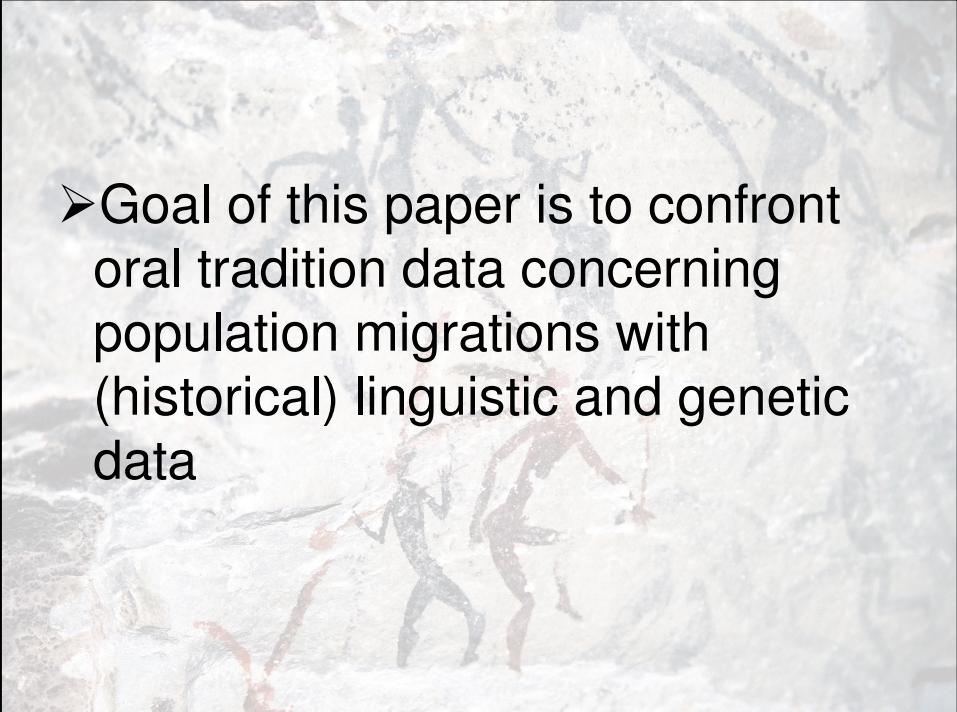


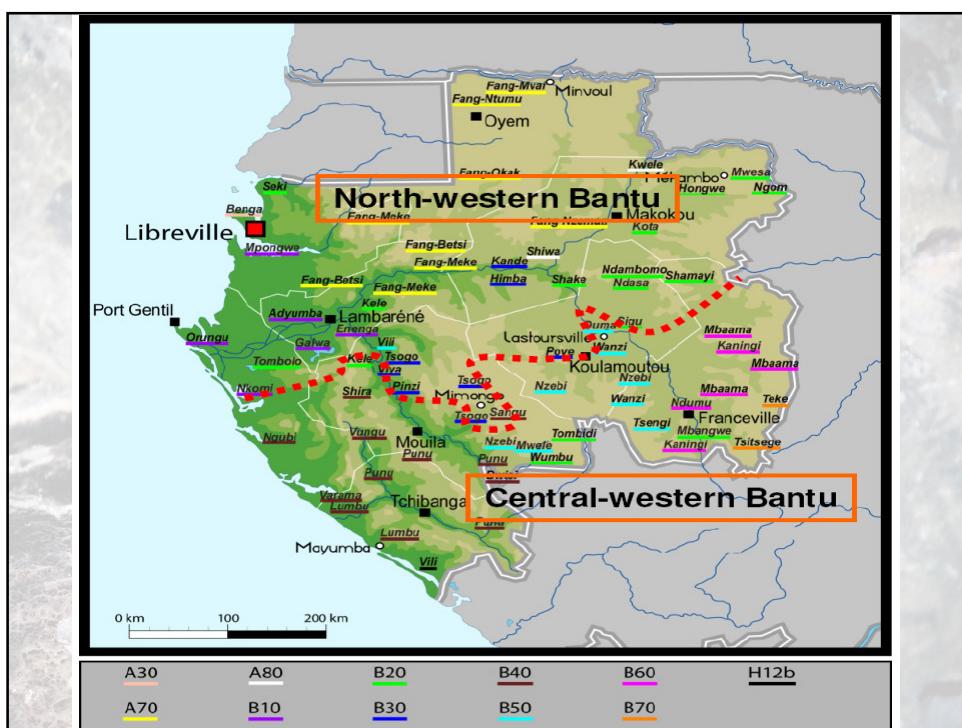
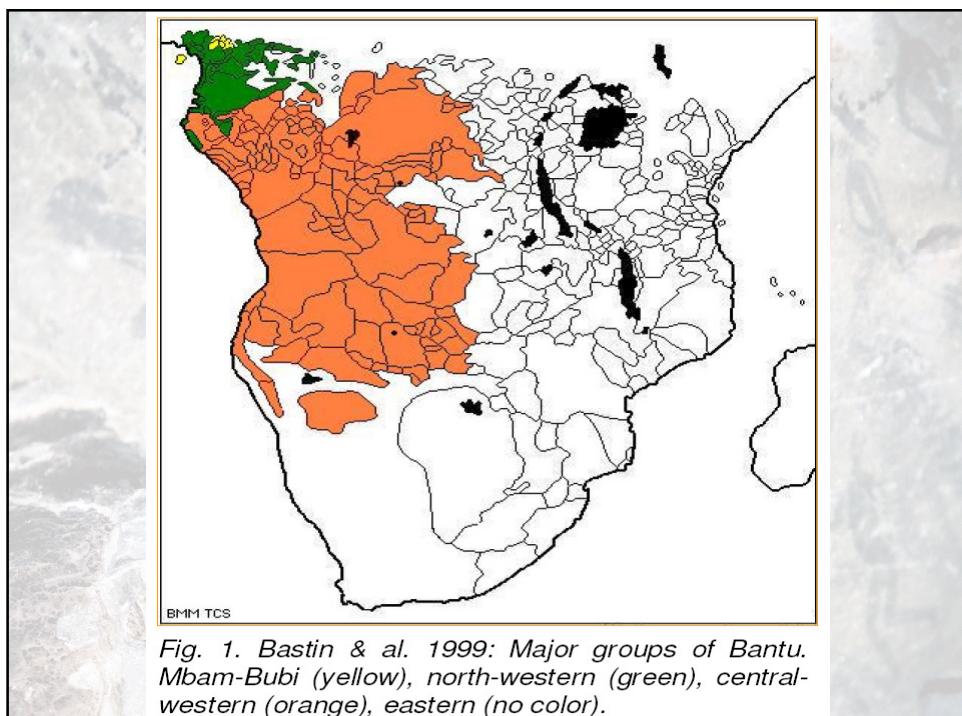
The Fang enigma : evidence from linguistic and genetic data

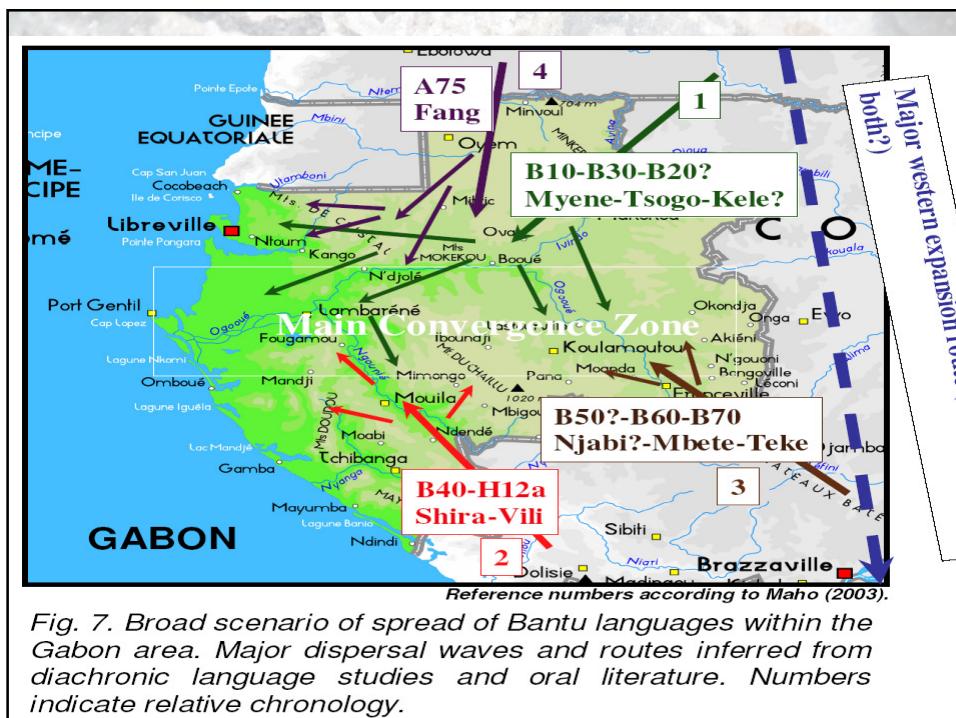
J-M. Hombert, D. Comas,
P. Mouguima, L. Quintana-Murci,
L. Sica and L. Van der Veen

Cradle of Language Conference,
Stellenbosch, South Africa
6-10 November 2006



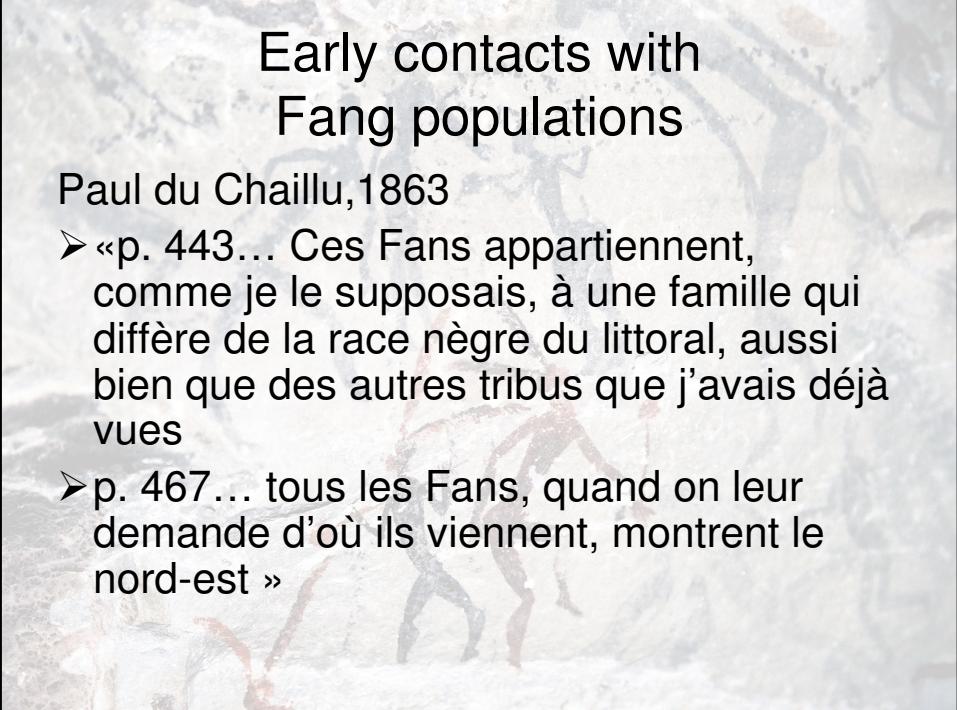
- Goal of this paper is to confront oral tradition data concerning population migrations with (historical) linguistic and genetic data





Fang local traditions

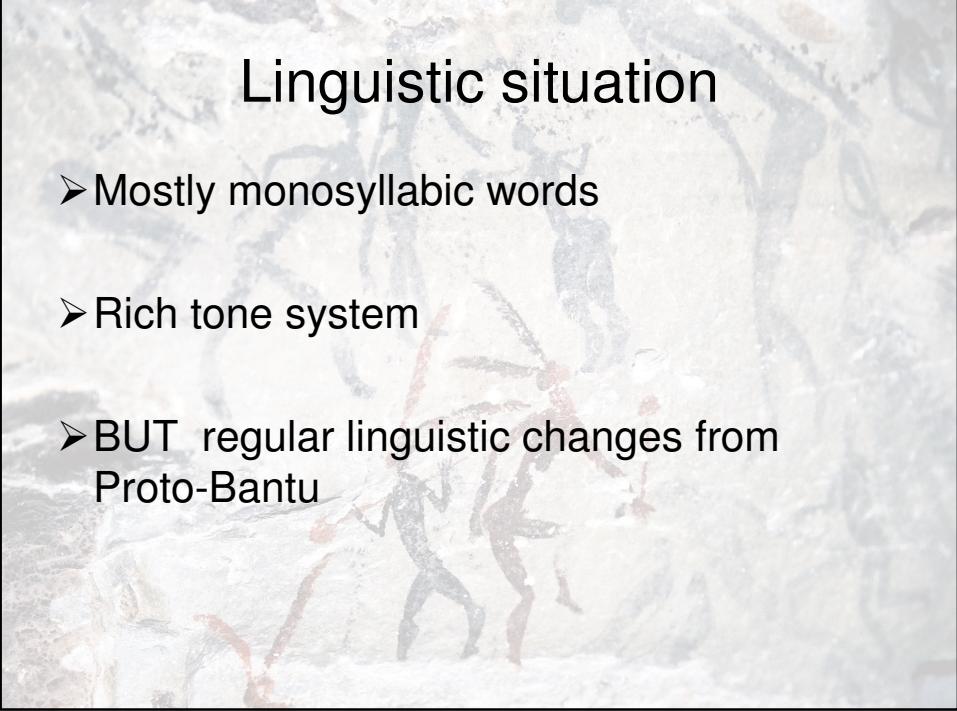
- « Fangs are not Bantu »
(opinion shared by Fang and by non-Fang populations in Gabon)
- Linguistic situation
- Migrations : Egyptian origin



Early contacts with Fang populations

Paul du Chaillu, 1863

- « p. 443... Ces Fans appartiennent, comme je le supposais, à une famille qui diffère de la race nègre du littoral, aussi bien que des autres tribus que j'avais déjà vues »
- p. 467... tous les Fans, quand on leur demande d'où ils viennent, montrent le nord-est »



Linguistic situation

- Mostly monosyllabic words
- Rich tone system
- BUT regular linguistic changes from Proto-Bantu

Linguistic changes

➤ « pygmy » : betchü vs. Akoa
from *ba-koda

- C1V1C2V2 > CVC
- LL > L
- HH > H
- LH > R
- HL > F

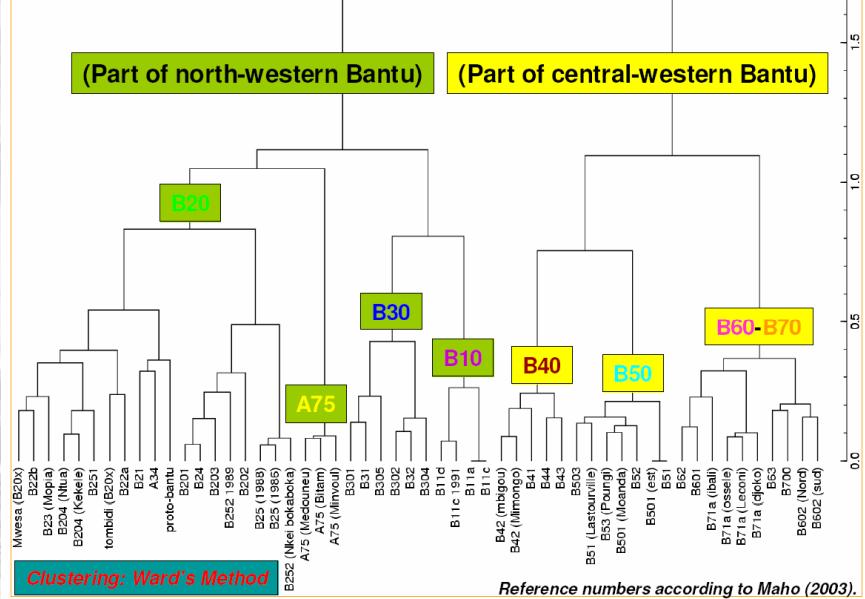
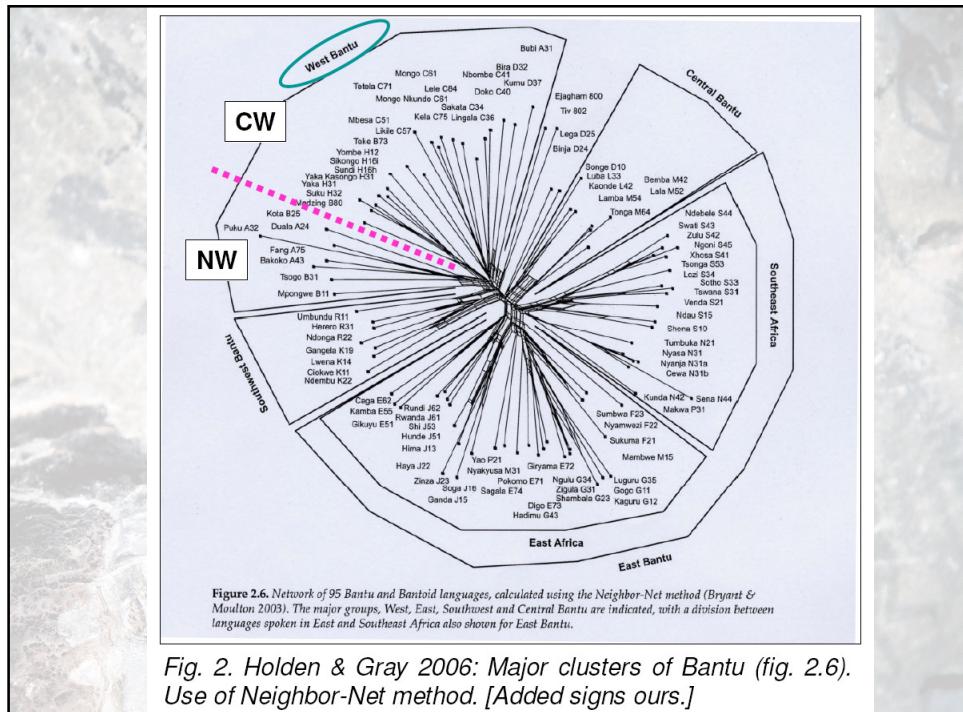


Fig. 4. Gabon area: Example of linguistic dendrogram. Manni, Van der Veen & Nerbonne (forthcoming).

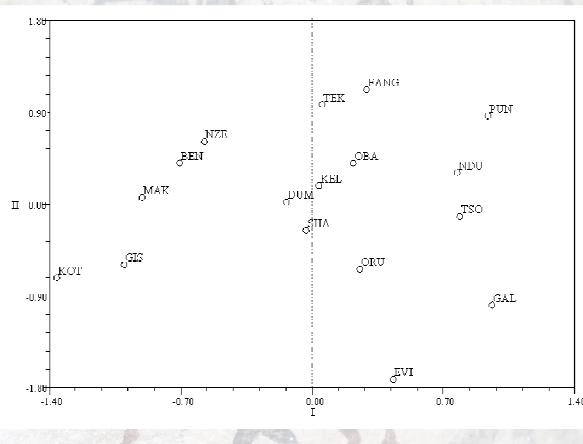


Genetic study

- Large scale genetic study of gabonese populations from 2002-2005 :
(over 1000 samples from 18 ethnic groups)
 - Interdisciplinary collaborations :
genetics, linguistics, anthropology
 - Choice of populations made on the basis of « historical » questions
 - Choice of « subjects » on the basis of genealogies
 - Data treated and analyzed in three laboratories
(Franceville, Paris (Mt DNA), Barcelona (Y Chromo))

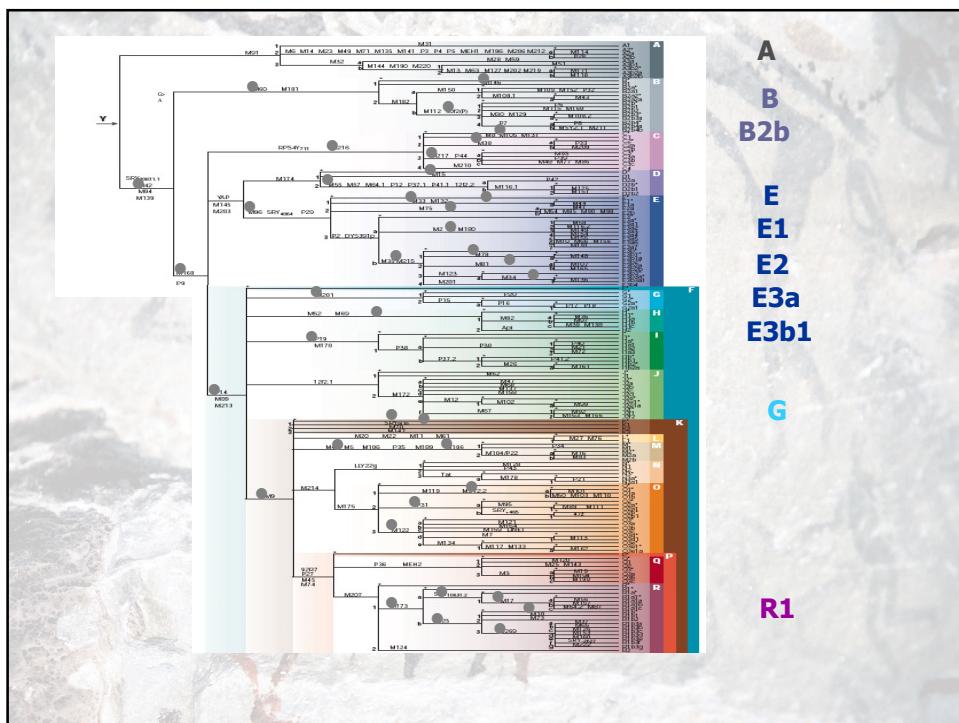


Results from Mt DNA



Y chromo analysis

- 18 Y- STRs and 38 Y-SNPs on over 750 samples from the Gabon and Cameroon, comprising 22 Bantu groups and 3 Pygmy groups



Main result of Y chromo analysis

- Presence of the non-African haplogroup R (including haplogroups R1b and R1*) in the Fang population who claim an Egyptian origin (17%)

Haplogroup R

- « Cruciani et al. have also identified the signature of a probable ancient migration from Asia into north Cameroon, in the form of a derived form of haplogroup R. This clade is not found in present-day western Eurasia or anywhere else in Africa, with the likely exception of **Egypt** (at 13%; see Scozzari et al. 1999) but it occurs in **north Cameroon** at a frequency of 40%. »

From Salas et al. 2002, AJHG, 1107

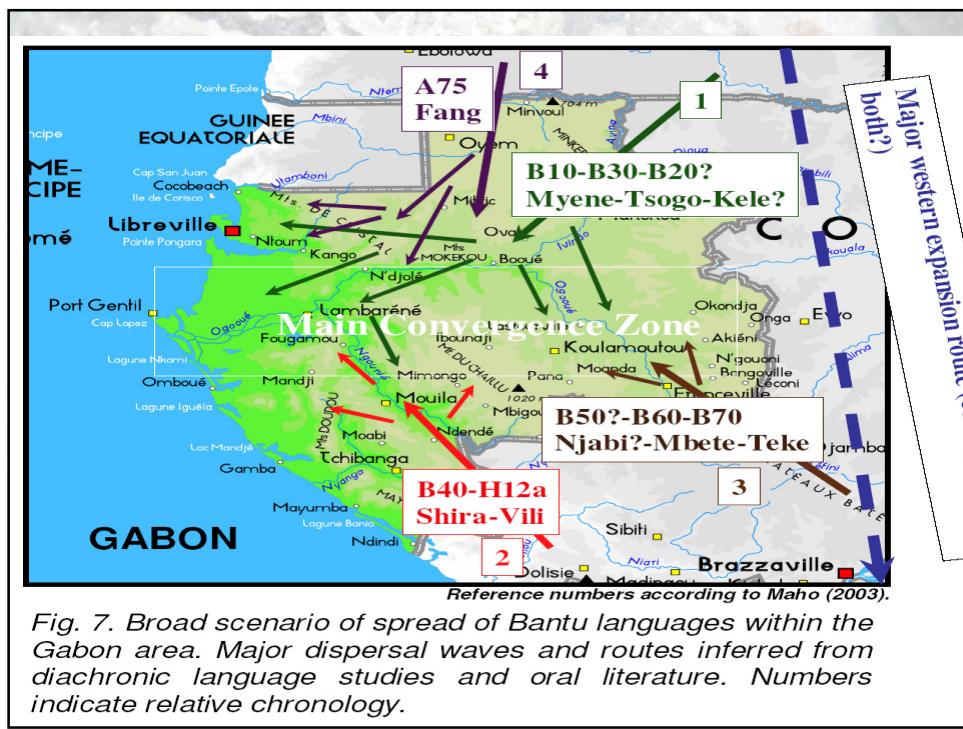
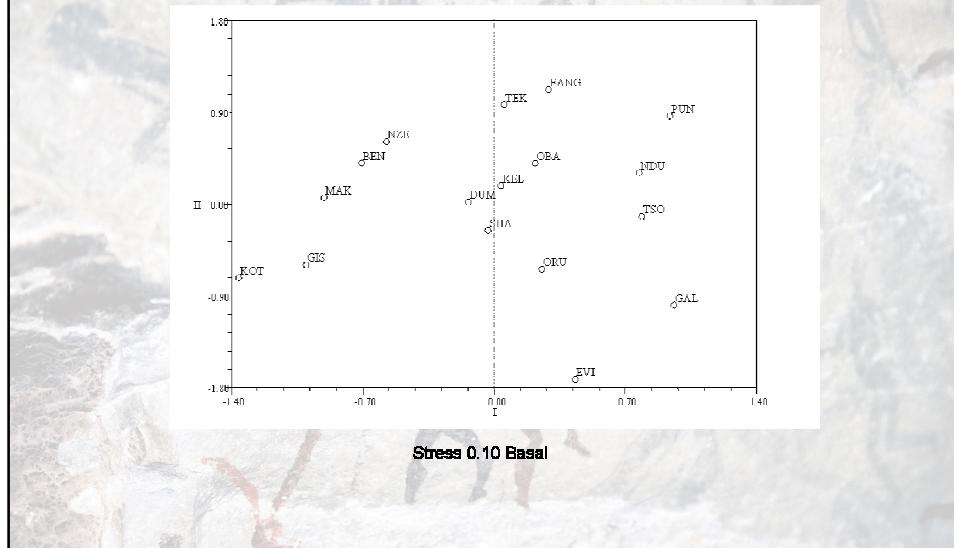
Conclusion

- Linguistically : the Fang speak a bantu language
- Genetically : Fang populations belong to an haplogroup rarely encountered in this area but found in north Cameroon and Egypt...

BUT...

a small number of other ethnic groups (Punu, Teke, Ndumu and Obamba) also show traces of this haplogroup, although these groups have very different oral traditions for their migrations.

Results from Mt DNA



Conclusion (bis)

- The Fang enigma is partially solved but a new question is raised :
- Early common migrations (from the north and north-east) of populations which are now quite distinct in Gabon?