

CALLS FOR PAPERS TO THE INTERNATIONAL CONFERENCE /HUMBOLT KOLLEG ON PROSODY AND LANGUAGE TECHNOLOGY: CHALLENGES AND PROSPECTS, ABIDJAN MAY 4th to MAY 9th 2014.

1. DESCRIPTION OF CONTENT: PROSODY AS A CORE COMPONENT OF LANGUAGE AND SPEECH

Prosodic systems in language range from the melodies and rhythms of intonation in sentences and dialogue on the one hand to intricate duration and tonal patterns of words. Physically, prosody is commonly defined as the variation of speech sounds and pitch patterns in time and has long been considered in traditional linguistics as peripheral to the core communicative functions of speech acts. Research into African tonal languages has played a highly significant but often unappreciated role in uncovering the significance and intricacies of prosody, revealing autosegments of tone, intonation, stress, accent, vowel harmony, nasality and other phonological features which pattern in a quasi-independent fashion in speech, and are represented as hierarchically organized parallel phonetic and phonological information streams or tiers.

Prosody has been studied from the perspectives of many different disciplines: literature, (particularly poetry and drama rhetoric), musicology, cognitive and behavioral psychology, the study of language acquisition and language and speech pathologies, forensic linguistics, computational and mathematical linguistics, language typology and historical linguistic reconstruction, and engineering disciplines concerned with the speech synthesis and recognition interfaces associated with modern mobile devices.

These interdisciplinary developments have also touched research on African languages, though mainly in separate universities and by individuals working without the extensive laboratory support of European, American and East Asian research groups. A strength of research on the distinctive prosodic attributes of African languages is that results have been based on extensive and detailed fieldwork on a very large variety of languages. However, this research has been conducted mainly with traditional linguistic methodologies, which are not as dependent on strong material infrastructures as the empirical and computational methodologies of other disciplines. Work of this type has applied to all language families of Africa, from the Khoisan languages in the south, through the Niger-Congo languages of central and West Africa to Nilo-Saharan and Afro-Asiatic in the North, and has yielded insights into the interaction of prosody with syllabic, particularly consonantal patterns, but also in purely prosodic areas such as downstep, tonal delay and tonal assimilation and in results on the interaction of prosody and other systems in speech technology. This work is associated with the studies of scholars such as European and North American linguists and phoneticians Clements, Connell, Gibbon, Goldsmith, Leben, Rialland, and African linguists such as Adegbola, Ahoua, Akinlabi, Barnard, Urua.

However, the challenge is that this work has been largely isolated, as witnessed in works such as in Green (2009) *Niger-Congo languages : an annotated Bibliography* , where the gap and the bias regarding prosody research on African language is reported. A further example of the gap is the leading surveys of intonation systems by Hirst and Di Cristo (1998), or of prosody typology by Sun-Ah Jun (2005), which have no chapter on African languages. In sum, the study of prosody in African linguistics and specifically in West African studies have considerably benefited linguistics in general, whereas African linguistics and its applications have not benefited reciprocally to the same extent.

2.OBJECTIVES OF THE CONFERENCE AND PROSPECTS OF PROSODY IN WEST AFRICA

The focus of the Humboldt Kolleg (hence HK) on prosody in West Africa is intended to contribute towards fulfilling a real need for linking disparate work, as outlined in the overview of the background situation, particularly in the field of areal typology and its impact on models in linguistics and technology.

West African languages show remarkable linguistic diversity, with approximately 13% of the roughly 6,000 languages in the world, noted in Gary et al (2013) *Ethnologue* as well as in Bender-Samuel (1989), which are thus associated with three main separate language families: Afro-asiatic, Niger-Congo, and Nilo-Saharan. West African languages also contain extremely interesting and diverse patterns in their vowel systems. Most of the languages exhibit contrastive tone (some languages with up to seven tonal contrasts and problematic tonal polarity), nasality (with nasal spreading), tongue root distinctions and domain spreading, complex and still not completed definitions of prosodic categories and domains, issues of mismatches between syntactic, semantic and phonological domains, issues of constraints interactions.

The primary and urgent goal of the HK is thus to provide a platform for discussion and exchange on documenting, describing and analyzing samples of prosodic systems.

Beside this general goal, a second goal of the HK is to create an environment for providing feedback to African linguistics from linguistics in general, as well as from other scientific fields which have profited from results in African linguistics.

The third goal is to develop a strategy for making human and technological resources available in different research zones, and eventually to constitute research groups for funding applications. As a matter of fact, there has been isolated cooperative initiatives within Africa, particularly in Nigeria, Kenya and South Africa, which successfully acquired a certain degree of funding from European, North American and international agencies.

As a general framework, the aim of the HK is to follow up the style of the TAPS conference on African prosody (<http://www.spectrum.uni-bielefeld.de/TAPS>), the HK in Morocco as well as other meetings, and to continue the initial work on African COCODA (International Coordinating Committee on Speech Databases and Assessment).

To conclude, and perhaps most importantly, the fourth goal is to create cooperative channels of communication among different research zones in order to consolidate cooperation in African linguistics and African language technologies.

The proposed HK thus expects intensive interdisciplinary collaboration among high profiled scholars and the joint exploration of new methodologies, including detailed phonological and phonetic analysis, the integration of descriptive work with theoretical modeling, the promotion of attempts to account for patterns observed in complex prosodic systems, and the creation of infrastructural resources (databases, tools) for prosodic analysis on African languages.

We expect exchanges at various levels, not just between researchers but only between junior scholars from more than four countries involved with South-South and South-North and South-East cooperation.

As a major event, this conference plans also to honor two internationally renowned researchers who have significantly contributed to research in prosody in sub-Saharan Africa: Prof. Dafydd Gibbon from Germany (Bielefeld University, former host of several prominent Humboltians, award winner of the Linguistic Association of Nigeria) and from the US, Prof. Will Leben (Stanford University), for their linguistic contribution to the languages of this area.

Researchers who will be involved in the HK are members of the Humboldt network, the executives of the West African Linguistics Society, of the World Congress of African linguistics, the President of the Maghreb Humboldt Network (Prof. Dr. Abdelhadi Soudi), the President of the Humboldt network in Africa (Prof. Dr. Adjai Paulin Oloukpona-Yinnon), the Ambassador Scientist in Nigeria (Prof. Dr. Remy Sonaiya) and finally all the Ivory Coast DAAD alumni.

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