THE TONAL PHONOLOGIES OF RAJA AMPAT LANGUAGES: TOWARDS A HISTORICAL PERSPECTIVE

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THE RAJA AMPAT LANGUAGES

- Several languages belonging to the South Halmahera-West New Guinea subbranch of Austronesian (AN) are spoken across the Raja Ampat archipelago in eastern Indonesia (see Figure 1).
- At least three of these languages have lexical tone: Ma'ya (van der Leeden 1993; Remijsen 2001), Matbat (Remijsen 2007), and Ambel (Arnold forthcoming).
- Lexical tone is very rare in AN languages (around 19 out of 1200 AN languages).
- Very little is known about the origin of the tonal systems of Raja Ampat languages.
  - Tone probably resulted from contact with a now-extinct tonal language, rather than developing spontaneously (Remijsen 2001).
  - By comparing the synchronic tonal specifications of cognate words, several potential suprasegmental correspondences can be identified.
    - This suggests tone developed before Ma’ya, Matbat, and Ambel split.

THE COMPARATIVE DATA

- Monosyllabic forms identified as cognate by Kamholz (2014) were compared to see whether any informative patterns emerge in the suprasegmental phonology.
  - Three recurring patterns were observed, in which vowel height plays a role. These three patterns are exemplified below.
  - There are currently too few cognate sets to identify any other patterns.

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<tbody>
<tr>
<td><strong>Ma’ya:</strong> High tone, open vowel</td>
<td><strong>Ma’ya:</strong> Rise tone, open vowel</td>
<td><strong>Ma’ya:</strong> High tone, close vowel</td>
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<tr>
<td><strong>Matbat:</strong> High tone, open vowel</td>
<td><strong>Matbat:</strong> High tone, open vowel</td>
<td><strong>Matbat:</strong> High tone, close vowel</td>
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<tr>
<td><strong>Ambel:</strong> High tone</td>
<td><strong>Ambel:</strong> High tone</td>
<td><strong>Ambel:</strong> no specification for tone</td>
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<td>‘mountain’ ye’l</td>
<td>‘fire’ la’l p</td>
<td>‘breast’ s</td>
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<td>‘person’ ma’t</td>
<td>‘full’ fo’n</td>
<td>‘five’ l</td>
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<td>‘sea turtle’ fe’n</td>
<td>‘sand’ le’n</td>
<td>‘louse’ u</td>
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<tr>
<td>‘three’ to’l</td>
<td>‘swim’ -a’l s</td>
<td>‘two’ lu</td>
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THE TONAL PHONOLOGIES

- **Ma’ya** (Salawati dialect):  
  - Two tonemes (Rise /12/ and High /1/)
  - Contrastive lexical stress in polysyllabic words
- **Matbat:**  
  - Six tonemes: Extra High Fall /41/ , High Level /1/ , Low Level /1/ , Rise-Fall /12/ , Low Fall /21/  
- **Ambel:**  
  - One toneme (High /V/) in a privative system  
  - Tone is not obligatory, but is culminative in polysyllabic words

IMPLICATIONS

- **Kamholz (2014):** The most recent common ancestor of Ma’ya, Matbat, and Ambel is Proto-Raja Ampat-South Halmahera (RASH), which extends beyond Raja Ampat:  
- **BUT:**  
  - No other RASH language has been analysed as tonal.  
  - Did tone originate in Proto-RASH and was subsequently lost in most of the daughter languages?
- An alternative and simpler explanation:  
  - Tone developed in a more recent common ancestor, from which (at least) Ma’ya, Matbat, and Ambel are descended.
- **Next steps:**  
  - Establish whether any of the other Raja Ampat languages are tonal.
  - Identify more cognate sets to further explore the histories of the complex prosodic systems of these languages.
  - Explore the phonetic role played by vowel height in tonal development.

References available on request