[1] Schwai in Tashlihiyt Berber:
- Dell & Elmedlaoui (1985, 2002) argues that any segment, even a voiceless obstructant, may occur in the syllable nucleus in Tashlihiyt Berber. The short vowels that sometimes appear between consonants are mere transitional vocoids. (see also Ridouane 2003)
- Coleman (1996, 1999, 2001) argues that the so-called transitional vocoids in Dell & Elmedlaoui’s analysis are actually euphonetic vowels that fill syllable nuclei that would otherwise be empty (e.g. akɔkkur blackbird, gaˈt sleeper, jəɡt he hung)
- Our proposal is not concerned with the syllabic status of these short vowels. Rather, we focus on their phonological representation. We show that they are the straightforward result of the association of one of the uncontroversial full vowels i, a, u to one skeletal position.

[2] On the basis of Lowenstamm 1991 (Ethio-Semitic / Arabic) and Bendjahallah 2001 (Kabyle Berber), we assume that in Tashlihiyt Berber: 
- peripheral vowels are phonologically "long" (i.e. associated to two vocalic slots)
- any vocalic element associated to one skeletal position surfaces as [ə] or [o], depending on the phonotactic conditions (ii.)

<table>
<thead>
<tr>
<th>Phonological</th>
<th>CVC</th>
<th>CVC</th>
<th>CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>I</td>
<td>U</td>
</tr>
<tr>
<td>Phonetic</td>
<td>[a]</td>
<td>[i]</td>
<td>[u]</td>
</tr>
</tbody>
</table>

[3] Evidence in correspondences between Classical Arabic (CA) and Tashlihiyt Berber (TB): 
<table>
<thead>
<tr>
<th>CA</th>
<th>TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>sahada</td>
<td>sahd</td>
</tr>
<tr>
<td>saafara</td>
<td>safr</td>
</tr>
<tr>
<td>laahaqa</td>
<td>laag</td>
</tr>
<tr>
<td>alkaaib</td>
<td>likah</td>
</tr>
<tr>
<td>albaa</td>
<td>lbhr</td>
</tr>
<tr>
<td>tuffaah</td>
<td>tffah</td>
</tr>
<tr>
<td>fukkaaz</td>
<td>cracth</td>
</tr>
</tbody>
</table>


1. A lexically empty V positions too as [ə] or [o] under the same conditions.

[5] Triconsonantal formations:

\[
\begin{array}{c|c|c|c|c}
   & 1 & 2 & 3 & 4 \\
\hline
   1 & jkiss & jkaa & jkaa & jkiss \\
   2 & jkiss & jkaa & jkaa & jkiss \\
   3 & jkiss & jkaa & jkaa & jkiss \\
   4 & jkiss & jkaa & jkaa & jkiss \\
\end{array}
\]

Derivation of Tagnawt from TB (informal description): 
- a. delete affixes and vowels = keep only root consonants 
b. insert aj- (prefixed) and -wa- (infixed) 
c. geminate R1, 
d. reduplicate R2 and R3, 
e. vocalize the form invariably in a 

1. We correct in [4] five forms given in Douchaina 98 in which some typographic mistakes probably occur, namely n°34: hhɔnt|zh > ahjhattz|watɔz instead of ahjhattz|watɔz (D98: 203); n°56: kk|r(] > ajkk|ark|jwaa[k] instead of ajkk|fntkwakr (D98: 208); n°57: kk|rr > ajkkankrwakr instead of ajkkfntkwakr (D98: 208).
[6] Underlying glides:
   a.  R₁ = j
      - reduplicated /j/ surfaces as [i]
      - non-realization of j before w (of infixed -wa-)
      - reduplicated R₂ is geminated

   b.  R₂ = w
      - w > j (and then proceed as in a.)

   c.  R₃ = j
      - metathesis: j R₁ → R₂ j (and then proceed as in a.)

[7] Template:

[8] Biconsonantal formations:

   a.  epenthesis of j as a third radical:
       R₁ R₂ R₃ → R₁ j R₂ R₃
       11.  affalwalli
           12.  ajdda
       13.  jippalwalli
           14.  jippalwalli

   b.  epenthesis of j as a first radical:
       R₁ R₂ j R₃ → R₁ R₂ R₃ j
       11.  ajbaddawaddi
           12.  jippe


[10] Gemination of R₂ in case of R₁ = j (lexical or epenthetic): induced by the non-realization of the glide j before w (cf. [6])

   a.  the template is invariant
   b.  the template must be filled


   a.  the template is invariant
   b.  the template must be filled

   Epenthesis of t as a second radical and j as a third radical: R₁ O O → R₁ j

   a.  jippatwatti
   b.  jippatwatti


[13] Quadricsonantal formations:

   a.  one root consonant is dropped:
       R₁ R₂ R₃ R₄ → R₁ R₂ R₃ R₄
       (R₅ = 1/2)
       11.  jippatwatti
           12.  jippatwatti

   b.  the template is invariant
   c.  the template must be filled
b. => template: the same as in [7]

[14] Quadriconsonantal that remain quadriconsonantals in Tagnawt:

- All other forms invariably display a.

[15] One crucial observation: forms in [14] are the only forms of the whole set of examples in [4] that display [a] to the right of the geminated R. All other forms invariably display a.

[16] Interpretation:

a. the template is NOT different: Tagnawt forms are all built upon the same template (the same analysis holds for another feminine secret language in TB, Tagjmit, see Lahrouchi & Ségalr, to appear)

b. => the realization of A as [a] in Tagnawt quadriconsonantals formations results from the maintained association of R to the template: the Element A that is associated to one skeletal slot can no longer surface as [a] but, according to (2b), as [a]:

References:
Lahrouchi, M. & Ph. Ségéral (to appear). Morphologie gabaritique et apophonie dans un Tagnawt ». Thèse de Doctorat, Université Paris III.