The What, Where and When of Tone

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Tone is a characteristic of the phonological systems of a very substantial proportion of the world's extant languages, probably on the order of 40%. However, this characteristic is very unevenly distributed across areas of the world and language families and even what counts as tone is open to different interpretations. Hyman (2006) suggests defining a tone language as one "in which an indication of pitch enters into the lexical realization of at least some morphemes." This definition would include all languages in which lexical stress can be marked by a pitch excursion. A narrower understanding of tone would require that (a) some lexical or morphological elements are marked by ***distinctive*** upward and downward pitch excursions, and perhaps, (b) some lexical or morphological elements have sequences of uniform pitch pattern. Attempting to apply this definition to a large sample of languages is still problematic, due to the absence of sharp boundaries between language types as well as frequent lack of information. While acknowledging these difficulties, this presentation will revisit some of the 'universals of tone' posited in Maddieson (1978) and re-evaluate the world-wide distribution of tone systems discussed in Maddieson (2005, 2011) based on the LAPSyD sample of languages currently under development (Maddieson et al 2011). A little over 700 languages are included in this survey.

The posited maximum number of levels, five, remains unchallenged and the proposed hierarchy under which complex contours imply simple contours, and simple contours imply levels is rarely violated. About half of the sampled tonal languages have only a two-way contrast of tone, with the maximum number being 10 (see figure 1).

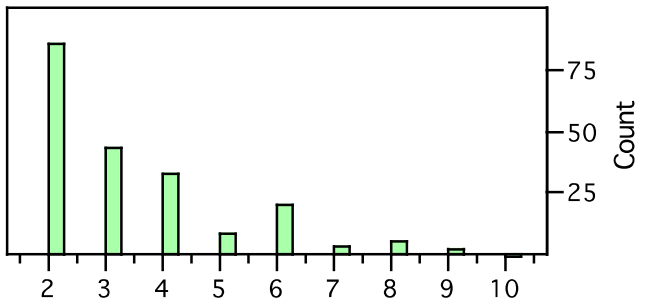

Figure 1. Number of tone contrasts

The geographical distributions of tone systems and their complexity will be explored in a series of maps which examine whether the hypothesis of Wedekind (1985), based on languages of Africa, that tone systems of increasing complexity are 'nested' in local areas can be extended elsewhere. A final section will consider what we might be able to say about the antiquity of tone as a linguistic phenomenon. Comrie (2001) suggests that, since we know the origin of tone in a number of previously non-tonal languages, tone can be taken to be not an original feature of human language. The opposite inference might be drawn from Atkinson (2011). In view of the predominance of tone in African languages, the plausibility of the 'out of Africa' hypothesis for the dispersal of modern

human populations and its hypothesized link to the development of full language capacity, as well as the fundamental role of pitch in vocal production (across species), it is proposed that human language was most likely to have used lexical pitch distinctions from its beginnings.

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