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### Towards Proto-Niger-Congo: Comparison and Reconstruction, Paris, LLACAN, September 1–3, 2016

The 2<sup>nd</sup> Niger-Congo Congress was held by the research unit “Languages and cultures of Sub-Saharan Africa” (LLACAN) in Paris on September 1–3, 2016 as a follow-up to the first Congress, also held in Paris four years earlier. Despite the fact that J. Greenberg’s original hypothesis is now more than fifty years old, the genetic reality of the Proto-Niger-Congo phylum continues to have a somewhat hypothetical status, and thus, the main stimulus for organizing the previous Congress was a rather ambitious idea to make a significant advance in the reconstruction of Proto-Niger-Congo within a foreseeable timespan through the combined efforts of Africanists from different parts of the world. At the conclusion of the first Congress it was agreed that such events should be held on a regular basis every three or four years. Another outcome of scientific collaboration during and after the congress would be a collective monograph (provisionally titled “Comparative-historical studies in East Benue-Congo” and edited by John Watters) that will be released in the near future.

The 2<sup>nd</sup> Congress was opened by Mark van de Velde, present director of LLACAN. The initial sessions concerned the Niger-Congo phylum as a whole, and the rest consisted of presentations on individual families within Niger-Congo, more or less grouped together by the degree of genetic affiliation between the languages concerned. Addressed issues included comparative and historical studies as such, as well as typological studies without any major conclusions on diachrony. Historical presentations referred to various language levels: segmental phonology, tonology, grammatical and semantic reconstructions. Regrettably, several planned participants were unable to attend the event, but all submitted abstracts and other materials remain available online at the website of the Congress (<http://llacan.vjf.cnrs.fr/nigercongo2/index.html>).

Generally following the chronological order, first, we will briefly describe the presentations that concentrated on specific issues of the Niger-Congo macro-family, and then outline the various reports on particular branches of Niger-Congo.

One of the most exciting disputes concerned the possible stem/root structure in Proto-Niger-Congo. Two polemical proceedings that succeeded one another represented drastically different points of view. Roger Blench (McDonald Institute for Archaeological Research / University of Cambridge) developed Kay Williamson’s original suspicion, based on Ijoid data, that the canonic Proto-Niger-Congo root structure was possibly not disyllabic (according to Blench, this point of view may be suspected of a “Bantu-centric” bias), but trisyllabic CVCVCV. These originally triconsonantal roots subsequently underwent erosion in most branches, although Ijoid and Dogon languages (as the first Niger-Congo outliers) still show evidence of the initial state. Another argument in support of this is that the three-syllable root structure provides an explanation for front/back vowel alternation between the Niger-Congo subfamilies.

An alternative view was presented by Konstantin Pozdniakov (INALCO – LLACAN). Using statistical tools, he came to the conclusion that the most common Proto-Niger-Congo root structure was monosyllabic. In order to identify possible later derivational strata, calculations were carried out separately for verb and noun stems. Taking into consideration all the meso-level language families, the speaker successively addressed three questions: the nature of the initial and final phonemes and the number of syllables, with the consolidated results leading to suggest a monosyllabic biconsonantal CVC structure.

In their joint study Dmitry Idiatov and Mark Van de Velde (LLACAN – CNRS) determined to what extent it is justified to postulate labial-velar stops in Proto-Niger-Congo upon analyzing the lexical frequency of labial-velars in languages of Northern Sub-Saharan Africa. After putting the frequencies on the map, it was discovered that they constituted two easily recognizable high labial-velar frequency clusters (Coastal West Africa and Central Africa) and perhaps one less prominent cluster (South-Eastern Mali and South-Western Burkina Faso). Taking into account the

typological rarity of these consonants, the areas seem likely to be pockets of retention of the original state rather than zones where independent innovation should be suggested. On the other hand, since labial-velar phonemes are atypical for the basic lexicon and tend to be used in the expressive part of the vocabulary, such as ideophones or property words, and also because their distribution is mostly restricted to stem-initial position, it was assumed that it was unlikely for Proto-Niger-Congo to have labial-velars. The main trigger for the emergence and spread of these phonemes was C-emphasis prosody, partial manifestation of which is stem-initial consonant lengthening and strengthening. The authors also cautioned against properly unfounded reconstruction of labial-velars in intermediate language units.

Larry Hyman (University of California, Berkeley) verified the general assumption about the presence of two level tones in Proto-Niger-Congo. The starting point for the survey was an intention to figure out how far it is possible to extend the regular correspondences between the existing tonal reconstruction of Proto-Bantu and reconstructions of higher level groupings which include Bantu. Only verbal stems were considered and only for those languages where root tone characteristics are not a part of verb morphology (TAM, negation, etc.), so as to deal as far as feasible with relics of inherited lexical tones. A further goal was to find out more about Niger-Congo verb structure by considering the verb extensions and their tone patterns. The major findings are that there is no evidence for reconstructing more than two register tones; verb extensions had their own inherent tone features.

A first attempt at a modern phylogenetic classification of Niger-Congo was made by Jean-Marie Hombert (Laboratoire Dynamique du Langage, CNRS – Université Lumière Lyon 2), Rebecca Grollemund and Simon Brandford (Evolutionary Biology Group, University of Reading). The input consisted of 100-item wordlists belonging to the basic vocabulary for a sample of languages from different Niger-Congo families; cognate sets allegedly were identified by manual evaluation. However, data sources and quality were not always clear, and, more importantly, neither was the scoring scheme for cognate detection, making it hard to evaluate the usefulness of the new scheme for further Niger-Congo studies.

One of the distinguishing features of Niger-Congo was the existence of a nominal classification system. Several of the presentations were devoted to its traces in descendant families, including a survey conducted by Robert Hepburn-Gray (University at Buffalo, SUNY)

that presented an overview of Niger-Congo noun class agreement systems, taking into account a number of parameters of cross-language variation, such as type of agreement targets, or number of distinct positionally conditioned realizations of the class markers; it seems, however, that the modest size of the sample and the employed methodology remain insufficient to make any far-reaching conclusions. Ronald Schaefer (Southern Illinois University) reviewed types of subordinated arguments in Niger-Congo branches, distinguishing between sentence-like, infinitival and truncated complements (nominalisations). Two major tendencies are represented within Niger-Congo: to mark indicative, subjunctive, and conditional clauses differently, or to make no distinction between any of them. Unfortunately, this report suffers from the same problem as the preceding one.

An important task for Niger-Congo studies is to precisely delineate the boundaries of the phylum. Thus, for instance, because of limited data sources and a number of typological shifts in their history, the status of the Kadu (Krongo-Kadugli) languages had long remained contentious. Under one hypothesis, they were associated with Niger-Congo (within Kordofanian, or as a different branch), under another, they were included with Nilo-Saharan. An additional benefit of George Starostin's (Russian State University for the Humanities / Russian Presidential Academy) ongoing reclassification of Greenberg's Nilo-Saharan phylum was that it supplied new evidence for Kadu's non-Niger-Congo affiliation. The revised classification was established by means of lexicostatistics combined with traditional comparative-historical method involving step-by-step reconstruction (moving from first-order proto-languages to higher levels of classification) of the most stable subset of Swadesh list items (for detailed description, see G. Starostin 2013). The findings show that the basic lexicon of Kadu languages shows far more significant phonetic similarities with Nilo-Saharan (specifically, Central Sudanic, since Nilo-Saharan as a valid taxon remains even more problematic than Niger-Congo), and that there is no lexical basis whatsoever to group them together with Niger-Congo.

Turning now to reports on individual (smaller) language groups and families, Sandro Capo Chichi (Université Paris VII-Paris Diderot / Laboratoire de Linguistique formelle) revised the function of the noun suffix *-i* in Proto-Gbe. Previously it was understood as marking compounds, diminutives, nouns similar to underived base, and instruments (Capo 1991). According to Capo Chichi, the affix is one of the complementarily distributed variants along with na-

sality of terminal vowel, and both of them served as nominalizer for marking loanwords with structures uncommon for Proto-Gbe.

The Kwa languages demonstrate great diversity in the design of their class systems from residual to quite elaborate (the Guang and the Ghana-Togo Mountain languages). As the classes are attested in genetically remote Kwa branches and have external parallels in other Niger-Congo families, Maria Konoshenko and Daria Shavarina (Russian State University for the Humanities) came to the conclusion that Proto-Kwa had a fully-fledged class system with canonical Niger-Congo class marking on nouns and agreement. They identified the main strategies of noun class attrition, comparing them with the generalizations formulated for other families. Almost the same issue, but from a different angle, was addressed by Ines Fiedler (Humboldt-Universität zu Berlin). She described the Kwa class system in terms of gender (cf. Güldemann 2000) and proposed refinements for the already existing reconstructions of Kwa subgroups.

Further related to general classification issues, Tucker Childs (Portland State University) offered motivation for establishing Mel as a group separate from Atlantic proper, and suggested an internal reclassification of the family, indicating major clusters: Temne-Baga, Bolom-Kisi and Gola as a single language branch. The rest of the report dealt with the reconstruction of definite markers for various Mel subgroups, whose distribution supports current views on the internal classification of Mel.

Guillaume Segerer (LLACAN) raised the issue of universality of the basic vocabulary among languages, building on the case of Joola. Joola (Bak < Northern Atlantic), a cluster of languages spoken in Lower Casamance, Senegal, exhibit minor differences in phonology and morphology that reflect their close relationship; however, low cognacy percentages in lexicostatistical calculations contradict this assumption. The speaker highlighted the most stable and most unstable items in the Swadesh list, comparing them with the ones proposed in S. Starostin 2007 and Holman et al. 2008, and outlined the main lexical replacement strategies, among others, taboo for words used for people's names after their death.

Another talk specifically tackled the Southern sub-branch of the Mande family. These languages are generally assumed to have isolating morphology, yet their pronominal systems are rather elaborate, with multiple pronominal series differing morphologically and syntactically. Valentin Vydrin (LLACAN – INALCO) presented scenarios for the proliferation of the pronominal series and his own reconstruction of

the Proto-Southern Mande pronominal system. Despite a series of innovations and complications of the system that took place in recent times, the proto-system itself was rather intricate as well, including, among other things, a clusivity opposition for both dual and plural numbers.

Lynell Zogbo (University of the Free State / Abidjan) attempted to determine whether a separate adjective category could be reconstructible for Proto-Kru. Given that the class does not exceed 6–20 items, is not particularly homogenous within itself (some adjectives pattern like verbs, others like nouns) and Western and Eastern Kru differ in models of noun class agreement, she concluded that even though the category did exist, it was modest in scope.

Jeffrey Heath (University of Michigan) discussed verbal inflection in Proto-Dogon, particularly the issue of stem-gradation, which enables to draw parallels between Dogon and other Niger-Congo families.

A significant contribution to the description of several underexplored Adamawa lects was made in the course of fieldwork trips undertaken in 2012–2014 by the Faculty of Asian and African Studies of St. Petersburg State University. In their joint report Anastasiya Lyahovitch and Alexander Zheltov (St. Petersburg State University) presented the main results of the survey. For the languages under consideration the authors compared their pronominal systems as well as numeral systems and copulas, with further discussion on the implications that this could have for the internal classification of the family. Ulrich Kleinewillinghöfer (JGU-Universität Mainz) drew attention to several languages within the Samba-Duru subgroup of Central Adamawa that still preserve the original nominal class system, while most other Adamawa languages have reduced or even lost it; the established tentative reconstructions for Central Adamawa bear clear similarities to the noun system earlier proposed for Gur.

On the Benue-Congo side of things, a further report by Bruce Connel (Glendon College, York University) focused on tonological reconstruction in Mambiloid (Northern Bantoid). Modern Mambiloid languages appear to have three to four contrastive tones, yet the absence of regular tonal correspondences in their systems imply that they are rather innovative. The speaker suggested a two-tonal system for Proto-Mambiloid and, using individual daughter languages as case samples, illustrated the evolution from two-level tone systems to polytonal ones.

Demola Lewis (University of Ibadan, Nigeria) used several algorithms for automated classification, such as the Automated Similarity Judgement Program and the Sound Correspondent Recognition Program, to

North Edoid languages. For source data, she used the Leipzig-Jakarta lists of basic vocabulary, a recent alternative to the Swadesh list (with 62 overlapping items), compiled by Martin Haspelmath and Uri Tadmor in the course of their cross-linguistic investigation of borrowings in the world's languages (cf. Haspelmath & Tadmor 2009). Oyetayo Bankale (University of Ibadan, Nigeria) proposed a new model of stem-initial consonant (the most stable position within the morpheme) inventory for Proto-West Benue-Congo, although his reconstruction would seem to deal more with phonetics rather than phonology.

Two presentations concerned the Ekoid languages, a small Southern Bantoid subgroup. The Ekoid group proper is often discussed in conjunction with its closest relative, a single language Mbe. During the first stage of divergence, the common ancestor of the Ekoid languages split into Proto-Ndoe and Proto-Bakor-Ejagham, which in turn subdivided into the Bakor and Ejagham clusters. John Watters (SIL International) presented a reconstruction of the Proto-Ekoid-Mbe noun class system. Noun class prefixes and concord markers of Mbe and all the proto-languages of Ekoid subgroups were matched with those reconstructed for Proto-Bantu; the results revealed that despite several transformations and mergers, Proto-Ekoid-Mbe had a relatively well preserved noun class system, since all Bantu classes (except for 13 and 18) have correspondences in Ekoid-Mbe. Continuing the Ekoid subject, Galina Sim (Institute of Linguistics, Russian Academy of Sciences) proposed a hypothetical segmental inventory for Proto-Ekoid, specifically dwelling on some controversial topics such as the voiceless/voiced obstruent split in Proto-Ndoe, which should rather be regarded as an innovation than an archaism. An overview of the Lower Cross speech forms spread in Akwa Ibom State of Nigeria and their suggested classification was presented by Emmanuel Akaninyene Okon (University of Uyo, Akwa Ibom State, Nigeria).

Both talks given by Jacky Maniacky (Royal Museum for Central Africa, Belgium) addressed the issues of semantic reconstruction in Bantu. An automated likelihood-based statistical model was devel-

oped by Rebecca Grollemund, Simon Branford, and Mark Pagel (Evolutionary Biology Group, University of Reading). It allows to align cognate sets phonemically and detect sound changes by evaluating probabilities for each node in the graph and choosing the most probable scenario. The model was applied to the Proto-Bantu material and enabled to automatically detect some sound changes that actually took place.

Investigations of particular Niger-Congo branches not only lay down the groundwork for prospective Niger-Congo reconstruction but also to a certain extent supply possible scenarios that could have taken place during earlier stages.

The final chord took the shape of two general discussions moderated by Konstantin Pozdniakov and Larry Hyman. Following the conference, the first meeting of the newly formed Adamawa languages working group was held with the goal of focusing researchers' efforts on this least well explored branch of Niger-Congo. Nevertheless, many problems in Niger-Congo reconstruction still remain to be resolved, and, hopefully, all the initiatives will in fact result in fruitful cooperation and further progress in our understanding of African prehistory.

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