hoyñ> in Tai Ahōm.

PT *ḍɔj^a "mountain" written <doyñ> in Tai Ahōm.

PT *t^hɔj^b "to ask a question" written <thoñ> in Tai Ahōm.

PT *gɔj^b (<grɔj^b) "to go slowly" written <koy> / <koñ> in Tai Ahōm.

PT *zɔj^a "to chop" written <soñ> in Tai Ahōm.

PT *ɰɔj^c "to drizzle" written <ñoñ> in Tai Ahōm.

PT *duj^a "hermaphrodite" written <tūñ> in Tai Ahōm.

PT *koj^c "banana tree" written <kūñ> in Tai Ahōm.

PT *k^hiaj^a "son-in-law" written <khūñ> In Tai Ahōm (Tai Phakè: <khoy> [k^hoj^a]), Tai Ahōm pronunciation probably identical, PT [*-iaj]>[-oj] in Tai Ahōm).

⁶⁴ Terwiel (1996); Morey (2002).

⁶⁵ The preglottalized plosives were preserved in Tai Ahōm whereas they underwent the changes [ḃ-] > [m- / w-] and [ḍ-] > [l- / n-] in the other Shan languages.

⁶⁶ Sometimes in other Shan languages too.

⁶⁷ Nishi (1999).

⁶⁸ As far as the graphic conventions are concerned, see "Chart 5."

PT ***pliāj^a** "naked" written <puñ> in Tai Ahōm (Tai Yaï, Tai Phakè, Tai Khamtī: <puñ> [poj^{a1}], Tai Ahōm pronunciation probably identical).

From a historical and cultural perspective, the Tai Ahōm are also in Burma's debt rather than Thailand's, Laos' or China's. First of all, the Tai Ahōm called their Brahmins <puṃnā>, which offers a conspicuous equivalence to the Burmese <puṃṇā:> [pəṇṇ nà:] (OB <puṃnā, puṃṇā>) borrowed from the Prākṛit⁶⁹ puṃṇā "meritorious deed" through Old Mon (OM <buṃnah, buṃnaḥ>, modern Mon <bamnaḥ> [pəṇḥ] "a brahman, a brahman at Indo-Chinese court to carry out brahmanical rites and ceremonies"). Also noteworthy is the fact that the Tai Ahōm name the "venerable powerful Tāra"⁷⁰ <phūra: ta:ra: 'a:lwaṇ> and use the Burmese word <'aloṇ:> [ʔəlaṇ] "corpse; destined to be" used in expressions such as <'aloṇ: to> [ʔəlaṇ dḥ:] "Buddha-to-be; Boddhisattva" or in Burmese kings' names like Alaungsithu (OB <'aloṇ caṃsū>) where <'aloṇ>, according to Luce (1969:82), means "Buddha in becoming." Besides Tai Yaï (a Shan language spoken in Burma) attests [ʔa^{c2} ləṇ^{a2}] which means "one who is progressing towards a state of enlightenment; incipient Buddha."⁷¹ Then, the Tai Ahōm <phūra:> is an obvious borrowing from the Burmese <bhurā:> [p^həj^u:/p^hj^u:], an avatar of the Sanskrit *brāh[maṇa]* (author)⁷²; it is quite suggestive that the Burmese avatar <bhurā:> was borrowed rather than the Khmer-Siamese one <braḥ> [prəḥh]/[p^hràʔ] "honorific prefix before names of the royalty or of members of the clergy." It is then resolutely towards Burma that the Tai Ahōm cultural gaze pointed before exiling westwards into Assam in the 13th century. The loans are culturally important terms.

4.2.3 Comparative data

The Shan languages (Tai Ahōm, Tai Phakè, Tai Āiton, Tai Yaï, Tai Khamtī, Tai Maw, Tai Tehong)⁷³ encode their phoneme /w-ɤ/ in the digraph <ui> borrowed from a Burmese alphasyllabary round the 15th-16th centuries. In some utterances, however, this phoneme is encoded in the symbol <u>. In appetizers, the Shan vowel system is sketched below:

i:	i	u:	u
	e		
ɛ:		a:	a
		aɯ	

Legend:

(= encoded in the graph <ui> or <u> in Tai Ahōm; = randomly encoded in the graph <ui> or <u> Tai Ahōm)

⁶⁹ Or from an altered form of Pāli *puñña*.

⁷⁰ Terwiel (1992:339).

⁷¹ Cushing (1914:679)

⁷² It should be noticed that <-r-> [-ɹ-] has not yet (completely) undergone the change [ɹ]>[j] in, among others, Arakanese and Intha [p^həj^u:]/[p^hj^u:].

⁷³ On Shan ethnonymy, see author.

The Proto-Tai (whence: PT) vowels underwent some changes in Shan. (1) The PT diphthong */*-wa/ > /w:/* (or one of its phonetic variants [ɤ:], [i:], [ə:]) according to the language) in open syllables; short in checked syllables. The PT diphthong */*-ua/ > /o:/* (*/u:/* in Tai Āiton); short in checked syllables. (3) The PT diphthong */*-ia/ > /e:/* (*/ɛ:/* in Tai Āiton); [e] in checked syllables, [i] in Tai Āiton. (4) The PT vowel */*-ə:/ > /aɰ/* (or [aɪ] according to the language); this diphthong is exclusively attested in an open syllable.

1.- Phoneme */w/* encoded in the digraph <ui> in all Shan languages:

PT **k^hwn^c* "to rise" *khuin* in Tai Ahōm, Tai Āiton and Tai Phakè.
 PT **gwa:p^{DL}* "span" *khuip* in Tai Ahōm, Tai Āiton and Tai Phakè.
 PT **ɣwa:n^a* "night" *khuin* in Tai Ahōm, Tai Āiton and Tai Phakè.
 PT **dw:^a* "to hold" *thuiw* in Tai Ahōm, *thuiw* [t^hw:^{a1}] in Tai Āiton and Tai Phakè.
 PT **rwa:n^a* "house" *ruin* in Tai Ahōm; *huin* [hwn^{a2}] in Tai Āiton and Tai Phakè.
 PT **ŋwa:n^a* "silver" *nuin* in Tai Ahōm; *nuin* [ŋwn^{a2}] in Tai Āiton and Tai Phakè.
 PT **lwa:t^{DL}* "blood" *luit* in Tai Ahōm; *luit* [lw:t^{DS2}] in Tai Phakè.
 PT **klwa:^a* "salt" *kuiw* in Tai Ahōm; *huin* [hwn^{a2}] in Tai Āiton and Tai Phakè.
 PT **t^hwk^{DS}* "young male (an.)" *thuik* in Tai Ahōm, Tai Āiton and Tai Phakè.

2.- Phoneme */w/* encoded in <u> or <ui> in Tai Ahōm and <ui> in the other languages:

PT **d^hwk^{DS}* "endormi, late" *tuk/ tūk* in Tai Ahōm
 PT **mwa:^a* "hand" *mu/ muiw* in Tai Ahōm; *muiw* [mw:^{a2}] in Tai Āiton and Tai Phakè.
 PT **lwa:m^a* "to forget" *luṃ* in Tai Ahōm; *luim* [lw:m^{a2}] in Tai Āiton and Tai Phakè.
 PT **zwa:^c* "to buy" *su* in Tai Ahōm; *suiw* [sw:^{c2}] in Tai Āiton and Tai Phakè.
 PT **ɟwa:^b* "name" *cu/ cuiw* in Tai Ahōm; *cuiw* [cw:^{b2}] in Tai Āiton and Tai Phakè.
 PT **nwaŋ^c* "to braise" *nuṃ* in Tai Ahōm; *nuiṃ* [nw:ŋ^{c2}] in Tai Āiton and Tai Phakè.
 PT **h^hmwa:^b* "weather" *mu/ muiw* in Tai Ahōm; *muiw* [mw:^{b1}] in Tai Āiton and Tai Phakè.
 PT **rwa:^a* "boat" *rū/ ruw* in Tai Ahōm; *huiw* [hw:^{a2}] in Tai Āiton and Tai Phakè.
 PT **h^hnwa:^c* "flesh" *nu/ nuw* in Tai Ahōm; *nuiw* [nw:^{c1}] in Tai Āiton and Tai Phakè.

3.- (Rare: phonemes */u o/* encoded in <u> or <ui> in Tai Ahōm, <u> in Tai Āiton and <o> in Tai Phakè)

4.2.4 The Shan trail: conclusion

The Shan data offer us a captivating and stimulating trail to explore; they echo the sociolectal shape of Old Burmese. Tai Ahōm, which allegedly used the most archaic Shan writing, attests a hybrid encoding of the vowel */w/*, on the one hand encoded in the digraph <ui> and on the second hand transcribed by the graphic symbol <u>. Conversely, there are some (though rare) attestations where the phonemes */u o/* are encoded in the symbols <u> or <ui>.

Similarly to the Burmese borrowings from Mon and Pāli, these various graphic encodings of the Tai Ahōm phonemes */w/* and */u o/* are indicative of a sociolectal hybrid treatment. The first one attests a Mon type of encoding of the phoneme */w/* through the digraph <ui>, whereas the other one attests a low sociolectal Burmese type of phonetic encoding, as the confusion of the graphic symbols <u> and <ui> to transcribe the

phoneme /o/ in Tai Ahōm clearly suggests. The Shan data therefore confirm this hybrid treatment, a Mon learned or high sociolectal /ʌ-w/ on the one hand and a Burmic vernacular low sociolectal /o/ on the other.

As a corollary, one can assume with some confidence that the writing system was borrowed by the Shans through the circulation of Buddhist texts which were read by Burmese whose pronunciation of the written rhyme <ui> fluctuated according to sociolectal readings. This hypothesis may also explain why the Tai Ahōm syllabary didn't borrow the Burmese symbol <ra> to transcribe the phoneme /r/ as this phoneme had obviously already evolved to /j/ in the donor Burmese dialect. Indeed, Tai Ahōm had preserved the phoneme /r/ since its arrival in Assam in the early 13th (and until its extinction in 17th century).

5. Conclusion

Towards a panchronic diahoric perspective

Panchronic Linguistics belongs to the stream of the transdisciplinary studies whose axiom is based on the assertion that any linguistic utterance (whether synchronic or diachronic) and its socio-cultural context of occurrence are intimately intertwined. Language is a social reality, and any social (synchronic or diachronic) utterance will *de facto* be mirrored in the language; the awareness of it is so profoundly rooted in the "reptilian brain" of any panchronician that it has become an unconscious automatism for any linguistic enquiry. To highlight the importance of a study combining internal (systemic) and external (socio-cultural) diachronic factors, I opted for a particular problem which has been long intriguing Tibeto-Burmanists: which Old Burmese phoneme did the written rhyme <-uiw> (consequently <-uik -uiñ>) encode? The internal linguistic utterances and their socio-cultural home base were connected and the concluding following lines are where the panchronic voyage has landed me.

The comparative analysis of the Southern and Northern Burmish data leads us to reconstruct <-uiw> /-o:/ in open syllable; the rhymes <-uik> and <-uiñ>, whether they belong to a common Burmic lexical stock or not, can be reconstructed (in a vernacular reading) /-ok/ and /-oŋ/ respectively for the Old Burmese stage, though they mainly indicate a loan from Pāli, Mon or Shan. While the Old Burmese scholars could have used some Mon symbols to transcribe accurately the rhyme /-o/, they opted for <-uiw> transcribing a rhyme /ʌ-w/ which cannot be justified from the point of view of the Burmic historical phonetics, as shown by the Burmic comparative data. The loans from Old Mon and Pāli, which are precisely marks of the nobility and the upper classes of the Burmese medieval society, provide us with a key to this dilemma in the sense that the digraph <-ui-> noted alternately a rounded-lax vocalic nucleus [-u/-ɔ/-aʊ/-aw] on the one hand, and an unrounded-tense vocalic nucleus [-ʌ-] on the other hand. I believe that this fluctuation is due to a different sociolectal status: a Burmic pronunciation representative of the Old Burmese vernacular low sociolect and a learned "monized" or "monizing" pronunciation due to an imitation by prestige for the high sociolect.

The hybrid treatment of the phonetic nucleus of the rhymes <-uiw -uik -uiñ> from the Pāli and Mon loans in Old Burmese as well as the use that the Shan script made of this digraph, namely a "monized" phonetics in [w] and a Burmic phonetics in [o], is intriguing. If we introduce into the equation the prestige position held by the Mons at the Court of Pagán by the very fact that they brought with them a Sanskrit-Pāli culture considered highly prestigious, this hybrid reading can be explained by a sociolectal differentiation between (1)

an Old Burmese spoken at the Court and in the highest sphere of the *Samgha* using a phoneme particular to Old Mon totally unknown in Old Burmese and so looked upon as a mark of prestige and (2) an Old Burmese spoken by the rest of the medieval Burmese society.

Summary			
<i>high sociolect</i>	<-uiw>	/-Λw/	"Monized" pronunciation
	<-uik>	/-Λk/	
	<-uiñ>	/-Λŋ/	
<i>low sociolect</i>	<-uiw>	/-ow/	Burmic pronunciation
	<-uik>	/-ok/	
	<-uiñ>	/-oŋ/	

Finally, the paper provided some linguistic pieces of evidence on the role of the Mons in the edification of the Pagán civilization. Since the book by Aung-Thwin (2005), albeit a salutary reanalysis of ideas which imposed themselves as a Truth in the historiography of medieval Burma, there has been an inclination to minimize or annihilate the role of Mons in the civilization of Pagán. I think I have replaced the Mons in the place they deserve. It was demonstrated that the Burmese borrowed their writing from the Mons and, therefore, that the latter played an important role in the shift of the *Myanmā* ethnic group from orality to literacy. Their importance shouldn't be looked down on.

REFERENCES

- Aung-Thwin, Michael. 1985. *Pagan. The origins of Modern Burma*. Honolulu: University of Hawai'i Press.
- . 2005. *The Mists of Rāmañña. The Legend that was Lower Burma*. Honolulu: University of Hawai'i Press.
- Ba Shin, Bohmu. 1962. *Lokahteikpan. Early Burmese Culture in a Pagan Temple*. Rangoon : The Burma Historical Commission.
- Bauer, Christian. 1998. "A newly discovered Mon inscription of AD 1129 — Myinkaba mound #1216." Contribution to the *31st International Conference on Sino-Tibetan Languages and Linguistics*. Lund, 30 September – 4 October 1998.
- . 2010. "Painters and Scribes: Rethinking Old Mon." Contribution to the *20th Anniversary Meeting of the Southeast Asian Linguistics Society*, Zürich 10-11 June.
- Benedict, Paul K. 1972. *Sino-Tibetan. A Conspectus*. Cambridge: Cambridge University Press.
- Bernot, Denise. 1957-58. "Rapports phonétiques entre le dialecte marma et le birman." *Bulletin de la Société de Linguistique de Paris* 53. 273-294.
- . 1965. "The vowel systems of Arakanese and Tavoyan." *Lingua* 15. 463-574.
- Bernot, Lucien. 1967. *Les Paysans Arakanais du Pakistan Oriental. L'histoire, le monde végétal et l'organisation sociale des réfugiés marma (mog)*. The Hague/ Paris: Mouton. 2 tomes.
- . 1980. "Une population lacustre de Haute Birmanie." *Annuaire du Collège de France*, 1979-1980. 609-619.
- Bernot, Lucien et Denise. 1958. *Les Khyang des collines de Chittagong (Pakistan oriental). Matériaux pour l'étude linguistique des Chin*. Paris : Plon.

- Bernot, Lucien and Michel Bruneau. 1972. "Une population lacustre: les Intha du lac Inle (États Shan du sud, Birmanie)." *Journal d'Agriculture Tropicale et de Botanique Appliquée* 19:10-11. 401-441.
- Bradley, David. 1979. *Proto-Loloish*. London and Malmö.
- . 1985. "Arakanese vowels." *Linguistics of the Tibeto-Burman Area : The State of the Art* edited by Thurgood Graham, Matisoff James A. and Bradley David. 180-200. Canberra: Australian National University.
- . 1997. "Tibeto-Burman Languages and Classification." *Papers in Southeast Asian Linguistics. 14 : Tibeto-Burman Languages of the Himalayas* edited by Bradley David, 1-71. Canberra: Australian National University.
- . 2002. "The Subgrouping of Tibeto-Burman." *Medieval Tibeto-Burman Languages* edited by Beckwith Christopher, 73-112. Leiden: Brill.
- Buchanan, Francis. [1799] 2003. "A Comparative Vocabulary of Some of the Languages Spoken in the Burma Empire." *SOAS Bulletin of Burma Research* 1:1. 40-57. (Reprint of *Asiatick Researches* 5. 219-240.
- Burling, Robbins. 1966. "The addition of final stops in the history of Maru." *Language* 42:3. 581-586.
- . 1967. "Proto Lolo-Burmese." *International Journal of American Linguistics* 33:2. 1-101.
- Bybee, Joan. 2001. *Phonology and Language Use*. Cambridge: Cambridge University Press.
- Bybee, Joan and Paul Hopper (eds.). 2001. *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins.
- Chomsky, Noam. 1979. *Language and Responsibility*. London: Harvester.
- Cushing, Joshua N. 1914. *A Shan and English Dictionary*. Rangoon: American Baptist Mission Press.
- Dài Qìngxìà 戴庆厦, Bùfán Huáng 黄布凡, Shòuchūn Xǔ 许寿椿 and Jiāyīng Chén 陈嘉瑛, Huìyín Wáng 王会银. (eds). 1992. *Zàngmiǎn Yǔzú Yǔyán Cíhuì* 藏緬語族語言詞彙[A Tibeto-Burman Lexicon]. Běijīng 北京: Zhōngyāng Mínzú Xuéyuàn Chūbǎnshè 中央民族学院出版社.
- Dempsey, Jakob. 2001. "Remarks on the vowel system of old Burmese." *Linguistics of the Tibeto-Burman Area* 24:2.205-34. (Errata 26:1. 183).
- . 2003. "Analysis of rime-groups in Northern-Burmish." *Linguistics of the Tibeto-Burman Area* 26:1.63-124.
- Diffloth, Gérard. 1984. *The Dvaravati Old Mon Language and Nyah Kur*. Bangkok: Chulalongkorn University Printing House.
- Enfield, Nick J. 2003. *Linguistic Epidemiology. Semantics and Grammar of Language Contact in Mainland Southeast Asia*. London: Routledge Curzon.
- Ferlus, Michel. 1979. "Formation des registres et mutations consonantiques dans les langues mon-khmer." *Mon Khmer Studies* 8. 1-76.
- . 1982. "Spirantisation des obstruantes médiales et formation du système consonantique du vietnamien." *Cahiers de Linguistique. Asie Orientale* 11:1. 83-106.
- . 1983. "Essai de phonétique historique du mōn." *Mon-Khmer Studies* 12. 1-90.
- . 1988a. "Langues et écritures en Asie du Sud-Est. Les écritures d'origine indienne et leur adaptation aux langues de l'Asie du Sud-Est continentale : les consonnes." Contribution to the *21st International Conference on Sino-Tibetan Languages and Linguistics*, University of Lund, October 7-9.
- . 1988b. "Les circonstances de l'introduction de l'alphabet *tham lanna*." Contribution to the *Premier Symposium Franco-Thai sur l'Histoire ancienne de la Thaïlande des origines au XV^e siècle*. Bangkok - University of Silpakorn. July 18.-20.

- . 1991. "Le dialecte vietnamien de Vinh." Contribution to the *24th International Conference on Sino-Tibetan Languages and Linguistics*, Ramkhamhæng University - Chiang Mai University. October 10.-11. 1991.
- . 1998. "Les systèmes de tons dans les langues viet-muong." *Diachronica* 15:1. 1-27.
- . 1999. "Sur l'ancienneté des écritures thai d'origine indo-khmère." Contribution to the *Colloque "George Cœdès aujourd'hui"*. Sirindhorn Centre of Anthropology - Centre de Documentation et de Recherches d'Études franco-thaïes [CEDREFT]. Bangkok. September 9.-10.
- . 2009. "What were the Four Divisions of Middle Chinese?" *Diachronica* 26:2. 184-213.
- Forbes, C.J.F. Smith. 1878. "On Tibeto-Burman languages." *Journal of the Royal Asiatic Society* (n.s.) 10. 210-27.
- François, Alexandre. 2005. "Unraveling the history of the vowels of seventeen northern Vanuatu languages." *Oceanic Linguistics* 44:2. 443-504.
- Gong Hwang-chern. 1980. "A comparative study of the Chinese, Tibetan, and Burmese vowel systems." *Bulletin of the Institute of History and Philology* (Academia Sinica) 51. 455-490.
- Goody, Jack (ed.). 1968. *Literacy in Traditional Societies*, introduction by Jack Goody. Cambridge: Cambridge University Press.
- Goudineau, Yves. 2001. "Review of *Fils et maîtres du Lac. Relations interethniques dans l'État Shan de Birmanie* by F. Robinne." *Bulletin de l'École Française d'Extrême-Orient* 88:1. 407-10.
- Guillon, Emmanuel. 1999. *The Mons. A Civilization of Southeast Asia*. Bangkok : The Siam Society.
- Hagège, Claude & André-G. Haudricourt. 1978. *La phonologie panchronique*. Paris: Presses Universitaires de France.
- Hannerz, Ulf. 1987. "The world in creolisation." *Africa* 57:4. 546-59.
- Haudricourt, André-G. 1940. "Méthode pour obtenir des lois concrètes en linguistique générale." *Bulletin de la Société de Linguistique de Paris* 41:1. 70-74.
- . 1973. "La linguistique panchronique nécessaire à la linguistique comparée, science auxiliaire de la diachronie sociologique et ethnographique." *Ethnies* 3. 23-26.
- . 1975. "Why and how the 'small languages' should be studied." Paper presented at *The Workshop on Southeast Asian Languages. Theme: Linguistic Problems in Minority/ Majority Group relations in Southeast Asia Countries*. Mahidol University, Bangkok, 13-17 January 1975.
- Henderson, Eugenie J.A. 1986. "Some Hitherto Unpublished Material on Northern (Megyaw) Hpun." *Contributions to Sino-Tibetan Studies* edited by McCoy John and Timothy Light, 101-134. Leiden: Brill.
- Hill, Nathan W. 2012. "Evolution of the Burmese vowel system." *Transactions of the Philological Society* 110:1. 64-79.
- Houghton, Bernard 1897. "The Arakanese dialect of the Burmese language." *Journal of the Royal Asiatic Society* 1897. 453-461.
- Jacques, Guillaume. 2004. *Phonologie et morphologie du Japhug (rGyalrong)*. Ph.D. in Linguistics, Université Paris 7.
- . 2008. 嘉绒语研究 [*Research about the Rgyalrong Language*]. 北京 Běijīng: 民族出版社 Mínzú chūbǎn shè.
- . 2011. "A panchronic study of aspirated fricative, with new evidence from Pumi." *Lingua* 121:9. 1518-38.

- Jenner, Philip N. 2009. *A dictionary of Pre-Angkorian Khmer*. Canberra: Australian National University (Edited by Doug Cooper).
- Jenny, Mathias. 2010. "Burmese Influence in Mon syntax or independent development." Contribution to the *20th Anniversary Meeting of the Southeast Asian Linguistics Society*, Zürich 10-11 June.
- Jones, Robert B. 1976. "Prolegomena to a Phonology of Old Burmese." *Southeast Asian History and Historiography. Essays Presented to D.G.E. Hall* edited by Cowan C.D. and Oliver Wolters, 43-50. London/ Ithaca : Cornell University Press.
- Labov, William. 2001. *Principles of Linguistic Change, Volume II. Social Factors*. Oxford: Blackwell.
- Leach, Edmund. [1954] 1965. *Political Systems of Highland Burma. A Study of Kachin Social Structure*. Boston : Beacon Press. (with a foreword by Raymond Firth).
- Leider, Jacques-P. 2004. *Le royaume d'Arakan, Birmanie. Son histoire politique entre le début du XVe et la fin du XVIIe siècle*. Paris : EFEO [= "Monographies", 190].
- Lévi-Strauss, Claude. 1958. *Anthropologie structurale*. Paris: Plon.
- Li, Fang-kuei. 1977. *A Handbook of Comparative Tai*. Hawai'i: The University of Press of Hawai'i.
- Löffler, L.G. 1976. "Historical phonology of Burmese and Arakanese finals". Contribution to the *Ninth International Conference on Sino-Tibetan Languages and Linguistics*. Leiden, Oct. 22-24.
- Luce, Gordon Hannington. 1953. "Mons of the Pagan Dynasty." *Journal of the Burma Research Society* 36:1. 1-19.
- . 1959. "Old Kyaukse and the coming of the Burmans." *Journal of the Burma Research Society* 42:1. 75-112.
- . 1969. *Old Burma – Early Pagán*. New York: J.J. Augustin. (Volume 1).
- . 1981. *A comparative Word-List of Old Burmese, Chinese, and Tibetan*. London: School of Oriental and African Studies, University of London.
- . 1985. *Phases of Pre-Pagán Burma. Languages and History*. Oxford : Oxford university Press. Volume 1.
- . n.d. "Typescript lexicon: Pre-Standard Old Burmese – Standard Old Burmese – Modern Burmese." *Luce Collection*, MS 6547, box 7, folder 44, pp. 16-135. National Library of Australia.
- Mann, Noel Walter. 1998. *A Phonological Reconstruction of Proto Northern Burmic*. M.A. in Linguistics presented at the University of Texas at Arlington.
- Martinet, André. [1955] 1964. *Économie des changements phonétiques. Traité de phonologie diachronique*. Berne: A. Francke.
- Matisoff, James A. 1969. "Lahu and Proto-Lolo-Burmese." *Occasional Publications of the Wolfenden Society on Tibeto-Burman Linguistics* 1. 117-221.
- . 2003. *Handbook of Proto-Tibeto-Burman. System and Philosophy of Sino-Tibetan Reconstruction*. Berkeley: University of California Press.
- Mersan, Alexandra (de). 2010. "La construction rituelle du territoire à travers la tradition orale. Étude d'une incantation aux esprits d'Arakan (Birmanie)." *Aséanie* 26. 31-55.
- Michaud, Alexis. 2011. "Les systèmes de tons en Asie orientale: typologie, schémas évolutifs et modélisation." *Faits de Langues* 37. 247-261.
- . 2012. "Monosyllabicization: patterns of evolution in Asian languages." *Monosyllables. From phonology to typology* edited by Nau Nicole, Thomas Stolz & Cornelia Stroh. 115-130. Berlin: Akademie Verlag.
- Michaud Alexis, Jacques Guillaume & Rankin Robert L. 2012. "Historical Transfer of Nasality Between Consonantal Onset and Vowel. From C to V or from V to C ?" *Diachronica* 29:2. 201-30.

- Miller, Roy Andrew. 1954. "The Sino-Burmese vocabulary of the *I-shih chi-yu*." *Harvard Journal of Asiatic Studies* 17:3-4. 370-393.
- Morey, Stephen. 2002. "Tai languages of Assam, a progress report — Does anything remain of the Tai Ahom language?" *Language Endangerment and Language Maintenance* edited by Bradley David & Maya Bradley. 98-113. London: RoutledgeCurzon.
- Myanmar Language Commission. 1993. *Myanmar-English Dictionary*. Rangoon: Department of the Myanmar Language Commission/ Kensington, Maryland: Dunwoody Press. (=MLC)
- Nishi, Yoshio 西義郎. 1997. 『ビルマ文語の-ac について Birumabungo-no -ac ni tsuite [About -ac in Old Burmese] 』. 東洋學報 *Tōyō gakuho* [The Journal of the Research Department of the Toyo Bunko] 56:1. 1-43.
- . 1999. "Old Burmese : Toward the History of Burmese." *Bulletin of the National Museum of Ethnology* 23:3. 659-692.
- Nishida Tatsuo 西田龍雄. 1972. *Mendenkan Yakugo no Kenkyū. Biruma Gengogaku Josetsu* 緬甸館譯語の研究: ビルマ言語學序説 [A study of the Burmese-Chinese vocabulary: Mien-tien-kuan i-yu]. Kyōto-shi 京都市: Shōkadō 松香堂.
- Okell, John. 1967. "Nissaya Burmese. A case of systematic adaptation to a foreign grammar and syntax." *Journal of the Burma Research Society* 50:1. 95-120.
- . 1989. "The Yaw dialect of Burmese." *South-East Linguistics. Essays in honour of Eugénie J.A. Henderson* edited by Davidson Jeremy H.C.S., 199-217. London: School of Oriental and African Studies
- . 1995. "Three Burmese dialects." *Papers in Southeast Asian Linguistics n° 13 : studies in Burmese languages* edited by Bradley David, 1-138. Canberra: Australian National University.
- Ong, Walter J. 2012. *Orality and Literacy. The Technologizing of the World*. London: Routledge. [30th Anniversary Edition with additional chapters by John Hartley].
- Ōno, Tōru 大野徹. 1967. "Decipherment of the Sino-Burmese Vocabulary in the Ching Dynasty]." *Journal of Osaka University of Foreign Studies* 17. 127-173.
- Pulleyblank, Edwin G. 1963. "An interpretation of the vowel systems of Old Chinese and of Written Burmese." *Asia Major* (ns) 10:2. 200-221.
- . 1991. *Lexicon of reconstructed pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin*. Vancouver: UBC Press.
- Rhodes, Alexandre (de)(Father). 1651. *Dictionarium Annamiticum Lusitanum et Latinum*. Rome. Reedited and updated in Modern Vietnamese in *Từ điển Annam-Lusitan-Latinh*, 1991, Hồ Chí Minh.
- Robinne, François. 2000. *Fils et maîtres du Lac. Relations interethniques dans l'État Shan de Birmanie*. Paris : Éditions de la Maison des Sciences de l'Homme.
- . 2010. "Presence and use of the Burmese legend heritage in the dynamic of inter-ethnic supremacy and tran-ethnic partnership (South Shan State)." *Inter-Ethnic Dynamics in Asia. Considering the Other through ethnonyms, territories and rituals* edited by Culas Christian & François Robinne. 167-181. London: Routledge.
- Shorto, Harry Leonard. 1971. *A Dictionary of the Mon Inscriptions from the Sixth to the Sixteenth centuries*. London: Oxford University Press. (=DMI)
- Stargardt, Janice. 1970. "Social and Religious Aspects of Royal Power in Medieval Burma: From Inscriptions of Kyansittha's Reign, 1084-1112." *Journal of the Economic and Social History of the Orient* 13:3. 289-308.
- . 1990. *The Ancient Pyu of Burma. Volume One: Early Pyu Cities in a Man-Made Landscape*. Cambridge: Cambridge University Press.
- Suwilai Premsrirat. 2002. *Dictionary of Khmu in Thailand*. Bangkok: Mahidol University.

- Taylor, L.F. 1921. "The dialects of Burmese." *Journal of the Burma Research Society* 11. 89-97.
- Terwiel, Barend Jan. 1992. "La déesse Tara et la religion ancienne des Ahoms." *Disciplines croisées. Hommage à Bernard Philippe Groslier* edited by Condominas Georges. 337-350. Paris: Éditions de l'ÉHESS.
- . 1996. "Recreating the Past. Revivalism in Northeastern India." *Bijdragen tot de Taal-, Land- en Volkenkunde* 152:275-292.
- Theraphan L. Thongkum. 1984. *Nyah Kur (Chao Bon) – Thai – English Dictionary*. Bangkok: Chulalongkorn University Printing House.
- Thomason, Sarah Grey & Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Thurgood, Graham. 1974. "Lolo-Burmese Rhymes." *Linguistics of the Tibeto-Burman Area* 1:1. 98-107.
- U Hla Pe. 1967. "A tentative list of Mon loan words in Burmese." *Journal of the Burma Research Society* 50:1. 71-94.
- U Pe Maung Tin. 1933. "The dialect of Tavoy." *Journal of the Burma Research Society* 23:1. 41-46.
- Venneman, Theo. 1988. *Preference Laws for Syllable Structure and the Explanation of Sound Change. With Special Reference to German, Germanic, Italian, and Latin*. Amsterdam: Mouton deGruyter.
- Weinreich, Uriel. [1953] 1963. *Languages in Contact. Findings and Problems*. New York: Mouton.
- Win Than Tun. 1992. *Pali and Sanskrit Loans in Myanmar Language (Pagan Period)*. Tokyo: Tokyo University of Foreign Studies.
- Wolfenden, Stuart N. 1929. *Outlines of Tibeto-Burman linguistic morphology : with special reference to the prefixes, infixes and suffixes of classical Tibetan and the languages of the Kachin, Bodo, Naga, Kuki-Chin and Burma groups*. London: The Royal Asiatic Society.
- Yabu, Shirō 藪司郎. 1980. 『ビルマ語ヨー方言の資料』 Birumago yō hōgen no shiryō [Linguistic Data of the Yaw Dialect]. アジア・アフリカ言語文化研究 [Ajia afurika gengo bunka kenkyū, *Journal of Asian and African Studies*] 19. 164-182.
- . 1981¹. 『ビルマ語タウンヨウ方言の資料』 Birumago taunyou hōgen no shiryō [Linguistic Data of the Taung'yo Dialect]. アジア・アフリカ言語文化研究 [Ajia afurika gengo bunka kenkyū, *Journal of Asian and African Studies*] 21. 154-187.
- . 1981². 『ビルマ語ダヌ方言の会話テキスト』 Birumago danu hōgen no kaiwa tekisuto [Conversational Texts of the Danu Dialect]. アジア・アフリカ言語文化研究 [Ajia afurika gengo bunka kenkyū, *Journal of Asian and African Studies*] 22. 124-138.
- . 1988. "A preliminary report on the study of the Maru, Lashi and Atsi languages of Burma." *Historical and cultural studies in Burma* edited by Yoshiaki Ishizawa, 65-132. Tokyo: Institute of Asian Studies, Sophia University.
- Yanson, Rudolf A. 1990. *Voprosi fonologii drevbebirmanaskogo yazika*. Moscow: Nauka.
- . 1994. "Mon and Pali influence on Burmese : how essential was it?" *Tradition and modernity in Myanmar. Proceedings of an international conference held in Berlin from May 7th to May 9th , 1993* edited by Gärtner Uta and Jens Lorenz, 356-373. Münster: Berliner Asien-Afrika-Studien.
- . 2002. "On Pali-Burmese Interference." *Medieval Tibeto-Burman Languages* edited by Christopher Beckwith, 39-57. Leiden: Brill.