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STRATA OF STANDARDIZATION:
THE PHONG NHA DIALECT OF VIETNAMESE
(QUÂNG BÌNH PROVINCE) IN HISTORICAL PERSPECTIVE*

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The present research, based on first-hand data, is intended as a contribution to the study of the present-day diversity of lesser-described Vietnamese dialects, and of the range of evolutionary paths to which they testify. The Vietnamese dialect of the hamlet of Phong Nha (commune of Sơn Trạch, county of Bố Trạch, Quảng Bình) is one of the “heterodox” dialects of Vietnamese, which are known to present considerable interest for the historical study of Vietnamese and of the Vietic group at large. These dialects are the product of the southerly expansion of Vietnamese over related (Vietic) languages, a process which involved various interferences. Comparative evidence reveals strata of standardization: some words are phonologically identical to Standard Vietnamese; others are of Southern Vietic stock, as demonstrated by the absence of telltale historical changes that took place in Vietnamese, such as the spirantization of medial stops; still others appear to be the result of hybridization.

Keywords: historical phonology; dialectology; spirantization; diphthongization; vowel systems; Vietnamese; Vietic languages; Quảng Bình.

1. INTRODUCTION

The present study is based on first-hand data on the Vietnamese dialect of the hamlet of Phong Nha, in the commune of Sơn Trạch, county of Bố Trạch, Quảng Bình (thôn Phong Nha, xã Sơn Trạch, huyện Bố Trạch, tỉnh Quảng Bình). The aim of the present research is to contribute to the study of the present-day diversity of lesser-described Vietnamese dialects, and of the range of evolutionary paths to which they testify.

* Many thanks to the language consultants, Mr. Trần Văn Hợp and Mr. Hoàng Minh Chiêm, and to Pr. Trần Trí Đời (Department of Linguistics of Vietnam National University, Hanoi) for organizing the invitation of the consultants and for travelling to Phong Nha to accompany them on the journey to Hanoi. Many thanks to two anonymous reviewers, and to the editorial team, for the wealth of useful comments and suggestions that they offered. Support from Agence Nationale de la Recherche (LabEx EFL, ANR-10-LABX-0083—Investissements d’Avenir) is gratefully acknowledged.
1.1. The importance of heterodox dialects

Vietnamese dialects exhibit considerable diversity, and remain relatively under-studied. Emeneau (1951) provided a detailed description of the dialects of Vinh (Nghệ An) and Nam Định (the main city of the province of the same name); dialectal information is also found in Hoàng Thị Châu (1989; 2004) and in Chapter 4 of Thompson’s *Vietnamese Grammar* (Thompson 1984). Apart from these and a few other notable exceptions, most research tends to focus on the varieties spoken in the major cities, with special emphasis on the two largest cities: Hanoi and Hồ Chí Minh City (Saigon). However, Maspero pointed out that, within the field of Vietnamese dialectology,

“from a historical point of view, comparison of Tonkinese [i.e. Red River delta Vietnamese: the Northern dialect of Vietnamese, including Hanoi Vietnamese] with Cochinchinese [i.e. Mekong delta Vietnamese, Southern dialect of Vietnamese, including Saigon Vietnamese], which belong in the same group, is least interesting, whereas comparison of these dialects with that of Haut Annam [spoken from the North of Nghệ An to the South of Thuận Thiên] is of much greater importance; unfortunately, this comparison has not yet been thoroughly carried out” (Maspero 1912: 3).

The “Haut Annam” dialects show various irregular correspondences with Vietnamese as reflected in Rhodes’s Dictionary (1651), referred to below as Middle Vietnamese. In view of these irregularities, they are referred to as “heterodox” (Ferlus 1995). This term will be used here, consequently using the term “orthodox dialects” for the varieties that exhibit regular relationships of correspondence with Middle Vietnamese. More than a century after the publication of Maspero’s study, heterodox dialects survive in a few areas of Quảng Bình, Hà Tĩnh and southern Nghệ An; as emphasized by Alves (2007), there remains much progress to be done in the study of this crucial dialect area.

1.2. Earlier work on heterodox dialects

The first published description of a “Haut Annam” dialect is a report by Cadière (1902), who defines “Haut Annam” dialect as “the dialect spoken from Đà Nẵng to Vinh or thereabouts” (“le dialecte parlé depuis Tourane jusqu’à Vinh environ”; page X). As pointed out by Maspero (1912: 1, note 1), the data in this initial report suffer from some inconsistencies, due in part to the absence of sufficiently clear indications on where each cited form comes from. Maspero collected data

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1 “Au point de vue historique, la comparaison du tonkinois et du cochinchinois, qui appartiennent au même groupe, est la moins intéressante ; celle de ces dialectes avec celui du Haut-Annam est beaucoup plus importante : malheureusement elle n’a pas encore été faite de façon complète.”
on more than ten of the dialects of this area; some examples are adduced in his 1912 study, but to our knowledge, his field notes remain unpublished. Data on the dialect of Cao Lao Hạ (Quảng Bình) were collected by Michel Ferlus; they confirm the presence of some irregular correspondences with Middle Vietnamese, interpreted as resulting from the spread of Vietnamese on related language varieties – belonging to the Vietic² subbranch of Austroasiatic – with which there was sufficient closeness for cognate words in Vietnamese and in local Vietic languages to be perceived as such by the speakers (Ferlus 1995). Ferlus’s argument is that a phonetic compromise was reached between the realizations in Vietnamese and in local varieties, which were not replaced holus-bolus by Vietnamese. Some words were borrowed with their Vietnamese pronunciation; others were imitated in part, modifying the earlier (non-Vietnamese) form through the introduction of some of the phonological contents of the Vietnamese form.

Further additions to documentation and research on heterodox dialects include a study of the Thanh Chương variety, Nghe An (Alves & Nguyễn Duy Hương 2007) and an experimental study of tones of several locations in Nghe An and Hà Tĩnh (Honda 2008).

Understanding these dialects is a topic of interest (i) for Vietnamese dialectology, (ii) for the study of the Vietic subbranch as a whole, and (iii) for general linguistic models. Concerning point (ii), a better knowledge of local Vietnamese dialects is necessary for further progress in the analysis of layers of borrowings into Vietic languages that have been heavily influenced by language contact, such as Arem (Ferlus 2014) and Thổ (Ferlus 2001).

2. METHOD

For administrative reasons related to research authorizations, elicitation sessions were conducted in Hanoi and not in Quảng Bình. Pr. Trần Thị Dội, of the Department of Linguistics of Vietnam National University in Hanoi, kindly went to Phong Nha in person to invite two consultants: Mr. Trần Văn Họp (hereafter M1), born in 1957, and Mr. Hoàng Minh Chiêm (hereafter M2), born in 1962. Both have lived continuously in Phong Nha.

The elicitation sessions took place at the recording studio of the International Research Institute MICA. The consultants were given explanations about the purpose of the work: to record the speech of their native village, as distinct from

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² The Vietic group consists of (i) Maleng, (ii) Arem, (iii) Chữ, (iv) Aheu, (v) Hung, (vi) Thổ, (vii) Mường and (viii) Vietnamese. This group was referred to as “Viet-Mường” by Thomas and Headley (1970), followed by Ferlus (1996; 1999; 2004). Nguyễn Tài Cẩn (1995) aptly proposed the term “Việt-Chữ”, a compound of the names of the two most distant languages within the group; but the term “Vietic”, proposed by Hayes (1982; 1992), has now become commonly accepted for the entire group, and we follow this usage. Hayes’s proposal is to use “Viet-Mường” as a label for the lower-level grouping containing Vietnamese and Mường.
other varieties of Vietnamese of which they have some command, such as Hanoi Vietnamese – the current national standard – and dialects of Central Northern Vietnamese spoken elsewhere in Quang Binh. Basic words were selected from Michel Ferlus’s word list (an expanded version of the EFEO-CNRS-SOAS word list for linguistic fieldwork in Southeast Asia, available online: Pain et al. 2014). The words were said by the third author (a speaker of Hanoi Vietnamese), and translated orally by the consultants.

An inherent difficulty under such a setup is that consultants have certain representations about their native dialect and its status respective to standards of correctness. It has long been known that, when an investigator from the city elicits data from rural people, they tend to modify their way of speaking, avoiding pronunciations which they think may sound ridiculous to the investigator. As a result of situations of non-egalitarian bilingualism, it can be difficult to elicit the full set of the oppositions present in the phonological system of the target dialect (see e.g. Haudricourt 1973: 23; on the importance of this issue when studying heterodox Vietnamese dialects: Thompson 1984: 79). A related difficulty is that the consultants have representations about the investigators’ expectations, methods and abilities, which also influence their behaviour. In the case of the present study, it is only on the second day that the speakers reported the existence of a local pronunciation – now frowned upon locally as coarse – which they had not indicated to us because they thought we would be unable to write it down: a voiced dental spirant, IPA [ð], found as a variant – alongside [ʑ], currently more frequent – in certain words written with orthographic d. The consultants, who are literate in Vietnamese, had observed that there is no distinct character for this sound (as they interpret orthographic d as [ʑ]). In the belief that “there is no way to write it down”, they considered that the investigators should dispense with it altogether, and they avoided this pronunciation. When finally heard, this sound proved to be of the greatest interest to the investigators: from a diachronic point of view, the spirant variant [ð] is a conservative realization (as explained in section 3.1.4). As a result, it was necessary to go through the word list again to establish which lexical items allow the spirant variant.

The odds are that the present description of the phonemic system achieves a good degree of accuracy, thanks in particular to (i) the presence of two speakers rather than one and (ii) sustained exchanges with the investigators during elicitation. It should nonetheless be kept in mind that the present report is based on a short (two-day) foray. There clearly remains room for a more in-depth study involving systematic vocabulary collection and a study of continuous speech.

We plan to make the recorded materials available online through the Pangloss Collection (Michailovsky et al. 2014) in 2016, if not before.
3. RESULTS

Phong Nha syllables have a \((C_i)(G)V(C_f)+T\) structure, where \(C_i\) is an initial consonant, \(G\) a glide /w/, \(V\) a vowel nucleus, \(C_f\) a final consonant, and \(T\) a tone. Brackets indicate optional constituents.

### 3.1. Consonants

#### 3.1.1. Inventory

An inventory of consonants is shown in Table 1.

<table>
<thead>
<tr>
<th>coronal</th>
<th>bilabial</th>
<th>labiodental</th>
<th>dental</th>
<th>alveolar</th>
<th>retroflex</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>plosive</td>
<td>t tʰ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>c</td>
<td>k kʰ</td>
<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td>j</td>
<td>ŋ</td>
<td></td>
</tr>
<tr>
<td>trill</td>
<td></td>
<td></td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fricative</td>
<td>ō f v</td>
<td>s</td>
<td>ē z</td>
<td>ŝ</td>
<td>x y h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approximant</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implosive</td>
<td>ō d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Inventory of consonants

Alveolo-palatal ē and z are placed in the ‘alveolar’ column for convenience. Initial /ɕ/ was only found in the syllable /ɕɔ/ (/ɕɔ C¹ ‘to thread’, /ɕɔ C¹ la B¹ ‘dishonest’). It may turn out, upon further examination, to be no more than an allophone of /s/; Phong Nha /s/ is sometimes realized close to [ɕ] in various contexts. Initial /ʑ/ is sometimes realized as a voiced palatal fricative [ʝ].

The dental trill /r/ is realized as a retroflex fricative [ʐ] in the speech of consultant M1; in the speech of M2, it is sometimes realized as a trill, [r], and sometimes as a tap, [ɾ].

Speaker M2 often has a stop realization for /kʰ/, whereas speaker M1 generally realizes it as a fricative, [x~xʰ]. In the documented history of Vietnamese, aspirated *pʰ evolved to /f/’, and *kʰ to /x/, leaving /tʰ/ as the only aspirated stop in the system. M2’s /kʰ/ is a conservative characteristic. In cases such as this one, where the two speakers have different phonetic realizations, the more conservative is chosen for phonemic notations.

Speaker M1 has some affrication in the realization of retroflex /tʰ/.

Syllable-final consonants will be dealt with as part of the discussion of rhymes.
3.1.2. Reminders about the spirantization of medial stops in Vietnamese

The initial consonant system of Vietnamese is characterized by the presence of spirants (weak fricatives) resulting from the lenition of medial obstruents within sesquisyllables: the second consonant in CCV(C). This was noted by Haudricourt (1965: 171) and worked out in detail some time later (Ferlus 1982; supportive evidence is provided by Shimizu 2011). The following changes took place: 

\[ p > [\beta], \quad t > [\delta], \quad c > [\mathcal{J}] \quad \text{and} \quad k > [\gamma] \]

These spirant consonants, intrinsically unstable, then evolved towards more stable units in Modern Vietnamese: [\beta] stabilized to [v], and [\delta] and [\mathcal{J}] merged to [z] in Northern Vietnamese and to [j] in Southern Vietnamese, as shown in Table 2. This consonantal stabilization is quite recent, as Alexandre de Rhodes’ dictionary (1651) still shows evidence of the presence of the spirants.

<table>
<thead>
<tr>
<th>non-spirantized</th>
<th>Proto-Vietic obstruents</th>
<th>p-b</th>
<th>t-d</th>
<th>s</th>
<th>c-j</th>
<th>k-g</th>
</tr>
</thead>
<tbody>
<tr>
<td>(initial stops)</td>
<td>modern phonetic value</td>
<td>b</td>
<td>d</td>
<td>t</td>
<td>c</td>
<td>k</td>
</tr>
<tr>
<td></td>
<td>Vietnamese spelling (identical to Rhodes 1651)</td>
<td>b</td>
<td>d</td>
<td>t</td>
<td>ch</td>
<td>c/k</td>
</tr>
<tr>
<td>spirantized</td>
<td>Middle Vietnamese</td>
<td>β</td>
<td>δ</td>
<td>r</td>
<td>j</td>
<td>γ</td>
</tr>
<tr>
<td>(formerly medial stops)</td>
<td>spelling in Rhodes (1651)</td>
<td>b, u</td>
<td>d</td>
<td>r</td>
<td>gi</td>
<td>g/gh</td>
</tr>
<tr>
<td></td>
<td>modern phonetic value</td>
<td>v</td>
<td>z/j</td>
<td>z/r</td>
<td>z/j</td>
<td>γ</td>
</tr>
<tr>
<td></td>
<td>modern Vietnamese spelling</td>
<td>v</td>
<td>d</td>
<td>r</td>
<td>gi</td>
<td>g/gh</td>
</tr>
</tbody>
</table>

Table 2. A recapitulation of the evolution of stops in Vietnamese: initial stops in CV(C) monosyllables, and medial stops in sesquisyllables (C-CV(C), later simplified to CV(C))

Numerous exceptions were noted by Nguyễn Tài Cẩn (2000): correspondences between monosyllables in Vietic languages and spirant initials in Vietnamese, instead of what the model predicts. According to the model, spirants originate in the lenition of medial consonants. These counterexamples led Nguyễn Tài Cẩn to

3 Martinet distinguishes fricatives, which involve distinctly audible friction, from spirants, which are identified through the “resonances of voice” (“la qualité des résonances de la voix”), i.e. a formant pattern. Diachronic studies provide compelling evidence that, among the sounds that fall into the IPA category of fricatives, some pattern with obstruents and others with continuants. Martinet recommends the use of Greek letters for spirants, e.g. [\delta] and [\theta] for interdental spirants, vs. [\delta] and [\theta] for the corresponding fricatives (Martinet 2005: 100–101). Synchronically, however, it may turn out that the range of observed situations constitutes a continuum, and that a hard-and-fast encoding by different IPA symbols for fricatives vs. spirants would raise difficulties for transcribers. This would be parallel to the notion of fortis/lenis (Kohler 1979; Kohler 1984), likewise not encoded in IPA. In this article, we adhere to IPA symbols; the intended meaning can be clarified by phrases such as “the spirant [γ]” or “the spirant [δ]”. 
the conclusion that the model must be wrong: that it is mistaken to reconstruct a
pre-syllable for all the words that developed a spirant initial in Vietnamese.

A key point, however, is that the model predicts the existence of numerous
exceptions. Presyllables can be lost without compensation – unlike the property of
voicing in an initial consonant, for instance. In consonant shifts involving voicing
properties of initial consonants (Haudricourt 1965; Ferlus 1979), great regularity
is expected in the output; on the other hand, monosyllabicization can proceed in a
more haphazard way. It is quite possible for presyllables to disappear from a set
of words whereas other words (including homophonous words of different
morphological makeup, e.g. those in which the presyllable is not morpho-
semantically distinct from the main syllable) are unaffected. This is shown by the
gradient of sesquisyllabicity among Vietic languages: no sesquisyllables in
Vietnamese and Mưòng; 10% of sesquisyllables in Pong; about 35% in Thavung,
Maleng and Sách/Rúc; and over 50% in Arem (Ferlus 2014). Real
counterexamples to the proposed generalization about spirantization in
Vietnamese would come from words that have a presyllable (i.e. sesquisyllabic
structure) in some Vietic languages, and a non-spirantized initial (orthographic b-,
d, ch-, k/-c-) in Vietnamese. In the absence of such counterexamples, the theory of
spirantization of medial consonants cannot be considered disproved.

3.1.3. The preservation of nonspirantized initials in Phong Nha Vietnamese

Phong Nha Vietnamese preserves non-spirantized initials corresponding to
spirantized initials in Middle Vietnamese, as shown in Tables 3 and 5-8. This
means that, in these syllables, presyllables were lost without compensation. This
is one of several possible evolutionary paths for presyllables, in the course of
monosyllabicization: (i) loss without compensation; (ii) modification of medial
consonants, as in orthodox Vietnamese; (iii) development of consonantal clusters,
themselves yielding geminated consonants, then a tense/lax opposition among
initials, which can later evolve into a split of the vowel system or of the tone
system (Haudricourt 1991; Ferlus 1997a; for a synthesis: Michaud 2012: 119–
120).

Henceforth, letters in superscript (B1, B2) indicate the etymological lexical
tone categories; for information about tones, see section 3.3.
<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>t.ke:</td>
<td>thorn</td>
<td>gai</td>
<td>ɣaj \text{A}^1</td>
</tr>
<tr>
<td>C.gi:?</td>
<td>dibble</td>
<td>ɣay</td>
<td>ɣý\text{B}^2</td>
</tr>
<tr>
<td>t.ke:?</td>
<td>girl</td>
<td>(con) ɣái</td>
<td>ɣaj \text{B}^1</td>
</tr>
<tr>
<td>t.ku:l?</td>
<td>knee</td>
<td>ɣi</td>
<td>ɣo\text{B}^1</td>
</tr>
<tr>
<td></td>
<td>to carry on the</td>
<td>ɣùi</td>
<td>ɣu\text{A}^2</td>
</tr>
<tr>
<td></td>
<td>back in a basket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kam'/ gam'?</td>
<td>to bite</td>
<td>ɣăm</td>
<td>ɣám \text{B}^2</td>
</tr>
<tr>
<td>C.ka:s</td>
<td>to scratch</td>
<td>ɣái</td>
<td>ɣaj \text{C}^1</td>
</tr>
<tr>
<td>t.ko:c</td>
<td>to whittle</td>
<td>ġot</td>
<td>ɣɔt \text{D}^1</td>
</tr>
</tbody>
</table>

Table 3. Correspondences between Proto-Vietic \(^*\text{k/g}\), Middle Vietnamese /ɣ/, and Phong Nha Vietnamese /k/.

Aspiration in the last two examples, Phong Nha /k\text{ba}j \text{C}^1/ ‘to scratch’ and /k\text{ho}t \text{D}^1/ ‘to whittle’, corresponding to spirant initials in Middle Vietnamese, will catch the attention of linguists familiar with the Vinh dialect of Vietnamese, another heterodox dialect: see Table 4 (from Ferlus 1991).
The Phong Nha dialect of Vietnamese

<table>
<thead>
<tr>
<th>Middle Vietnamese spelling</th>
<th>IPA</th>
<th>Vinh dialect</th>
<th>IPA</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>vung</td>
<td>vuɲ B2</td>
<td>phúng</td>
<td>pʰuɲ B1</td>
<td>on the sly</td>
</tr>
<tr>
<td>văt</td>
<td>văt D2</td>
<td>phút</td>
<td>pʰut D1</td>
<td>to pick, to pluck</td>
</tr>
<tr>
<td>vọt</td>
<td>vọt D2</td>
<td>phọt</td>
<td>pʰọt D1</td>
<td>to gush forth</td>
</tr>
<tr>
<td>vỡ</td>
<td>vɔ C2</td>
<td>phó</td>
<td>pʰɔ C1</td>
<td>to clap (shrubs)</td>
</tr>
<tr>
<td>dợt</td>
<td>dợt D2</td>
<td>thọt</td>
<td>tʰọt D1</td>
<td>to drip</td>
</tr>
<tr>
<td>dặm</td>
<td>dặm A2</td>
<td>thâm</td>
<td>tʰạm A1</td>
<td>drizzle</td>
</tr>
<tr>
<td>gàn</td>
<td>ɣan A2</td>
<td>khan</td>
<td>kʰan A1</td>
<td>silly</td>
</tr>
<tr>
<td>got</td>
<td>ɣɔt D2</td>
<td>khót</td>
<td>kʰɔt D1</td>
<td>to peel</td>
</tr>
<tr>
<td>gải</td>
<td>ɣaj C2</td>
<td>khái</td>
<td>kʰaj C1</td>
<td>to scratch (with nails)</td>
</tr>
<tr>
<td>gờ</td>
<td>ɣɔ C2</td>
<td>khọ</td>
<td>kʰɔ C1</td>
<td>to clear up</td>
</tr>
<tr>
<td>gáp</td>
<td>ɣəp D2</td>
<td>kháp</td>
<td>kʰəp D1</td>
<td>to meet</td>
</tr>
<tr>
<td>gút</td>
<td>ɣut D1</td>
<td>khút</td>
<td>kʰut D1</td>
<td>knot</td>
</tr>
<tr>
<td>gây</td>
<td>ɣəj C1</td>
<td>khày</td>
<td>kʰəj C1</td>
<td>to pluck (a string)</td>
</tr>
</tbody>
</table>

Table 4. Correspondences between aspirated initials in the Vinh dialect of Vietnamese and spirants in Middle Vietnamese

The interpretation of these correspondences proposed by Ferlus (1991) is that they result from a situation of contact in which local speakers tried to imitate spirant realizations by speakers of Northern Vietnamese, and ended up producing aspirated stops. (On the irregular tone correspondences, whereby the Standard Vietnamese word has a low-register tone and the Central-Northern Vietnamese word has a high register tone, see section 3.3.3.)

How come Phong Nha has similar correspondences, but in a handful of words only? This clearly looks like a case of borrowing, not regular sound change. The aspiration found in the last two examples in Table 3 are arguably due to the adoption of dialectal forms from Vinh or from another neighbouring dialect that possesses similar forms. While Vinh is inferior to Northern Vietnamese in terms of sociolinguistic prestige, it is a regionally influential variety, and it is therefore not implausible that such forms trickled into Phong Nha Vietnamese. The irregular tonal correspondences (for ‘to bite’ in Table 3, and for all items in Table 5 except ‘to hold’) will be explained in section 3.3.3.
<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>spiny amaranth</td>
<td>giện⁴</td>
<td>jen A²</td>
<td>cœn A¹</td>
<td></td>
</tr>
<tr>
<td>middle</td>
<td>giữ</td>
<td>jũo C²</td>
<td>tũo C¹</td>
<td></td>
</tr>
<tr>
<td>k.cih</td>
<td>to keep, to hold</td>
<td>giữ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k.cuːj</td>
<td>to pierce, to bore; awl</td>
<td>giũi (tỏ)</td>
<td>jũ A²</td>
<td>cuj A¹</td>
</tr>
<tr>
<td>k.raː</td>
<td>old</td>
<td>già</td>
<td>ja A²</td>
<td>ṭa A¹</td>
</tr>
</tbody>
</table>

Table 5. Correspondences between Proto-Vietic *c/j, Middle Vietnamese /j/, and Phong Nha Vietnamese /c/ or /j/.

<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>p.seːʔ</td>
<td>otter</td>
<td>(con) rái</td>
<td>raj B¹</td>
<td>tĩj B¹</td>
</tr>
<tr>
<td>m.ran⁷</td>
<td>louse</td>
<td>răn</td>
<td>rũn B²</td>
<td>ṭũn B¹</td>
</tr>
<tr>
<td>C.seːt</td>
<td>centipede</td>
<td>rêt / rit</td>
<td>ret D¹ / rit D¹</td>
<td>tit D¹</td>
</tr>
<tr>
<td>p.soŋ⁷</td>
<td>snake</td>
<td>răn</td>
<td>rũn B¹</td>
<td>tǎn B¹</td>
</tr>
<tr>
<td>p.suŋ⁷</td>
<td>navel</td>
<td>rũn</td>
<td>run B¹</td>
<td>dũn B¹</td>
</tr>
</tbody>
</table>

Table 6. Correspondences between Proto-Vietic *s, Middle Vietnamese r, and Phong Nha Vietnamese /ν/.

‘Louse’ is an odd-man-out in this set, as it is not reconstructed with a *s in Proto-Vietic. It may be due to a process of hypercorrection or borrowing. The initial /ɗ/ in ‘navel’ is also unexpected; likewise, in Table 7, the initial correspondence between initials for ‘cushion’ is unexpected. The aspirated initial for ‘leak (in the roof)’ (last line in Table 7) is likely to be due to dialectal influence from a dialect sharing the characteristic of the Vinh dialect brought out in Table 4.

---

⁴ In present-day Vietnamese texts, the spelling dên is far more common than giên for ‘amaranth’, and dùi at least as common as giùi for ‘awl’. Since the two Middle Vietnamese phonemes at issue, /ð/ and /ʝ/, merged in (standard) modern dialects, there tends to be hesitation as to which is the correct spelling (this is mentioned e.g. by Mai Ngọc Chữ et al. 2005: 123). The palatal found in Phong Nha constitutes strong evidence that the earlier forms had an initial palatal, not a dental, and that the spellings giên and giùi are etymologically appropriate.
The Phong Nha dialect of Vietnamese

### Table 7. Correspondences between Proto-Vietic *t/d, Middle Vietnamese /ɗ/, and Phong Nha Vietnamese /ɗ/

<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>k.niːw</td>
<td>gizzard</td>
<td>diẽ́ (gà)</td>
<td>đĩow A2</td>
<td>đĩow A2</td>
</tr>
<tr>
<td>?</td>
<td>eagle</td>
<td>diẽ́</td>
<td>đĩow A2</td>
<td>đĩow A2</td>
</tr>
<tr>
<td>k.taːl⁵</td>
<td>scrotum, testicles</td>
<td>dái</td>
<td>đaj B1</td>
<td>đaj B1</td>
</tr>
<tr>
<td>k.taːl</td>
<td>tough (meat)</td>
<td>(thị́t) dai</td>
<td>đaj A1</td>
<td>đaj A1</td>
</tr>
<tr>
<td>?</td>
<td>slobber, slaver</td>
<td>dăi</td>
<td>đaj C2</td>
<td>đį́ B1</td>
</tr>
<tr>
<td>k.taːw</td>
<td>knife</td>
<td>dao</td>
<td>đaw A1</td>
<td>đaw A1</td>
</tr>
<tr>
<td>C.ta:</td>
<td>skin</td>
<td>da</td>
<td>đa A1</td>
<td>đa A1 ; đa A1</td>
</tr>
<tr>
<td>?</td>
<td>leak (in the roof)</td>
<td>(máí) dût</td>
<td>đɪ́t B2</td>
<td>tʰót D1</td>
</tr>
</tbody>
</table>

### Table 8. Correspondences between Proto-Vietic *p/b, Middle Vietnamese /v/, and Phong Nha Vietnamese /ɓ/.

<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>buːʔ / puːʔ</td>
<td>breast</td>
<td>vú</td>
<td>vʉ B1</td>
<td>ɓu B1</td>
</tr>
<tr>
<td></td>
<td>to wash (rice)</td>
<td>vo (gao)</td>
<td>vɔ A1</td>
<td>ɓɔ A1</td>
</tr>
</tbody>
</table>

Additionally, Table 9 presents various items that call for further investigation. Their peculiar characteristics may be due to hypercorrection, or to the phonetic interpretation of sounds from other dialects under situations of language contact.

### Table 9. Items calling for further investigation

To venture some speculations about these items, the Phong Nha forms with initial /ʈ-/ suggest an evolution from *k.rəŋ to *k.ləŋ, the cluster *kl eventually developing into a retroflex (*k.rəŋ > *k.ləŋ, and *k.roːŋ > *k.łoːŋ).
3.1.4. The preservation of the spirant [ð] in Phong Nha Vietnamese

The Middle Vietnamese phoneme transcribed as $d$ in the orthography was a spirant (weak fricative), /ð/. This phoneme is now realized as /z/ in Hanoi Vietnamese and /j/ in Southern Vietnamese. In Phong Nha Vietnamese, cognates of $d$-words can all be pronounced with initial /z/; additionally, some of these words can be pronounced with an initial voiced dental fricative [ð], now frowned upon locally as coarse and ridiculous. Table 10 shows the words at issue, distinguishing those that display synchronic variation (allowing a [ð] variant) from those that do not.

<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Middle Vietnamese</th>
<th>IPA interpretation</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>slope</td>
<td>dố</td>
<td>δok$^{D1}$</td>
<td>δok$^{D1}$</td>
<td></td>
</tr>
<tr>
<td>to put out the fire</td>
<td>dậ</td>
<td>δʃp$^{D2}$</td>
<td>δʃp$^{D2}$</td>
<td></td>
</tr>
<tr>
<td>daughter-in-law</td>
<td>(con) dâu</td>
<td>δʃw$^{A1}$</td>
<td>δu$^{A1}$; zʃw$^{A1}$</td>
<td></td>
</tr>
<tr>
<td>skin, leather</td>
<td>đà</td>
<td>đa$^{A1}$</td>
<td>đa$^{A1}$; đa$^{A1}$</td>
<td></td>
</tr>
<tr>
<td>mother’s elder sister</td>
<td>đĩ</td>
<td>đi$^{A2}$</td>
<td>đi$^{A2}$</td>
<td></td>
</tr>
<tr>
<td>sausage</td>
<td>đồi</td>
<td>đọj$^{A2}$</td>
<td>đọj$^{A2}$</td>
<td></td>
</tr>
<tr>
<td>to demolish</td>
<td>đờ</td>
<td>đy$^{C2}$</td>
<td>đy$^{B2/C2}$</td>
<td></td>
</tr>
<tr>
<td>easy</td>
<td>đề</td>
<td>đe$^{C2}$</td>
<td>đe$^{B2/C2}$</td>
<td></td>
</tr>
<tr>
<td>C.ta:.</td>
<td>under</td>
<td>đươi</td>
<td>đươi$^{B1}$</td>
<td>đy$^{B1}$ / đươi$^{B1}$</td>
</tr>
</tbody>
</table>

Table 10. Phong Nha cognates of $d$-initial words in Middle Vietnamese

Finally, Phong Nha presents an interesting treatment of the Proto-Vietic voiced palatal implosive *ʄ. Proto-Vietic is reconstructed with three voiced implosives: *ɓ, *ɗ and *ʄ. They are reflected in Middle Vietnamese (and Modern Vietnamese) as /m/, /n/ and /ɲ/. In Phong Nha, the first two likewise become /m/ and /n/; on the other hand, Phong Nha words derived from Proto-Vietic *ʄ-initial words display free variation between /ɲ-/ and /ʑ-, e.g. ‘tinder’, Middle Vietnamese nhùi /ɲu$^{A2}$/, Phong Nha /ʑu$^{A2}$/ ~ nuj$^{A2}$/.

3.2. Rhymes

3.2.1. Inventory

The fourteen vowel nuclei of Phong Nha Vietnamese are the same as in Standard Vietnamese: nine vowels /i e ɛ a u u ɤ o ɔ/, two of which have phonemically distinct short counterparts: /ā/ and /ĩ/, and three diphthongs, /iɑ uə uə/. Short vowels are a majority in the system: there only exist two short vowels (Haudricourt 1952), and it is therefore economical to use a diacritic for these two short vowels and leave long vowels unmarked.
In syllable-final position, the following consonants are found: /-p -t -k -m -n -ɲ -ŋ -j -w/. Combinations of vowels with the medial glide /ʷ/ and with final consonants follow the same patterns as in Middle Vietnamese. For ease of reference, Table 11 provides a phonemic analysis of the rhymes of Middle Vietnamese. This table was created by Michel Ferlus in 1991; the analysis is essentially the same as that proposed by Cao Xuân Hao (2007: 102). The hyphen (-) in the top row (in -k, w-m, etc.) materializes the position of the vowel within the consonantal structure of the syllable. The notion of rime is understood in a broad sense that includes the rounding of labialized initials. This rounding is transcribed as a superscript w to the left of the symbol C (for Consonant). Thus, the rime uê, as in the word quê ‘countryside, home village’, is located in column Cʷ-, line e. A dash (—) indicates that the combination at issue is not found in the language. Some of the complexities of the orthography are not reflected in the table, such as the encoding of the contrast between the rhymes /ʷa/ and /uə/ by the use of different consonant symbols (and identical vowel symbols) in qua /kwa/ vs. cua /kuə/.

The choice of IPA symbols for vowels is based on Kirby (2011). It is not a narrow notation aiming at the greatest synchronic phonetic precision. For instance, the vowels ơ and â are transcribed as /ɤ/ and /ɤ̆/ respectively, reflecting their interpretation as a vowel pair distinguished by phonemic length, and overlooking the slight difference between them in terms of vowel quality – a difference which led Gsell (1980) to adopt a transcription by /ɤ/ and /ʌ/ respectively.

Velar finals after the back rounded vowels, /u o ɔ/, have an additional labial closure, as in Hanoi Vietnamese. For instance, ‘slope’, /ðɔk24/, is realized as [ðɔkʰ24], and ‘to use’, /ðuŋ32/, as [ðuŋʰ32]. In Hanoi Vietnamese, the vowel quality of /o/ and /ɔ/ is affected: the actual pronunciation of /ok/ /ɔk/ /oŋ/ /ɔŋ/ is approximated as [ɔuk̚] [ɛuk̚] [ɔuŋm] [ɛuŋm] by Thompson (1984), and as [ɔuk̚] [ɛuk̚] [ɔuŋm] [ɛuŋm] by Henderson (1985: 21). It can also be transcribed as [yɔk̚] [ɔɔk̚] [yɔŋm] [ɔɔŋm], “to reflect the intuition that lip rounding is moved to the right, the onset of the diphthong consisting in the unrounding of the original vowel: from [o] to [γo], from [ɔ] to [ɔɔ]” (Michaud 2004). In Phong Nha, on the other hand, the change is less advanced, and the quality of the vowel before velar finals is still readily identifiable.
Table 10. The rhymes of Middle Vietnamese
3.2.2. Comparative perspectives

Rhyme correspondences between Middle Vietnamese and “heterodox” dialects show a number of irregularities. The Vietnamese system is highly innovative: two Vietnamese vowels typically correspond to a single vowel in proto-Vietic (Ferlus 1997b). This two-way split does not correspond to the familiar effects of consonant shifts. It has been proposed that it results from dialect mixture (Ferlus 1997b:50): two dialects came in contact, one of which was conservative whereas the other had undergone opening diphthongization of low vowels /iː/, /uː/, /ɨ/, /ɨ/, followed by closing diphthongization of open vowels /aː/, /oː/ and /ɔː/. The coexistence and eventual merger of these two dialects – presumably in the Red River delta – resulted in a haphazard lexical distribution of the two vowel sets, and hence in a multiplication of the number of contrastive vowels. The resulting language variety endured to become dominant; all the language varieties resulting from its gradual spread, which constitute the core present-day Vietnamese dialects, possess this large inventory of vowels. Some “heterodox” dialects, however, do not show the diphthongized forms characteristic of Standard Vietnamese (from Middle Vietnamese to the present-day “orthodox” Northern and Southern dialects). Phong Nha is a case in point: it preserves reflexes of Proto-Vietic *aː; *ɛː; *ɛː; and *ɛː; that appear essentially unchanged since Proto-Vietic. Examples are provided in Tables 12 to 15. Note that all Proto-Vietic reconstructions in the present article are from ongoing comparative work (Ferlus in preparation).

<table>
<thead>
<tr>
<th>Proto-Vietic</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>daːŋ</td>
<td>path</td>
<td>đường</td>
<td>đườn A2</td>
<td>đậ́n A2</td>
</tr>
<tr>
<td>daːk</td>
<td>water</td>
<td>nước</td>
<td>nuở́c D1</td>
<td>nak D1</td>
</tr>
<tr>
<td>*C.laːs</td>
<td>fire</td>
<td>lục</td>
<td>luːc C1</td>
<td>la C1</td>
</tr>
<tr>
<td>ṇaːj</td>
<td>human being</td>
<td>người</td>
<td>ɲuːj A2</td>
<td>ɲaj A2</td>
</tr>
<tr>
<td>m.raːʔ</td>
<td>bush-hook</td>
<td>ruː</td>
<td>ruː B2</td>
<td>ra B2/C2</td>
</tr>
<tr>
<td>*C.laːjʔ</td>
<td>net</td>
<td>luːi</td>
<td>luːj B1</td>
<td>laj B1</td>
</tr>
<tr>
<td>laːs</td>
<td>tongue; ploughshare; blade5</td>
<td>luːdi</td>
<td>luːj C2</td>
<td>laj B2/C2</td>
</tr>
<tr>
<td>maːɲʔ</td>
<td>to borrow</td>
<td>mượn</td>
<td>mượn B2</td>
<td>man B2/C2</td>
</tr>
</tbody>
</table>

Table 12. Proto-Vietic *aː; Middle Vietnamese /ɔː/ (spelling: ɰa/ɰo), Phong Nha /a/
It may be that the vowel /ɤ/ in the Phong Nha examples in Table 13 represents the result of the reinterpretation of the vowel /ɯə/ of orthodox dialects, rather than a regular phonetic development.

There is only one example in Table 15: this is the only example found so far of Phong Nha /ɛ/ corresponding to Proto-Vietic *ɛ: and Vietnamese /iə/ (iê/iə).

Another notable feature of the system is the presence of a short /a/ or /i/ in some syllables with a /-aj/ rhyme in Middle Vietnamese. Table 16 presents relevant examples, and clarifies that they derive from Proto-Vietic *e: whereas Proto-Vietic *a: plus final *s or *l yields a main vowel /a/ in Phong Nha. Note that Proto-Vietic *ja:l ‘casting-net’ is an early borrowing from Sanskrit jāla.
The double set of reflexes of Proto-Vietic *e in Phong Nha (/ă/ and /ĕ/) is unexplained, but not especially surprising. “Orthodox” Vietnamese did not undergo a linear development from Proto-Vietic; while Proto-Vietic *e mostly evolves into /aj/ (orthographic ai), there are also numerous instances of /ĕ/ (orthographic ây). Likewise, Proto-Vietic *o has two reflexes, /aw/ (orthographic âo) and /ĕw/ (orthographic âû).

As for Proto-Vietic *o, only two examples are presented in Table 17; further data, comprising Phong Nha cognates for words such as bao ‘dream’, will be necessary to pursue the analysis. The mention ‘local voc.’ indicates that the word at issue (‘stream, river’) is part of local vocabulary that cannot be traced back to Proto-Vietic.

### Table 17. Correspondences for reflexes of Proto-Vietic *o

<table>
<thead>
<tr>
<th>Proto-Vietic vowel</th>
<th>gloss</th>
<th>Vietnamese spelling</th>
<th>Middle Vietnamese</th>
<th>Phong Nha Vietnamese main vowel</th>
<th>form</th>
</tr>
</thead>
<tbody>
<tr>
<td>*o</td>
<td>local voc.</td>
<td>stream, river</td>
<td>rão</td>
<td>raw ·A2</td>
<td>a</td>
</tr>
<tr>
<td>*o t.ko.?</td>
<td>husked rice</td>
<td>gao</td>
<td>yaw ·B2</td>
<td>a</td>
<td>yaw ·B2/C2</td>
</tr>
<tr>
<td>*o s.po:</td>
<td>to dream</td>
<td>bao</td>
<td>baw ·A1</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

### 3.3. The tone system

#### 3.3.1. Inventory

The tonal system is presented in Table 18. The table is arranged by etymological categories, A1 to D2 (Haudricourt 1972; Gedney 1972). The phonetic labels use Chao Yuen-ren’s scale from 1 (lowest) to 5 (highest); they approximate our auditory impression of the tones, pending further examination of their acoustic and perceptual properties. Tone A1 is rising, in the higher part of the speaker’s
range; A2 is lower, and slightly falling; B1 sounds falling-rising; the tone that results from the merger of B2 and C2 is very low; and tone C1 ends in glottal constriction. No tone sandhi was observed (on tone coarticulation in Vietnamese, see Brunelle 2003, 2009).

Table 18. Phong Nha tones. Categories A, B, C: non-checked syllables (smooth syllables); category D: checked syllables (stop-final syllables)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45</td>
<td>324</td>
<td>2^t</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>1</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

3.3.2. Origin of the five tones: four tones plus one, or six tones minus one?

In the Vietic languages Pong/Phong (Laos) and Toum and Liha (spoken in the north-central provinces of Vietnam), there exist four-tone systems, following the confusion of etymological B1 with C1, and B2 with C2 (Ferlus 1998). A four-tone system (on non-checked syllables) is also found in the Cao Lao Hä dialect of Vietnamese (Ferlus 1995), in which the etymological C category (originating in syllables with final *-h) is now confused with etymological B2: i.e. Vietnamese B2, C1 and C2 are all reflected as the same tone in Cao Lao Hä. Seen in this light, the five-tone system of Phong Nha Vietnamese may be due to the preservation of five of the six etymological categories; or it may be due to later borrowings that reintroduced a fifth category into a four-tone system (reintroducing a formerly lost opposition between B1 and C1). The way to test these two hypotheses is to evaluate the degree of regularity in tonal correspondences with Middle Vietnamese: if a category was reintroduced through borrowing, irregular correspondences are expected. Comparison argues in favour of the former hypothesis: Phong Nha has never been a member of the set of four-tone dialects.

3.3.3. Irregular tonal correspondences across dialects

Overall, tonal correspondences between Phong Nha and Middle Vietnamese are straightforward. There are a few cases of irregular tonal correspondences, falling in several categories. A reminder may be in order concerning about the three types of irregular tonal correspondences brought out by Ferlus (1999).

(i) The first type is due to the devoicing of sonorants in sesquisyllables in Proto-Việt-Muông, resulting in high-register reflexes in Northern Vietic (Vietnamese and Mường) vs. low-register in Southern Vietic (all the other languages of the group). For example, sesquisyllabic Proto-Vietic *k.ma ‘rain’ yielded a high-series tone (A1) in Vietnamese: /mɯə^A1/ (orthography: mua). The proposed explanation is that, under the influence of Chinese (which had already undergone monosyllabification), *k and *m came to be articulated as an initial consonant cluster *km-, and their strong coarticulation detracted from the voicing of the nasal, so that it patterned together with voiceless onsets at the stage when a
consonant shift among initials took place (Haudricourt 1965, 1972). In Southern Vietic, on the other hand, voicing of the *m was preserved through the sesquisyllabic realization of *k.ма as *[kʰma], hence the development of a low-series tone, e.g. Pong /kʰmaA2/ and Liha /maA2/.

(ii) The second type is due to the voicing of medial stops in Vietnamese after an initial *r, resulting in low-register reflexes in Vietnamese vs. high-register in all the other languages (including Mường). For example, *r.ка ‘chicken’ yields Vietnamese ɣà [ɣaA2], vs. Mường, Cuố, Pong and Thavung /kaA1/, Sách/Rúc /rkaA1/, Arem /lka(1)/, and Mạ Liềng /ũkaA1/.

(iii) The third type is due to the loss of Proto-Austroasiatic initial voicing in Northern Vietic languages, resulting in high-register reflexes, as against the expected low-register reflexes in Southern Vietic. This is interpreted by Ferlus (1999) as a substrate effect dating back to the time when Proto-Vietic spread northwards onto an Austroasiatic substratum of languages that lacked voiced stops (a set of languages of which the Khmuic language Ksing Mul arguably constitutes a remnant).

Some Phong Nha words illustrate the above types of irregular tonal correspondences categories. For instance, the word ‘louse’, Phong Nha /ʈɤ̆nB1/, constitutes an instance of the second type of irregularity. It differs from Standard Vietnamese /rɤ̆nB2/ rận by its initial and by its tone. In Vietnamese, the medial stop became voiced as a consequence of spirantization, resulting in the development of a low-series tone. Other examples include ‘to whittle, to cut out’, Phong Nha /kʰɔt D1/, and ‘to bite’, Phong Nha /kăm B1/, that have non-spirantized initials and high-register tones; compare Standard Vietnamese /ɣɔt D2/ gow and /ɣăm B2/ găm.

In addition to these three types, some mixed correspondences are found, however: cases where the word is a hybrid – a combination of phonological materials from Vietnamese and from another Vietic language. The Phong Nha word for ‘bedbug’, /repD1/, is identical to the Standard Vietnamese word, except for its tone (Standard Vietnamese /repD2/ rẹp). Tone D1 is the regular tone of this word in all Vietic languages except Vietnamese: Mường /seːt D1/ or /tʰeːt D1/, Pong /sːip D1/, Thavung, Sách and Rúc /kːsip D1/, Maleng Bro /krsːip D1/. The Phong Nha word thus contains Standard Vietnamese segments (including the telltale spirant which caused the irregular tonal correspondence with the rest of Vietic) and a typically non-Vietnamese tone. Given the higher prestige of Vietnamese, it is a safe guess that /repD1/ results from the modification of an earlier form, which had an initial /*s-/, by speakers who adopted the segments of the Standard Vietnamese word, while retaining the tone of the earlier form. The initial, and perhaps the vowel, were acquired through a process of standardization, which did not affect the tone.

Such a change is documented in other dialects. In Hanoi, ‘coffee’ was initially borrowed from the French /kafe/ as trà phê /ʈaA2.feA1/ (Martini 1958: 337–338). The first syllable is a phonetic stretcher, as the tone is different from that (A1)
affected by default to borrowings from toneless languages, and the initial /t/ does not match the /k/ in /kafe/. This syllable is semantically motivated: it is none other than the Sino-Vietnamese word for ‘tea’, /ʈaA2/ trà. Labelling coffee as a type of tea acclimatizes the new beverage, introducing it into a set that previously included trà tàu ‘Chinese tea (black tea)’, trà Huế ‘Annamese tea (green tea)’, trà hoa ‘camellia tea’, trà rừng ‘three-seeded mercury (herbal) tea’, and so on. As for the second syllable, /feA1/ phê, it constitutes both a straightforward phonetic rendering of the syllable /fe/ and a semantically appropriate syllable, as coffee is apt to produce a sensation of elation not entirely unlike that produced by opium – another commodity associated with foreigners, which was actively promoted by colonial authorities (Le Failler 2001) –, whose psychotropic effects are evoked in Vietnamese through the expressive form phê phê. On the other hand, Vietnamese people with a command of French would pronounce the foreign word as /kaA1 feA1/, with tone A1 (a level, non-low tone, used as the default for foreign syllables without a final stop). A hybrid of the two forms emerged: /kaA2 feA1/ cả phê, correcting the initial to /k/ as in the donor language, but retaining the tone of /ʈaA2/ trà ‘tea’. This form became standard (see e.g. Nguyễn Như Ý 1999), to the puzzlement of the linguist Emeneau, who tentatively hypothesized that the A2 tone in /kaA2 feA1/ must be due to an (implausible) assimilation to /kaA2/ cả ‘eggplant’ (Emeneau 1951: 4, 158). The process is similar to that found in Phong Nha for the word ‘bedbug’: the partial correction of a form to make it sound closer to a perceived standard form, without replacing it altogether.

4. NOTES ABOUT THE MIGRATION HISTORY OF PHONG NHA

This section proposes notes on ways to analyze the historical situation that resulted in the linguistic patterns currently observed in Vietnamese dialects. A key issue in studying dialects is language contact among related language varieties.

4.1. The paucity of available information about migrations

The history of migration can shed light on situations of language contact. But historical records about population movements in the area of present-day Northern and Central-Northern Vietnam mostly concern the southerly flux of settlers from present-day South China into present-day Northern Vietnam, reported in Chinese chronicles. These sources are recapitulated in the form of a

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6 In the 3rd century BC, a group from the Shu (蜀) kingdom (Sino-Vietnamese reading: Thục), in the Sichuan basin, moved south and established a dynasty in the Red River delta; this attempt to escape from the domination of the kingdom of Qin (秦), which had conquered Shu, paradoxically resulted in the eventual integration of the Red River delta to the emerging Chinese empire. Ma Yuan 馬援, sent by the Eastern Han dynasty in 42 to 43 AD, crushed a
The Phong Nha dialect of Vietnamese

six-volume *History of Migrations in China* (Ge Jianxiong 1997). No compendium of comparable scope is available at present concerning the history of population movements inside Vietnam. The overall pattern during the past millenium is clear – the settling of the centre and south of present-day Vietnam through rural migration from North to South – but the process remains little-documented in its details. It seems as if few large-scale efforts had been made, during the successive Vietnamese dynasties, to compile detailed documentation on topics of local history – one of the consequences of the preference of successive Vietnamese emperors for Chinese culture and Chinese history. (See e.g. Langlet 1990: 105–184 on the constant emphasis placed on Chinese cultural models by emperor Gia Long, and the consequences for the last Vietnamese dynasty.) Useful information can occasionally be gleaned from imperial annals, and regional monographs by mandarins (for a detailed example, see Ferlus 2003); but these sources essentially testify to the fact that areas were ill-understood by imperial authorities, and of little interest to them (Le Faille 2014: 16). By the first half of the 20th century, the assessment of the situation by the geographer Pierre Gourou (1936: 179) was that “the official statistics are based on too fanciful data to provide any adequate idea of the evolution of the population”. Data collection was complicated by the fact that local communities were distrustful of population surveys as foreboding increases in taxes and other demands. The 1989 census has been considered as the first truly reliable census (Banens 2000), and contemporary studies of migration mostly concern developments since the 20th century (e.g. about the settlement of the highlands by migrants from the Red River delta: Hardy 2003; and present-day Chinese immigration: Nguyen 2013).

4.2. Piecemeal information about the settlement of Phong Nha

As a first step towards understanding the history of the settlement of Phong Nha, information provided by the Phong Nha speakers clarifies that the Phong Nha area used to be known by the name of Chùa Nghe, and inhabited by Chữt populations, i.e. speakers of languages of the Southern Vietic subgroup of Austroasiatic (“Chữt” includes the following subgroups: Rúc, Máy, Sách, Arem, and Mã Liềng). Ethnic Vietnamese (Kinh) settlers only moved into the area four to five generations ago. The first to settle in Phong Nha are reported to have carried the family name Dương (楊, or perhaps陽 or 羊), and to have moved in from a neighbouring village, Cù Lạc, located in the same county (xóm Cù Lạc, xã rebellion against the Chinese administration, and established the Red River delta as a Chinese province (Maspero 1918: 14–24), “thereby initiating the process whereby it acquired the solid Chinese framework that allowed it to play the leading role in East Indochina from the 10th century onward” (Maspero 1918: 28).
Son Trạch, huyện Bố Trạch, Quảng Bình). Other settlers from various areas of Nghệ An and Hà Tĩnh provinces gradually joined the village, by small groups of about one to three families. Family names found in Phong Nha are, by reported order of successive arrival: Dương, Lê (黎 or 梨), Đinh (丁), Nguyễn (阮), Trần (陳) and Hoàng (黄). Mr. Hoàng Minh Chiêm reported that his ancestors had moved to Phong Nha three to four generations ago, coming from the commune of Quảng Văn, Quảng Trạch county (xã Quảng Văn, huyện Quảng Trạch, tỉnh Quảng Bình). Language contact appears to have taken place predominantly among the Vietnamese dialects of the settlers, as no marriages are reported between the “majority” (Kinh) and “minority” (Arem and Chứt) populations. The first Kinh settlers in Quảng Bình are reported to have arrived around the year 1300 AD, with an increase in migratory inflow in the 15th and 16th centuries, mostly occupying the more level lands (Nguyễn Văn Lợi & Nguyễn Văn Mạnh 2010: 27–34).

The history of the settlement of Phong Nha by speakers from different areas of North-Central Vietnam would call for detailed comparison with these dialects, in order to understand phonological correspondences one after the other. The road ahead is clear: a fine-grained study of processes of diffusion across dialects would require in-depth descriptions of the dialects spoken in the places of origin of the migrants – and a reconstruction of the state of these dialects at the time of migration.

5. CONCLUSION

Examination of Phong Nha data suggests the presence of several strata of standardization: layers of influence from prestige varieties of the language. Some words are currently identical with Standard Vietnamese, presumably through relatively recent adoption (borrowing). The word for ‘husked rice’, Phong Nha /ɣawB2/C2/, displays spirantization and a low-series tone, like in Standard Vietnamese: /ɣawB2/ gao. Others are not of Vietnamese stock, but originate in another Vietic language, for instance ‘to plant (a tree)’, Phong Nha /loŋA1/, Middle Vietnamese tròng [tönA2]. The word is reconstructed to Proto-Vietic *m.loŋ; among Vietic languages, Vietnamese alone has a high-series tone for this word. 7 No explanation can be proposed at present concerning the development of

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7 The comparative word list proposed by Nguyễn Văn Tài (2005: 283) has tone A2 for almost half of the 29 language varieties for which a form for ‘to plant’ is reported. In detail, tonal notations in the late Pr. Nguyễn Văn Tài’s volume need to be used with caution, however, as it seems that this author found it difficult to leave aside the prism of his native language’s tone system when categorizing aurally the tones of other Vietic languages. There may also have been an issue of “contaminated tonal transcriptions” (Phan 2012: 6; Phan 2013: 315–316) due to the consultants’ production of words with their (“orthodox”) Vietnamese tone (used by the investigator at elicitation) instead of the tone in the language variety under study.
tone for this item in Vietic; this is an example of the many issues that remain to be investigated in the field of Vietic studies. A concern here is that, in view of the small number of linguists at work in this area, it is far from certain that in-depth linguistic surveys can be carried out before the influence of more prestigious dialects erases the features that constitute keys to historical reconstruction (for an overview: Trần Trí Đội 2000, 2003). Here as in other parts of the world, the importance of classical linguistic fieldwork (Dixon 2007) cannot be overemphasized.

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### APPENDIX: WORD LIST

This list is arranged by alphabetic order of IPA forms. Tones are noted phonetically; for the correspondences with the etymological categories A1 to D2, see section 3.3.1 of the article. The glosses constitute translations, not necessarily cognates. In many cases the Phong Nha forms are cognate with the Vietnamese form used for elicitation, e.g. ‘three’ /ɓa45/ (tone: A1) corresponding exactly to Vietnamese /ɓaA1/; but no attempt was made to provide cognates systematically in the list below, e.g. by verifying whether Phong Nha /ɓăj45/ for ‘to jump (tiger)’ is a semantic development from Standard Vietnamese /ɓăA1/ ‘to fly’.

<table>
<thead>
<tr>
<th>English</th>
<th>Vietnamese orthography</th>
<th>Phong Nha</th>
</tr>
</thead>
<tbody>
<tr>
<td>elder sister</td>
<td>chí</td>
<td>a2ˀ đọ32</td>
</tr>
<tr>
<td>three</td>
<td>ba</td>
<td>ɓa45</td>
</tr>
<tr>
<td>to jump (tiger)</td>
<td>cờp vô, tát</td>
<td>ɓăj45</td>
</tr>
<tr>
<td>silver</td>
<td>bạc</td>
<td>ɓăk53</td>
</tr>
<tr>
<td>to chop up</td>
<td>băm, văm</td>
<td>ɓăm32</td>
</tr>
<tr>
<td>to say</td>
<td>nói, bao</td>
<td>ɓaw2ˀ</td>
</tr>
<tr>
<td>flea</td>
<td>bọ chệt</td>
<td>ɓ01 cet24</td>
</tr>
<tr>
<td>ox</td>
<td>bò</td>
<td>ɓo32</td>
</tr>
<tr>
<td>zebu</td>
<td>bò u</td>
<td>ɓo32 u45</td>
</tr>
<tr>
<td>to wash (rice)</td>
<td>vo (gào)</td>
<td>ɓ045</td>
</tr>
<tr>
<td>to milk</td>
<td>vât si rê</td>
<td>ɓ0p53 sụa2ˀ, năn1 sụa2ˀ</td>
</tr>
<tr>
<td>to break, to interrupt</td>
<td>bè gậy, làm dứt, làm vở</td>
<td>ɓe2ˀ laj1</td>
</tr>
<tr>
<td>seven</td>
<td>bày</td>
<td>ɓejo2ˀ</td>
</tr>
<tr>
<td>we</td>
<td>chủng tôi</td>
<td>ɓejo32 tuj45</td>
</tr>
<tr>
<td>sea</td>
<td>biên</td>
<td>ɓiən2ˀ</td>
</tr>
</tbody>
</table>
butterfly  burom buóm  bʊəm45 bʊəm324
four        bón          bʊn324
breast (female)  viu         ɓɯəm
mud          bún          ɓɯəm324
to run       chay         cǎj1
casting net  chài         caj32
bamboo net   dân lạt      cak53 lat53
to thread    xâu kim      ceso2'
dishonest    gian xào     ceso2' la324
dog          chó          ceso324
to split bamboo into tape  chè lạt   ceso2' lat53
to wedge     chêm         cem45
spiny amaranth  rau giến gai  cem45
lightning    chớp         cxp24
lead         chí           ci32
head louse   chí, chây    ci324
bird         chim         cim45
to sing (of birds) (chim) hót   hɔt24
nine         chín         cin324
to take      láy          cu1
bee          ong mạt     əŋ45 mət53
weasel       chồn         con32
banana       chuối        cuaj324
broom        cải chổi    cuj2'
to pierce, to bore  giữ lò, khoan lỗ  cuj45
rat           chuột        cwot53
stone        dâ            đa324
testicles    hòn dái, trúng dái  đaj324
tough (meat)  thịt dái    đaj45
knife        dao con      daw45 / zaw45
to lead by a lunge  dâi di    đâk24
way, path    đường         đan32
to give birth; to lay (eggs)  dẻ (đẻ sinh; đẻ trứng)  de2'
urine        nước tiểu     ɗe324
slobber, slaver  nước dái, bot miếng ɗe3j324
to pound rice  giả gào       ɗe3m45 yaw1
earth, land   dâi          ɗe3t24
footprints   dâu,ệt chân   ɗe3w324
to go         dì            ɗi45
water leech   con dịa, tắc   ɗiə2'
beans (general)  dâu, dỗ     ɗiə1
groundnut, peanut  lac, dâu phông  do1
footprint    dâu chân      do324
plain

copper
don

bronze
don thanh, don dieu

ridgepole

xà noc

to light a fire
doi lua

red
don ganh

carrying pole

nave

to draw up, to set up
dung len, sap dat

leather, hide
da Thuoc

long
dai

slope
doc

easy
dei

to demolish a house

phu, don nhà

below

ben duoi

to put out a fire
dap lua

mother's elder sister

di

kite, falcon, eagle

dieu hau

sausage

xuc xich, doi

to pack

cai run, ron

to draw up, to set up

dung len, sap dat

wet rice field bunds

bo ruong

fern

(cay) to rong, duong xi

frog

Ech, ngoe

diarrhoea

ia chay

noise

tieng on, am

incubate

ap trung

red pepper, chilli

gat

to sing (rooster)

(gat) gay

chicken

gat tron/mai

cast iron, pig iron

gang

husked rice

gao

glutinous rice

gao nep

ginger

gung

hoof

mong guoc, guoc

sun bear

gau cho

two

hai

deep cave

hang sau

cave

hang, dong

proper name: Dung (sometimes spelt Dzung in English)
dung

wet rice field bunds

bo ruong

fern

(cay) to rong, duong xi

frog

Ech, ngoe

diarrhoea

ia chay

noise

tieng on, am

incubate

ap trung

red pepper, chilli

gat

to sing (rooster)

(gat) gay

chicken

gat tron/mai

cast iron, pig iron

gang

husked rice

gao

glutinous rice

gao nep

ginger

gung

hoof

mong guoc, guoc

sun bear

gau cho

two

hai

deep cave

hang sau

cave

hang, dong
to cough *ho* (hen324)
wild boar, wild pig *heo, lơn* (hew45 ri45)
pig (domestic) *heo, lơn* (hew45, lvn1)
rapid *ghèn*, thác *ghềnh* (ho32)
flower *bông, hoa* (hwa45)
to marry (of a woman) *lấy chồng* (joŋ324)
fish *cá* (ka324)
spawning fish *cá đẻ* (ka324 de2^2)
crocodile *cá sấu* (ka324 s̅w̅324)
to bite (chó) *cắn, gặm* (kâŋ2^2)
paws, feet (of animals) *bàn chân* (kap53)
to hold in the jaws *gặm, ngâm* (kat24)
to harvest, gather (general) *gặt hái* (kât24 haj324)
to harvest rice *gặt lúa* (kât24 lɔ̄324)
glass *cỏ* (ko2^2)
to hold in the jaws *gặm* (ko45)
walking staff *dụng cụ chọc lò tra hạt* (kɤ̆j1)
ladder *cái thang* (kɤ̆j324)
cooked rice *cơm* (km45)
tea plant *cây chè* (kɤ̆n45 ce32)
banana (plant) *cây chuối* (kɤ̆n45 cuaj324)
areca palm tree *cây cau* (kɤ̆n45 k̅w̅45)
tree *cây cỏ* (kɤ̆n45 koj324)
rice seedlings *cây ma* (kɤ̆n45 ma324)
lemongrass *sả chanh* (kɤ̆n45 s̅ā45 s̅ā2^2)
coconut palm *cây dừa* (kɤ̆n45 zuə32)
nettle-hemp *cây gai* (kɤ̆n45 zuə45)
to plant out rice seedlings *cây lúa* (kɤ̆j324 lɔ̄324)
thorn *gai* (kɤ̆j45)
girl *gái* (kɤ̆j324)
plough *cái cày* (kɤ̆n45 k̅j45)
rainbow *cầu vồng* (kɤ̆w̅31 vŋ31)
tuber *củ* (ko2^2)
mortar (for pounding rice) *cốิ giả gào* (koj324 ᵃ̄m45 yaw1)
owl (general)
cú mèo

crab
cua

to carry in a basket
gùi, kụ ng

knee
dầu gố

spur (of cock)
cự (gà trống)

crow
gái

to scratch (with one's nail)
gãi

tiger
dếo; hèm núi, khe núi

pass, defile
dèo; hẻm núi, khe núi

stream
sùi

monkey (general)
khỉ

smoke
khói

sweet potato
khôai lang

fire
lửa

fly, bluebottle
nhặng

embers
mẩu củ cháy dở

to carry in a basket
gùi

to scratch (with one's nail)
gãi

fire
lửa

leaf
lá

gum
lợi

to scratch (with one's nail)
gãi

village
làng

to set (the sun sets)
lặn (mặt trời)

to flower, bloom, blossom
ra hoa, nó (hoa), trò bông

feather
lông

blade
lưỡi dao

net
lưới

to plan a tree
trồng cây

fly, bluebottle
nhạng

embers
mầu cùi cháy dở

to flower, bloom, blossom
ra hoa, nó (hoa), trò bông

feather
lông

to plan a tree
trồng cây

paddy
lúa

eel
lươn

rice seedlings
(cây) mạ

shell (of tortoise)
mai rùa

to borrow (object)
mượn (vật)

moon
mặt trắng

sun
mặt trời

sesamum
mè, vừng

partition, bamboo panel
phên

cat
mèo

cloud
mây

to cultivate a rice field
lâm ruộng

honey
mật

tomb
mộ, mà

where?
(dì) dâu?
termite
mouth
taro
cockscomb, crest
one
beak
mosquito
salt
to rise (the sun rises)
weevil
lip
cinders, ashes
rain
water
year
five
this year
stopple, cork, plug
branch
anchor
boat, ship
to swallow
to give birth
to cook rice (water)
orchard
dark sky
to weed
small
tusk, ivory
man (homo)
far, distant (from)
day
calf
young buffalo
to be pregnant
near to
horse
star
in front
to look at
nest
father's elder sister
billhook

con mới
miếng
khoai sọ, món
mào (gà)
một
mó
mùi
muỗi
mở
mọc (mặt trời)
mọt
môi
tro
mưa
nuốt
sinh đẻ
nấu cơm
vì bỏ hoa quả
(trời) rấm
nhỏ, dấy cò
nhỏ, bé
ngà
người ta, con người
xa (nơi)
(con) bể, nghĩa
nghé
cò bâu, có thai
gần (nơi)
ngựa
ngồi sao
dáng, dáng trước
nhin
ô, tổ chim
cò, bác, bà
rya nhỏ

moj24
mom1
mon45
moj32
ya32
mot53
m2'
maj1
maj324
mok53
mat53
muj45
mun45
muo45
nak24
nam45
nam45
nam nay
náp24
neŋ324
new45
nok24
not24
ny2'
ryʁw324
kvm45
nuŋ45
ŋɔm45 ~ ʒɤm45
ŋo2'
ko2'
ŋo2'
ŋa32
ŋaj32
ŋaj45
ŋaj45
ŋe324
ŋe324
ŋen324
ŋen45
ŋəŋ1
ŋoŋ45
ŋaw45
ŋə1
ŋəsk24
ŋɔ324
o2'
ɔ45
ra1
cattle pen, cow pen  
river  
fence  
tooth  
placenta (after birth)  
bedbug  
root  
axe  
dragon  
tortoise  
fly  
gnat, midge  
whip, lash  
wet rice field (in the plains)  
dry paddy field  
intestines  
fishnet  
dry rice field  
sieve  
mountain, hill  
forest  
to husk rice  
to wash (clothes)  
rack (over the fire)  
wax  
to winnow paddy  
manioc, tapioca, cassava  
to hunt  
iron  
face to face  
six  
land leech  
lotus  
to hug  
adhesive  
wolf  
squirrel  
pot (for cooking rice)  
thunder  
milk  
to carry on a pole  
deep  
ugly

chuông trâu  
sông  
rào, giấu  
răng  
nhau  
rẹp  
rể cây  
riu  
rồng  
rùa  
rười  
muỗi mắt, muỗi nhỏ  
cái roi  
rượng nước  
rượu lúa khô, rượu can  
rượu  
rá, vô  
rấy  
rấy  
núi, đồi  
rừng  
xay lúa  
giặt quần áo  
giàn trên bếp  
sáp  
sấy lúa  
sắn  
sắn mới  
sắt  
dối mặt  
sáu  
con vật  
(hoa) sen  
óm  
dính  
chó sói, sói đỏ  
sóc  
nổ nấu cơm  
săm  
sĩa  
gánh  
sâu  
xấu
to bark
hand-held pestle
snake
to put out a fire
plantain leaf
rhinoceros
crayfish
garlic
to fight
son
python
white
above
to weave straw wall
centipede
prawn
cushion
sky
otter
fruit
ear lobe
areca nut (betel nut)
coconut
body louse
to slip
buffalo
insect
hare
trunk (of trees)
tin
leak (from the roof)
head
back of the blade
drum
betel
mole
earthworm
pangolin
to keep (buffalo)
middle, between
father's elder sister's husband
horns (of buffalo)
antlers

chó sủa ʂuəʔ²
chày tay täj32 đêm45 yəw1
rắn tân324
tắt la2²
tâu là chuối täw32 la324 cwej324
tôi te45 jak24
tôm sòng, tôm nước ngaì tep324
tỏi tạ2²
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tần45
tymbol45
bên trên tên45
dan/bên tằm tranh tẹp45
công rết, rít tit24
tôm tom45
gôi dưa, ghội đếm tuə1
trái trẹj32
công rái cá tẹj324
trái, quả tẹj324
dại tai tẹj324
trái cau tẹj324 käw45
trái (qua) dìa tẹj324 zuə32
rắn tẹn324
trướt, trướt tạ53
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säu bo tạw45 bɔ1
thò riêng tʰəʔ2⁴ ru324
thần cây tʰẹn45 kyən45
thiếc, kêm tʰiaŋk24
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trâu tu32
cọt chúi tu32
con trùn, giun tuəŋ32
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già tʊə2⁴
đờng tʊəŋ1
sịng tʊŋ32
gắc nai tʊŋ32 nŋj45
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<thead>
<tr>
<th>English</th>
<th>Vietnamese</th>
<th>Pinyin</th>
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<tbody>
<tr>
<td>egg</td>
<td>trứng</td>
<td>_typ324</td>
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<tr>
<td>to broadcast rice</td>
<td>gieo vài lua</td>
<td>vaj1 bọ324</td>
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<tr>
<td>scale (of fish...)</td>
<td>vây (cà, con té tê...)</td>
<td>văj2^1</td>
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<td>gold</td>
<td>vàng</td>
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<td>lime</td>
<td>vôi</td>
<td>vọj45</td>
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<tr>
<td>(wood) shavings</td>
<td>vò bao</td>
<td>vọ1</td>
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<td>elephant</td>
<td>voi</td>
<td>vọj45</td>
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<tr>
<td>elephant's trunk</td>
<td>vòi vòi</td>
<td>vọj32 vọj45</td>
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<tr>
<td>to thin out bamboo tape</td>
<td>vốt lạt</td>
<td>vọt24 lat53</td>
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<td>gibbon</td>
<td>vùm</td>
<td>vùn1</td>
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<td>marsh</td>
<td>dăm lây</td>
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<tr>
<td>yes</td>
<td>đa</td>
<td>za1</td>
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<tr>
<td>false, untrue</td>
<td>giả</td>
<td>za2^2</td>
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<tr>
<td>house</td>
<td>nhà</td>
<td>za32</td>
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<tr>
<td>weeds</td>
<td>cỏ dại</td>
<td>zạj1</td>
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<tr>
<td>mad dog</td>
<td>chó dại</td>
<td>zạj1</td>
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<td>to chew</td>
<td>nhai</td>
<td>zạj45</td>
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<tr>
<td>to dare (to do sth.)</td>
<td>đảm</td>
<td>zam324</td>
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<tr>
<td>to imprison</td>
<td>giam, bó tò ai</td>
<td>zam45</td>
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<td>to paste, glue</td>
<td>dán lai</td>
<td>zan324</td>
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<td>to disperse</td>
<td>xích, dang ra</td>
<td>zạj45</td>
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<td>to stroll</td>
<td>đi dạo, đi chơi</td>
<td>zaw45</td>
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<td>to teach</td>
<td>dấy</td>
<td>zạj1</td>
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<tr>
<td>mountains</td>
<td>dầy núi</td>
<td>zạj2^2 ~ nạj2^2</td>
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<td>to jump, to leap (e.g. frog)</td>
<td>nhảy</td>
<td>zạj32</td>
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<tr>
<td>thick</td>
<td>dầy</td>
<td>zẹ45</td>
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<td>cricket</td>
<td>con dế</td>
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<td>goat</td>
<td>dế</td>
<td>zẹ45</td>
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<td>to hoard</td>
<td>dế dành, dành dumd, tiệt kiểm</td>
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<td>to weave</td>
<td>dệt, dàn</td>
<td>zẹt53</td>
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<td>tear grass, job's tears</td>
<td>bo bo, ylim, cùơn tháo</td>
<td>zilla</td>
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<td>divorced (husband)</td>
<td>bồ chòng, lí dị</td>
<td>zì1</td>
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<tr>
<td>sulfur</td>
<td>điểm sinh</td>
<td>zìam45</td>
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<tr>
<td>to speak, make a speech</td>
<td>nhím</td>
<td>zìan1</td>
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<tr>
<td>hedgehog</td>
<td>xâu, dơ</td>
<td>zọ2^2</td>
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<td>bad</td>
<td>dua chroit, dua leo</td>
<td>zọv45 lew45</td>
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<tr>
<td>cucumber</td>
<td>chơi</td>
<td>zọxj1</td>
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<tr>
<td>to play</td>
<td>dummy dầy, dầy</td>
<td>zọvy1</td>
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<tr>
<td>to get up</td>
<td>vúng vây, dầy dưa</td>
<td>zọży1</td>
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<td>to struggle</td>
<td>dội</td>
<td>zọxj45</td>
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<td>bat</td>
<td>dẵn ai</td>
<td>zợń1</td>
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<tr>
<td>to lead</td>
<td>dẵn làng</td>
<td>zợń45</td>
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<tr>
<td>villager</td>
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<td>English</td>
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<td>Pronunciation</td>
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<tr>
<td>--------------------------------</td>
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<tr>
<td>to make a sacrifice</td>
<td>cúng, hiên dâng</td>
<td>zvŋ45</td>
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<td>to rise</td>
<td>dâng lên</td>
<td>zvŋ45</td>
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<td>castor oil tree</td>
<td>cây thâu dâu</td>
<td>zvŋw32</td>
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<td>daughter in law, son's wife</td>
<td>con dâu</td>
<td>zvŋw45 ; ðu45</td>
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<td>to observe</td>
<td>dò xét, quan sát</td>
<td>zo32</td>
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<tr>
<td>wind</td>
<td>gió</td>
<td>zo324</td>
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<tr>
<td>rose-apple</td>
<td>roi, mạn</td>
<td>zoŋj45</td>
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<td>thin</td>
<td>ỏm gậy</td>
<td>zom324</td>
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<td>somnambulism</td>
<td>mông du</td>
<td>zu45</td>
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<td>Rhizomys sinensis</td>
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<td>zuj1</td>
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<td>tinder</td>
<td>bụi nhủ (để mọi lửa)</td>
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<td>evil</td>
<td>dũ tơn</td>
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<td>fruit shell</td>
<td>vô cừng, gáo dĩa</td>
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<td>antelope goral</td>
<td>ban linh, linh dương</td>
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