

## **Introduction<sup>1</sup>**

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### **1. THE SIGNIFICANCE OF BANTU LANGUAGES IN LINGUISTICS**

In the last sixty years or so, the Bantu languages have become increasingly important as a testing ground for theories of formal linguistics. Likewise, formal linguistic theories have helped to cast light on the grammatical structure of Bantu languages, both individually and typologically. The Bantu languages display certain prominent characteristics which distinguish them markedly from the European languages that have received the bulk of linguists' attention. These include phonological, morphological and syntactic characteristics.

Phonologically, a prominent feature of Bantu languages is that they are nearly all tonal, and frequently display the interesting phenomenon of 'tonal shift', whereby a tone associated with a particular syllable surfaces on a different one; in terms of syllable structure, Bantu languages tend to allow only open syllables, although fairly complex onsets are permitted, as in the last two syllables of Zulu /i.ndwa.ndwe/ 'heron';<sup>2</sup> several of the languages have a limited form of vowel harmony, and some have consonant harmony as well; and many have intricate rules of sandhi, usually arising from a constraint against sequences of vowels (Herbert 1986). Earlier works on Bantu phonology were generally cast in terms of Autosegmental Theory (Clements & Goldsmith 1984). Lately, the trend is to analyse these phenomena in terms of Optimality Theory (Prince and Smolensky 1993, McCarthy and Prince 1996), and several important papers have been published in this tradition (e.g. Meyers 1997, Downing 1999).

In terms of morphology, the Bantu languages are notable for their complex agglutination, especially in verbal morphology, for their distinctive noun-class marking, and for the functional complexities of some of the affixes like the

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<sup>2</sup> Admittedly, depending on the analysis, these onsets may be viewed as more complex, or less so.

augment and the locative markers. The morphological complexities can be both inflectional and derivational. Bantu languages have been the subject of several papers on the nature of agglutination, imbrication, suffix-ordering, the function and phonological shape of the augment, and the status of the locative markers. Some examples are: Katamba (1978), Katamba (2003), and Hyman (2008).

In syntax, perhaps the most notable characteristics of Bantu are the valency-changing extensions, and the elaborate agreement systems, including complex constructions which Carstens (2011) refers to as 'hyperagreement'. Both of these topics have received considerable theoretical attention (e.g. Hyman & Duranti 1982, Bresnan & Moshi 1990, Alsina and Mchombo 1990, Carstens 2011).

Bantu languages have also been of interest to historical linguists since it became generally accepted, in the early to middle 19<sup>th</sup> century, that these languages were members of a single family (Werner 1919). There has been much effort devoted to the reconstruction of the proto-language. Among the leading works in this regard are Meinhof (1906), Guthrie (1967–1971), Meeussen (1967). Research in Bantu linguistics has also been concerned with the interfaces between the various subdisciplines of linguistics, e.g. syntax and morphology (see, for example, Marten, Kula and Thwala 2007), syntax and phonology, morphology and phonology, and all of these with semantics.

In addition to formal, theoretical, and comparative research focusing on different aspects of the structure of Bantu languages, more recent work has also adopted psycholinguistic and corpus linguistic approaches to provide a broader understanding of the acquisition, function and use of Bantu languages.

The papers collected in this volume speak to a range of these trends in Bantu linguistics.

## 2. THE CONTRIBUTION OF THIS VOLUME

The seven articles in this special issue make contributions to the various fields of linguistics discussed in the previous section. Four of them are primarily about morphology, while three focus on phonology. Most of them, however, go beyond a single field, and two papers focus on psycholinguistics and corpus linguistics respectively. In terms of empirical base, several papers draw on evidence from a specific Bantu language, such as Kinyarwanda, and in particular Southern African Bantu languages, such as Sesotho, Setswana and siSwati, are represented strongly. Other papers adopt a comparative approach and draw on examples from a range of on Bantu languages

Zeller's paper looks at the ordering of extensions in a number of Bantu languages, and analyses this phenomenon in terms of two syntactic theories of word formation. The first of these is Distributed Morphology (Halle & Marantz 1993), where words are formed via syntactic head movement, but can later be modified by post-syntactic morphological rules. The second, a stricter

Principles-and-Parameters approach (Chomsky 1995), derives all possible suffix orders by phrasal movement in the syntax. Zeller demonstrates that the Bantu data support the Distributed Morphology approach.

Harford and Malambe's paper examines imbrication of the perfective suffix *-il-* in siSwati from the perspective of Optimality Theory. Imbrication is a process whereby the perfective suffix fuses with the stem of the verb. The paper proposes that the perfective suffix in siSwati is right-adjoined to the verb stem. This poses a challenge for Kayne's (1995) theory of the antisymmetry of syntax, which predicts that the suffix would be left-adjoined. Harford and Malambe propose that a strategy of metathesis conceals the violation of the constraint against right-adjunction by fusing the perfective morpheme with the stem. They treat the process as synchronic, but it could also be viewed as a diachronic development.

Ngoboka's paper looks at the syntax and semantics of the locative markers *ku*, *mu*, and *i* of Kinyarwanda, and concludes that, although they have prepositional semantic properties, they are not prepositions. Rather, they are determiners on a par with augments and demonstratives. This paper has implications for the analysis of locative markers in other Bantu language. These morphemes are generally accepted to be historically derived from noun class markers, but they may well have different functions in the contemporary languages.

Malambe's paper examines the mobility of high tone in siSwati within the framework of Optimality Theory. In siSwati, high tone moves rightwards, to the penult in phrase-medial forms and to the antepenult in phrase-final forms. The author accounts for the rightward movement of tone in terms of various constraints. Malambe's paper has important implications for the tonal analysis of other Bantu languages, many of which show similar mobility of high tone (Kisseberth & Odden 2003).

Gibson, Guérois and Marten's article is a broad-based typological paper, which draws on data from 48 Bantu languages to explore the morphology–semantics interface. It looks particularly at the role that the noun class system plays in diminutive formation. It describes the various factors contributing to language change (semantics, pragmatics and language contact) which have shaped present-day diminutive formation in Bantu. This paper has typological significance, and makes an important contribution to both historical and synchronic Bantu morphosemantics.

Wissing and Roux's paper examines tonal perception and production in a group of young Sesotho speakers. It suggests that at least in some contexts, and with some speakers, the ability to differentiate tone is disappearing. This is interesting from the point of view of language change, and is a phenomenon that invites further investigation, firstly as to how pervasive it is in Sesotho, and secondly, as to whether similar processes are taking place other languages.

Otlogetswe's paper analyses the frequency and distribution of Setswana syllables based on an electronic corpus of about 59,000 words. Each

orthographic consonant is paired to each of the five Setswana orthographic vowels to generate a list of potential Setswana syllables. The frequency and distribution of each potential syllable is then tested against this list. This produces an inventory of all the syllables that make up Setswana words, and shows their distribution and frequency in the corpus. The study shows how data from large-scale corpora interact with phonological analysis and can enhance our understanding of phonological structure.

As this brief overview shows, Bantu language data is an important testing ground for developing and improving linguistic theories. The articles in this collection make an important contribution to linguistic theory by testing a range of theories for their empirical adequacy, using a range of methodological approaches, and enriching the field by providing a host of new and challenging data and questioning established concepts and assumptions.

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