

Preface



Figure 0.1 - Wile E. Coyote

Introduction



Figure 0.2 - Where Do We Come From, Who Are We, Where Are We Going? (Paul Gauguin)

Chapter Two

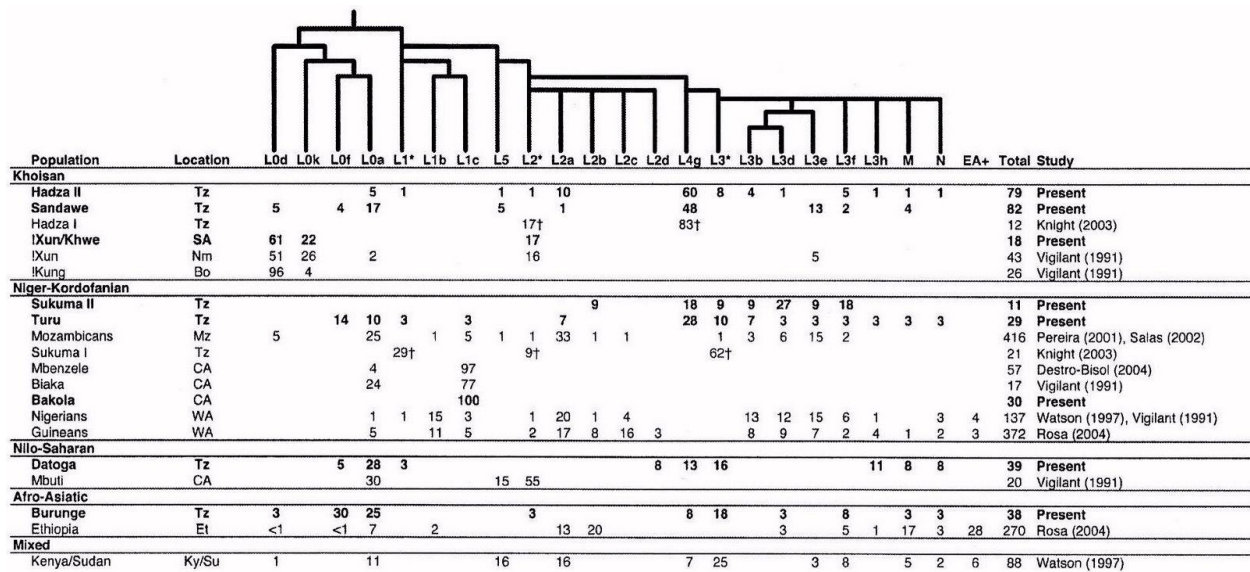


Figure 2.1 African mtDNA (Tishkoff 2007)

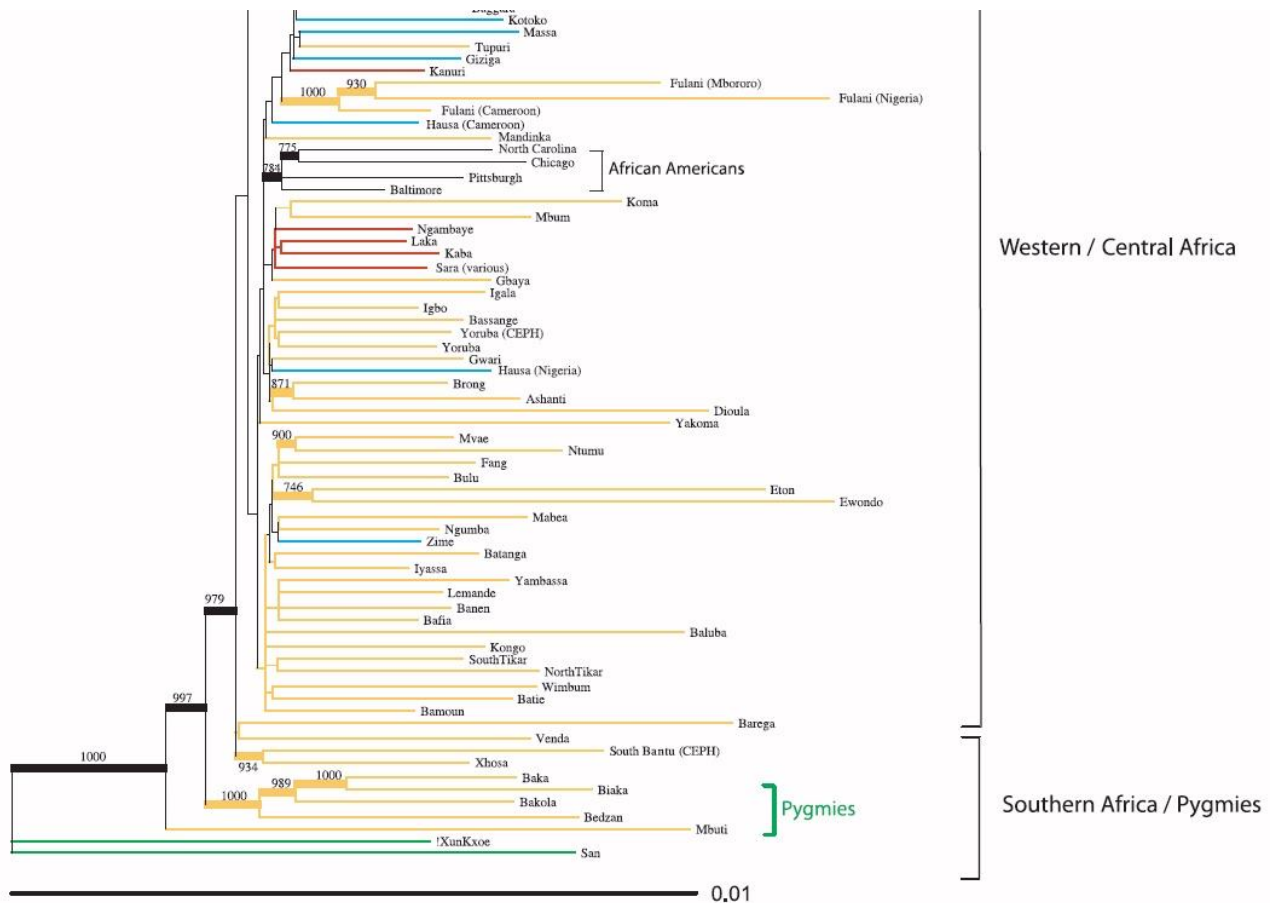


Figure 2.2 Nuclear DNA (Tishkoff 2009)

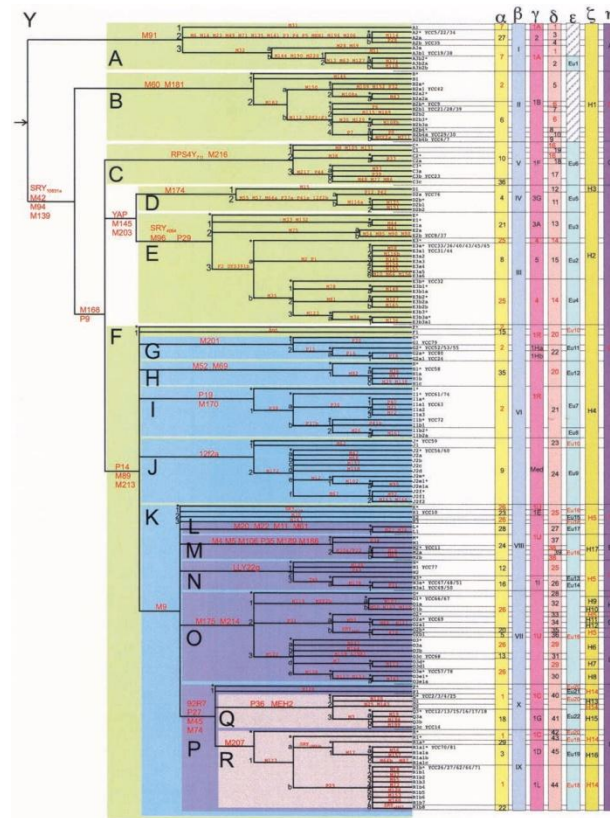


Figure 2.3 Y Chromosome DNA (Y Chromosome Consortium 2002)

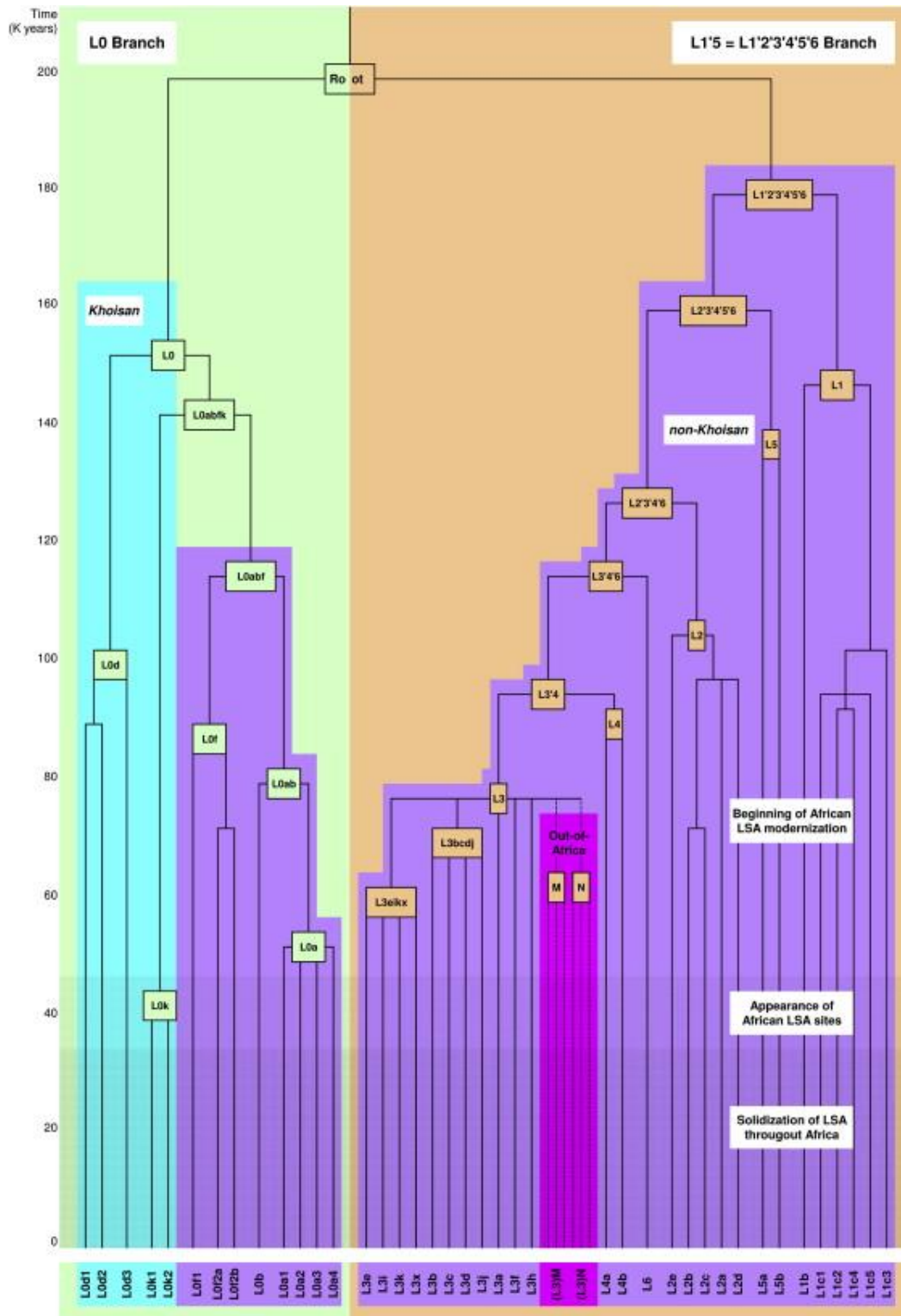


Figure 2.4 mtDNA (Behar et al. 2008)

Chapter Four



Figure 4.1 Bushmen huts.

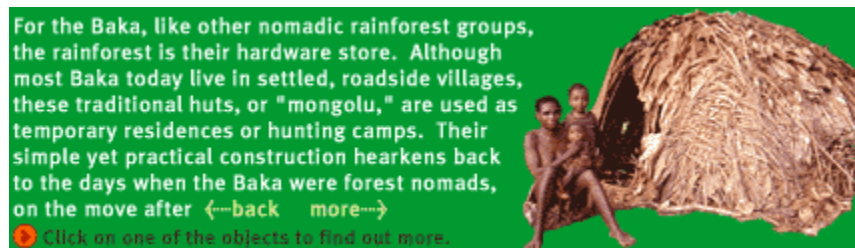


Figure 4.2 Baka pygmy hut



Figure 4.3 Mbuti huts

Chapter Five

Global Secondary Modes

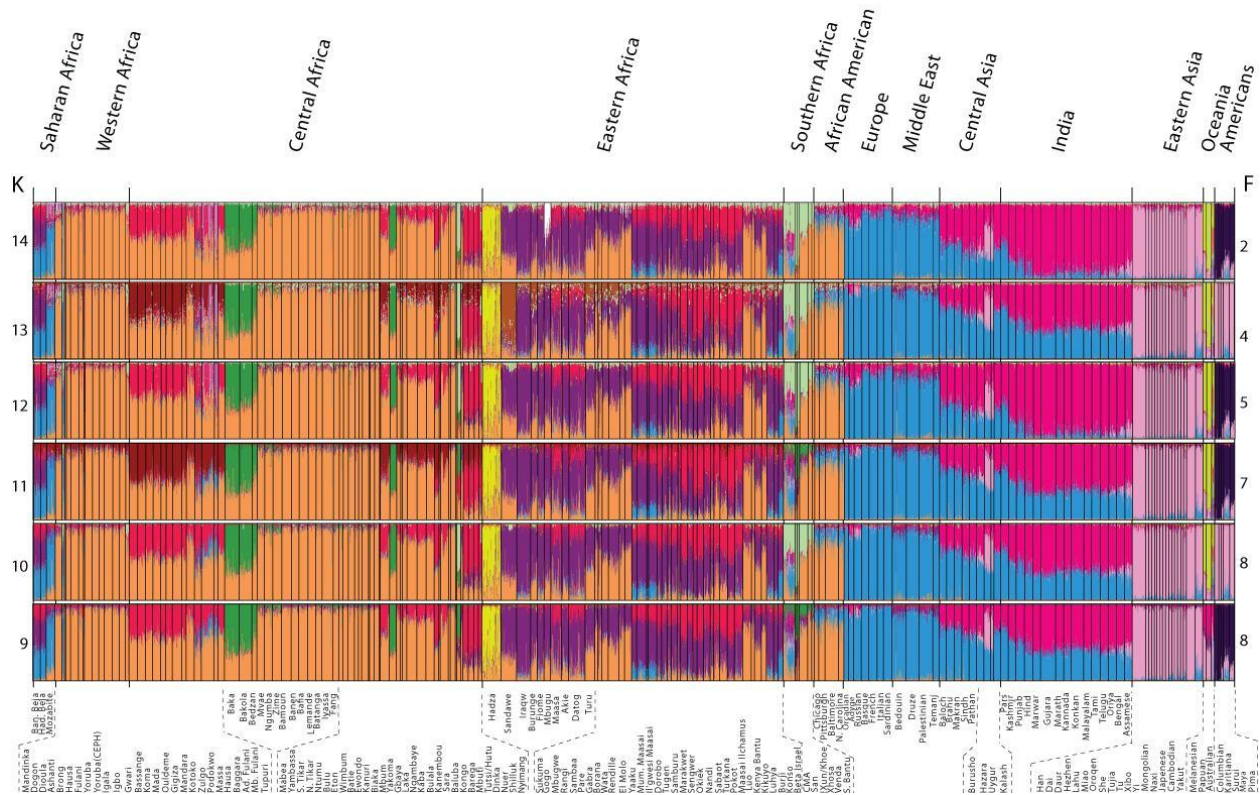


Figure 5.1 Autosomal DNA in Africa (Tishkoff et al. 2009)



Figure 5.2 Hadza Hut



Photograph by Martin Schoeller

Figure 5.3 Hadza Woman

Chapter Seven



Figure 7.1 Man with scarification marks-- Africa



Figure 7. 2 Maori Facial Tatoo



Figure 7.3 Tasmanian Woman



Figure 7.4 Great Andamanese.

Chapter Eight



Figure 8.1 Australian Huts



Figure 8.2 Dorze hut



Figure 8.3 Dorze hut

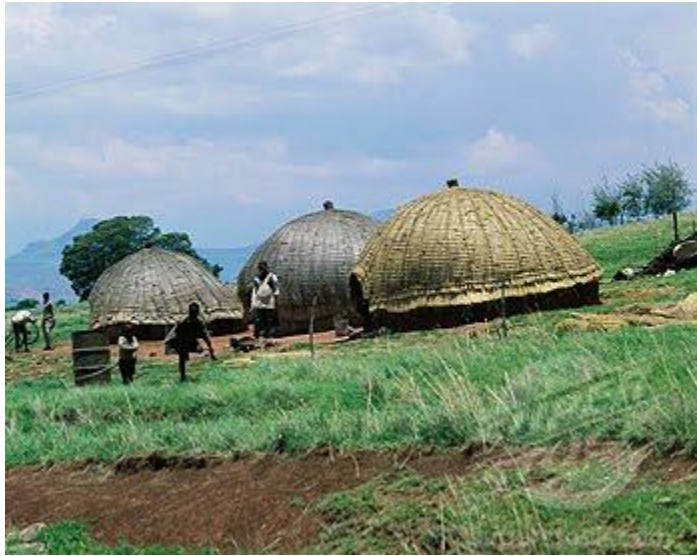


Figure 8.4 Zulu huts



Figure 8.5 Swazi huts

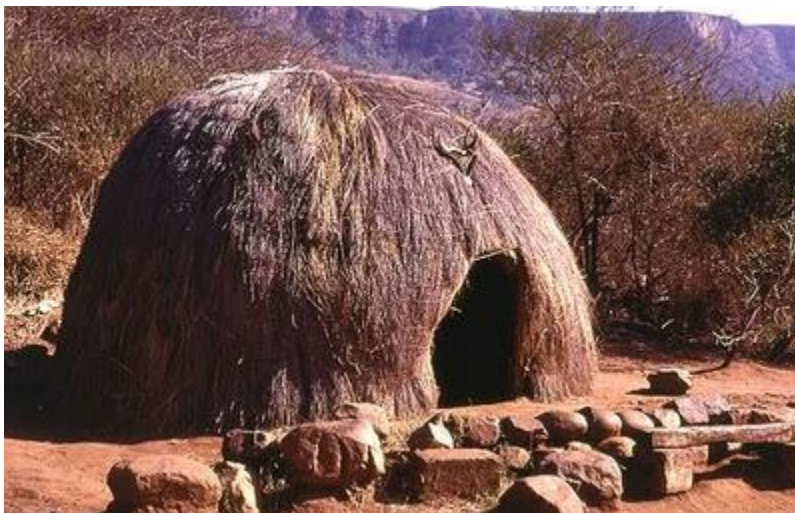


Figure 8.6 Traditional Zulu Hut



Figure 8.7 Stone “Beehive” Hut -- Bronze Age Ireland



Figure 8.8 “Celtic” Hut (reconstruction) – Wales



Figure 8.9 Traditional Huts – Dani

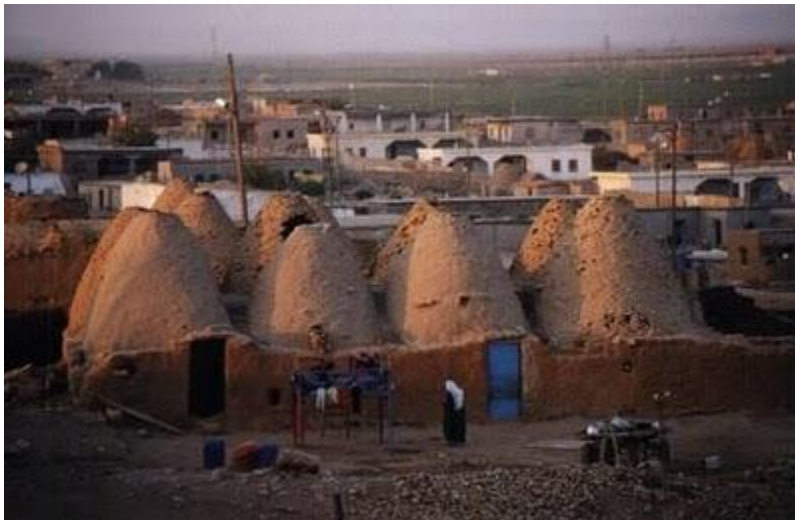


Figure 8.10 “Beehive” Mud Huts -- Harran, Turkey



Figure 8.11 Syrian Mud Huts



Figure 8.12 Eskimo with dog and igloo



Figure 8.13 Eskimos with different kind of Igloo



Figure 8.14 The Wigglesworth Observatory, under construction



Figure 8.15 Australia -- "Aboriginal hut without its turf covering."



Figure 8.16 Hadza Hut

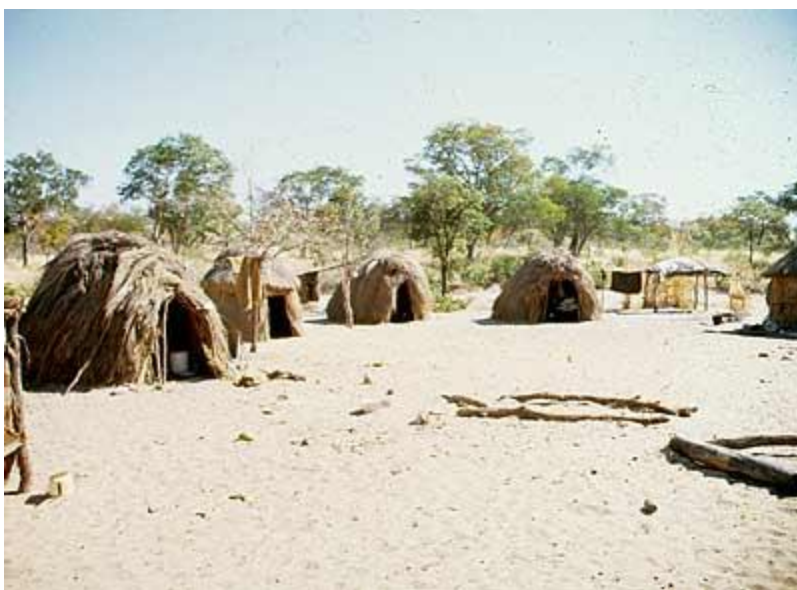


Figure 8.17 Bushmen huts



Figure 8.18 Australian huts



Figure 8.19 Tierra del Fuego

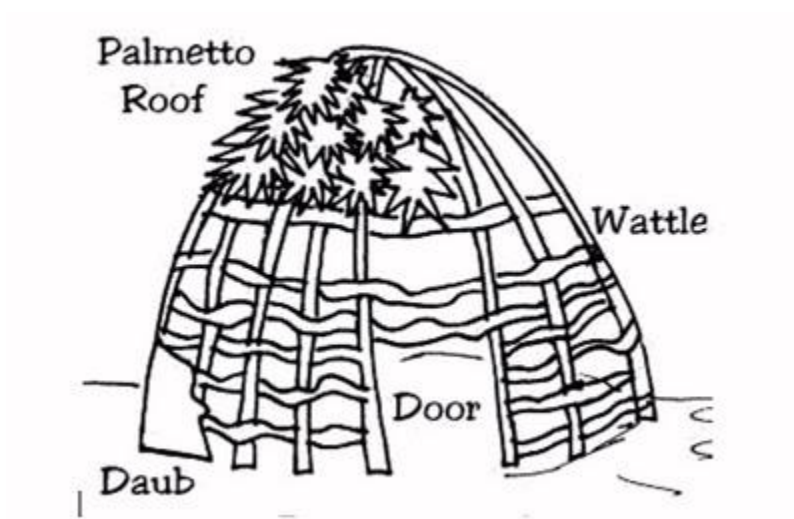


Figure 8.20 Framework for Poverty Point hut.

Chapter Nine

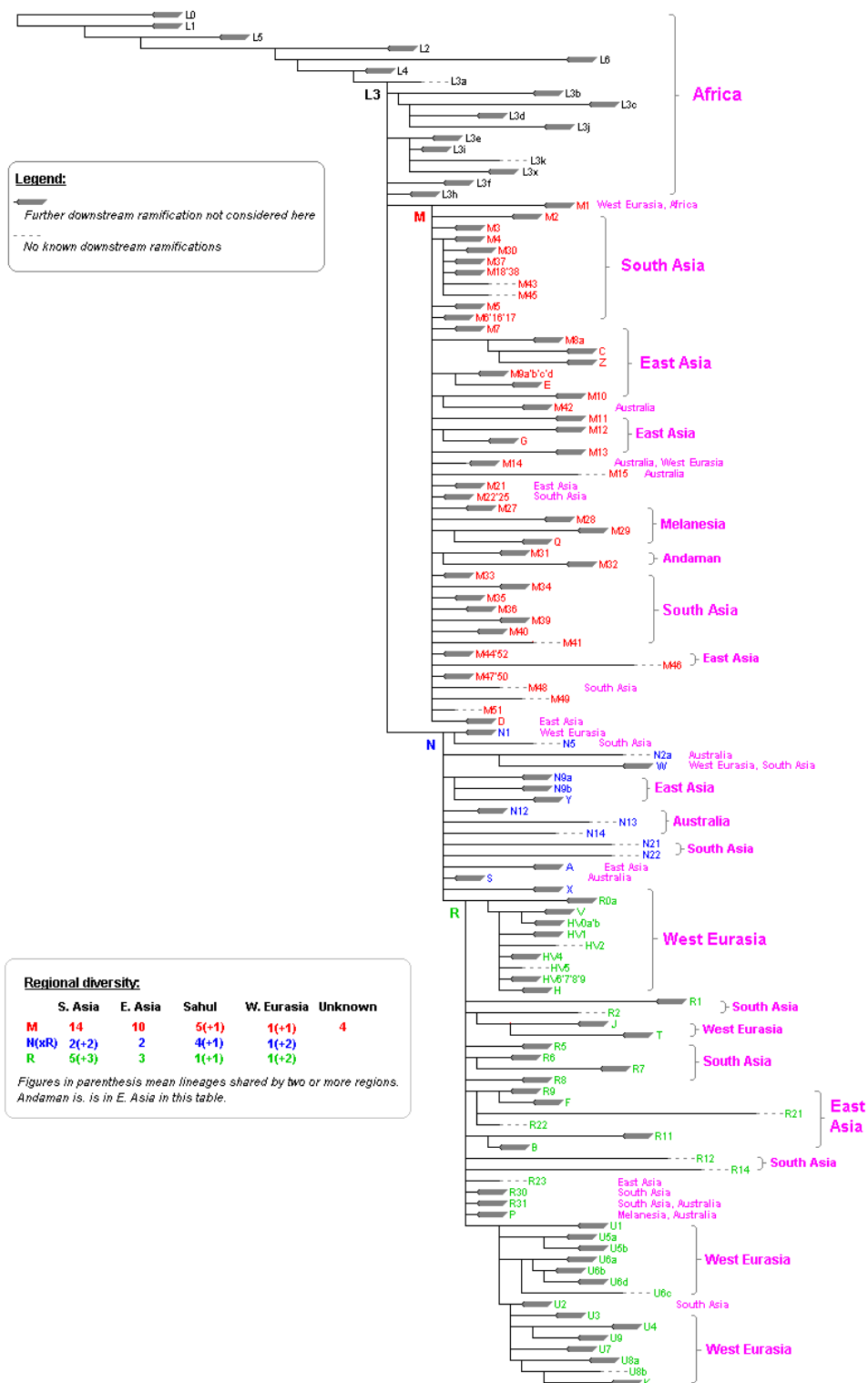


Figure 9.1 mtDNA Tree (from Maju 2009, *Leherensuge*)

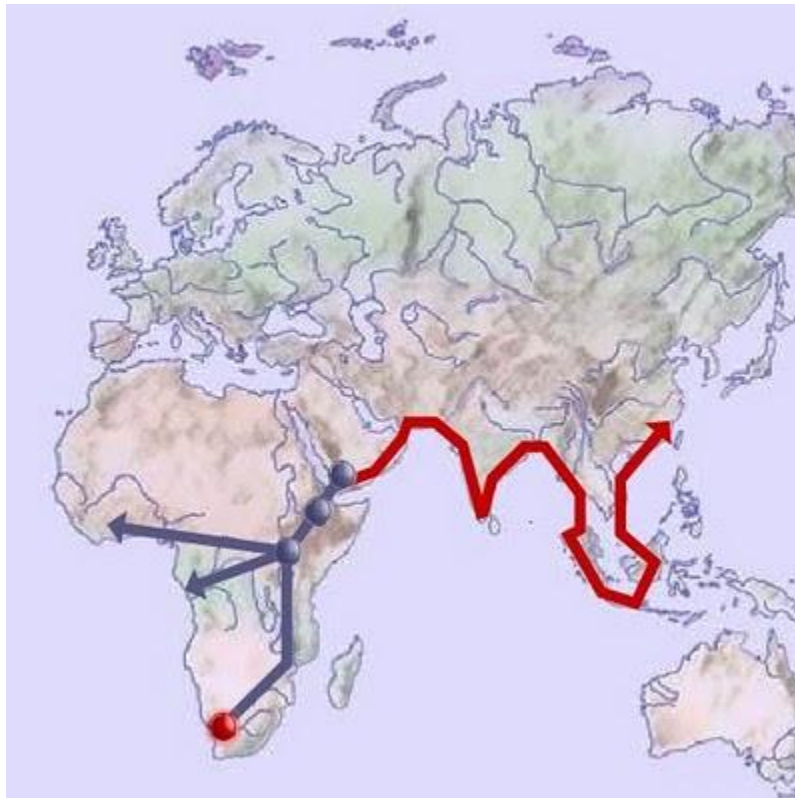


Figure 9.2 Early Migration Paths (Oppenheimer 2004a, *The Journey of Mankind*)

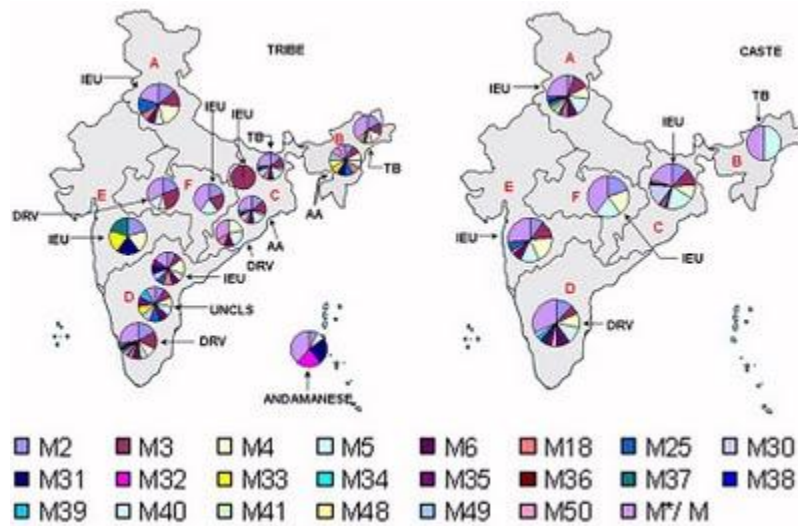


Figure 9.3 Haplogroup M in India (Krithika and Vasulu 2009)

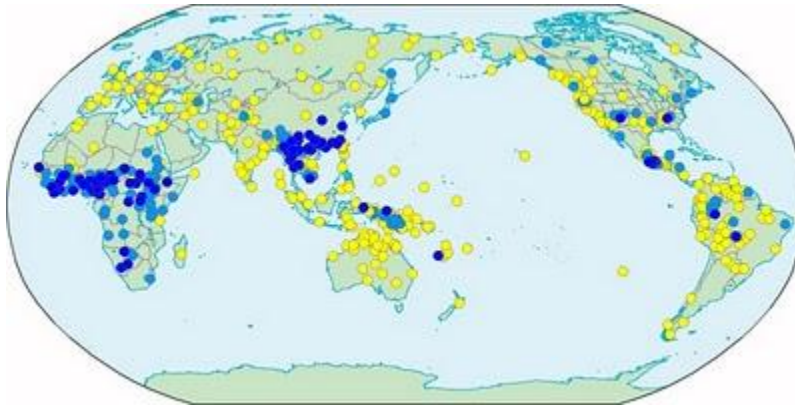


Figure 9.4 Tone Languages in blue (WALS 2011)

Chapter Ten



Figure 10.1 Toba Aftermath (Oppenheimer 2004a, *The Journey of Mankind*)

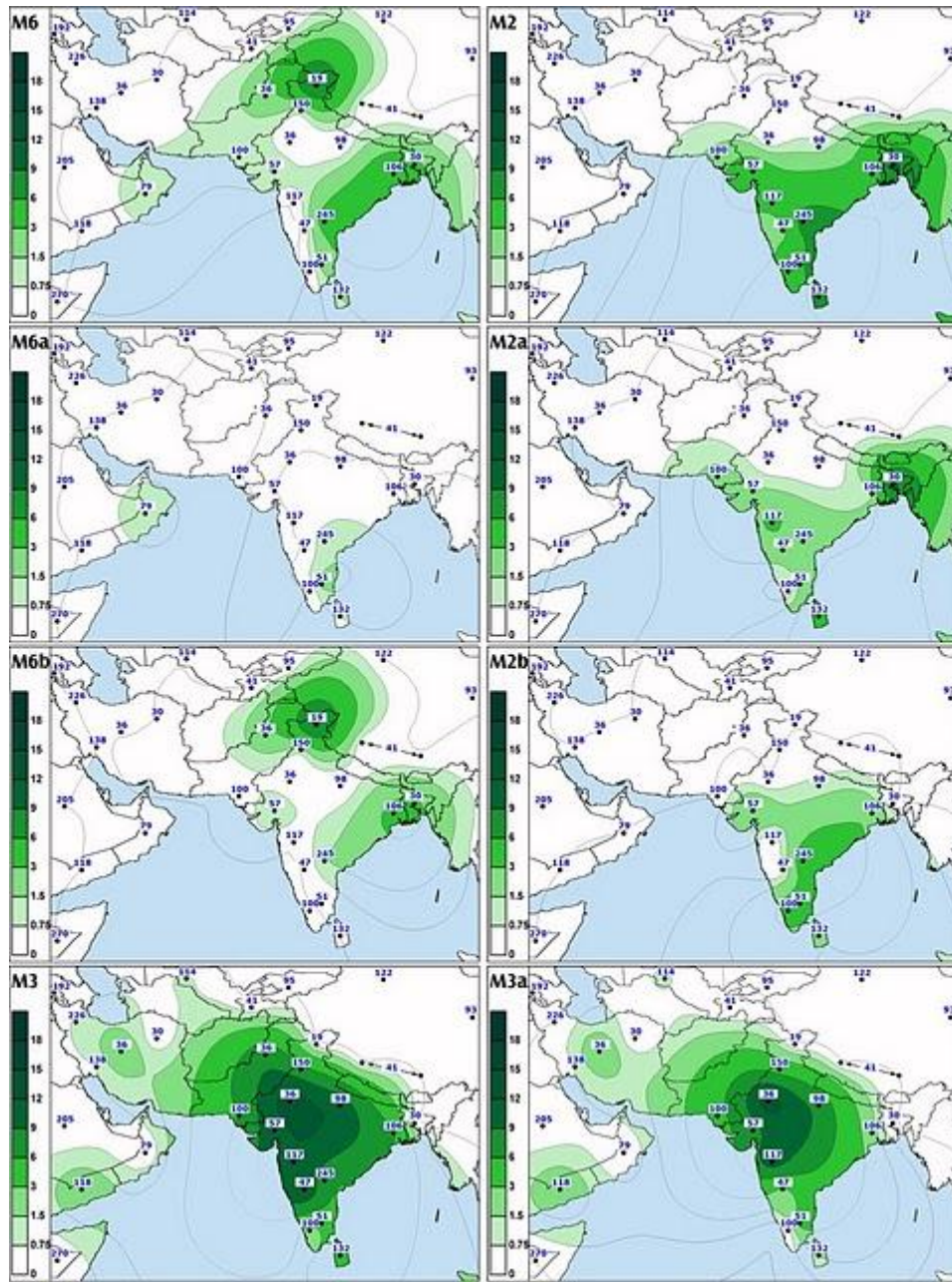


Figure 10.2 Distribution of M Haplogroups in India (Metspalu et al. 2004)

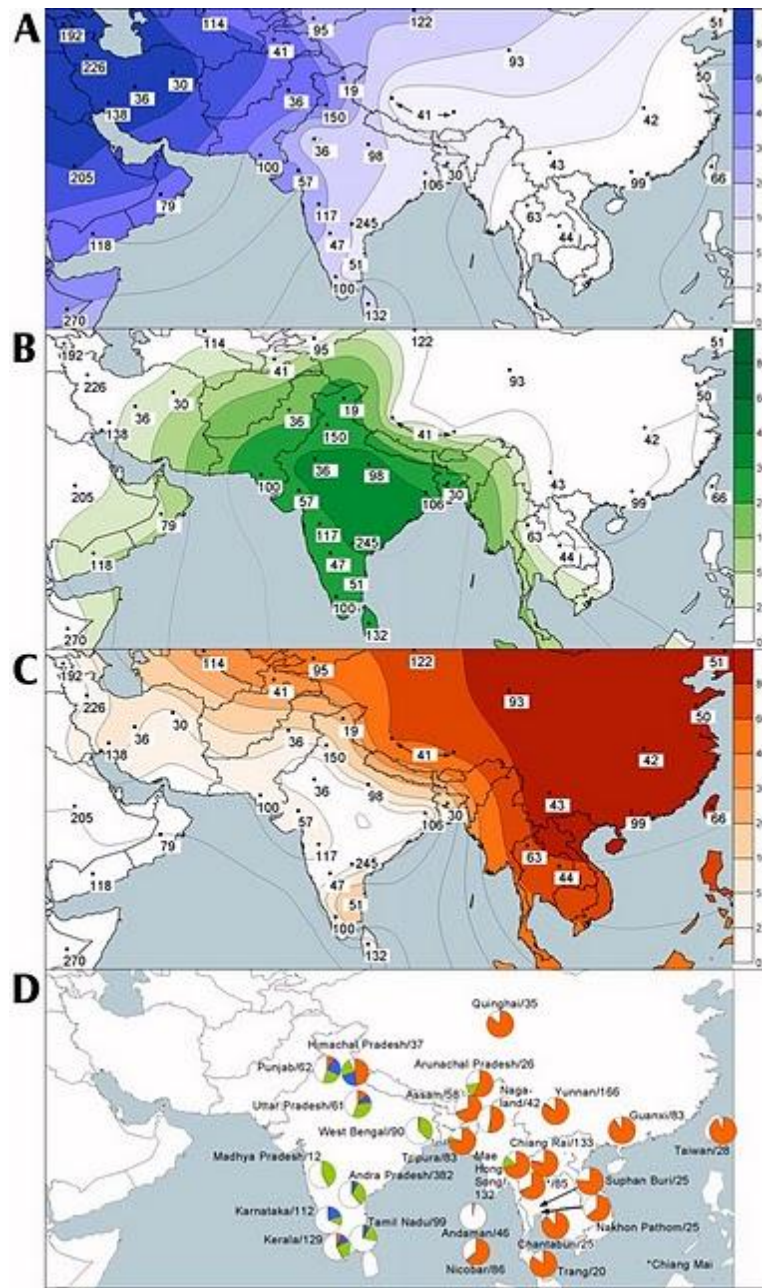


Figure 10.3 "The segregation of West Eurasian, East Eurasian and South Asian mtDNA pools" (Metspalu et al. 2004)

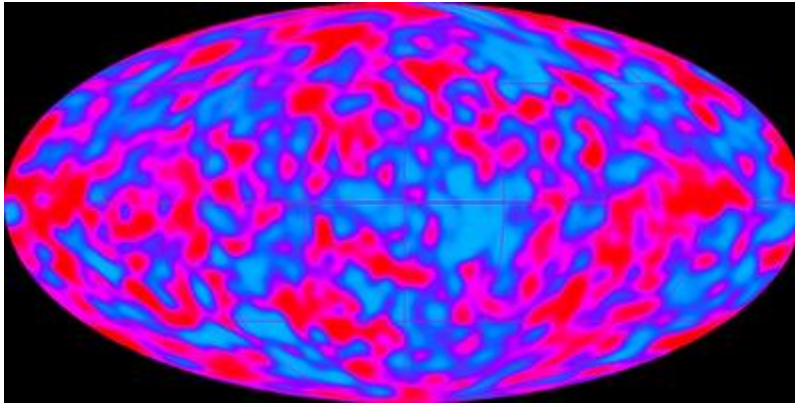


Figure 10.4 Cosmic microwave background (COBE)



Figure 10.5 Detail of Fig. 10.1

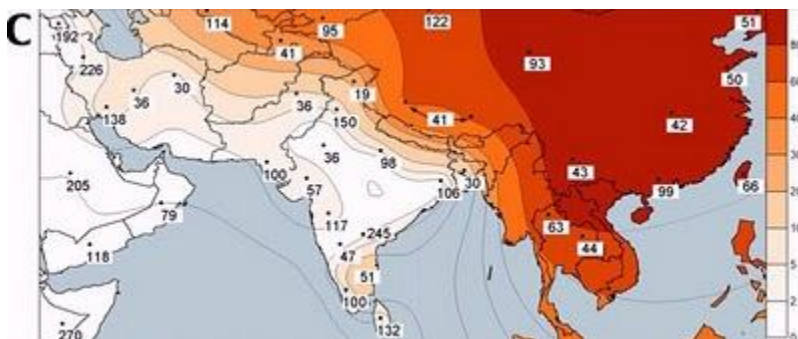


Figure 10.6 Detail of Fig. 10.3

Chapter Eleven

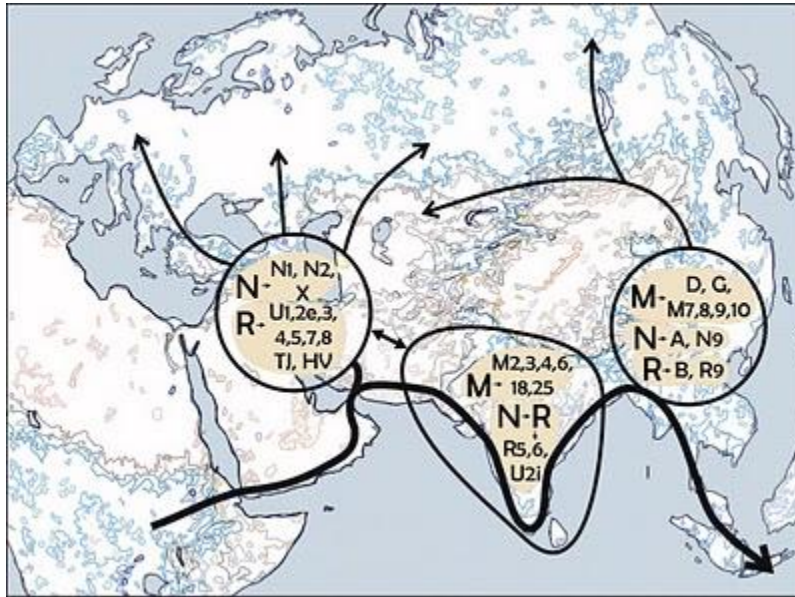


Figure 11.1 Eurasia -- later migrations (Metspalu et al. 2004)

Chapter Twelve



Figure 12.1 Birdbone Pipes from Kostenki (Hitchcock 2009)



Figure 12.2 Mammoth-Bone Hut (reconstruction)



Figure 12.3 Lithuanian Trumpets (Sadie 1984, iii:189)



Figure 12.4 Flute and Horn Ensemble, Chad (Blench 2002)

Player 1: (a) vocal sounds (b) flute sounds

Player 2: (c) vocal sounds (d) flute sounds

fiu - fiu-fiu-fiu-fa, fiu -

fef-fef - fef-ka,

fiu-fa, fiu - fiu-fa, fiu fiu - fiu-fa, fiu-fa, fiu -

fef-ka, fef - fef-ka fef - fef fef - fef-ka

Figure 12.5 Panpipe Duet -- Plekhovo (Velitchkina 1996)

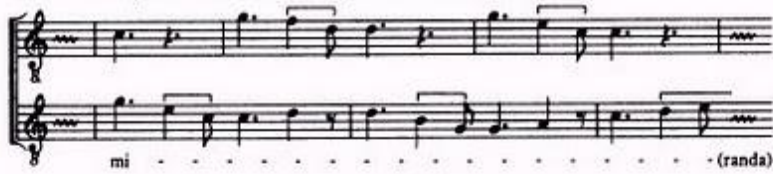
Ex. 1b. Excerpt from Conductus *Dum sigillum* (Perotinus); I-F, fol. 345^vEx. 1c. Excerpt from Organum *Exiit sermo*; I-F, fol. 102^vEx. 2a. Excerpt from Organum triplum *Exiit sermo*; I-F, fol. 19; D-W₂, fol. 15^vEx. 2b. Excerpt from Organum triplum *Judea et Iherusalem*; I-F, fol. 47; D-W₂, fol. 6^vEx. 2c. Ending of Clausula Nostrum No. 4; I-F No. 96 (fol. 157^v)

Figure 12.6 Examples of Medieval Hocket (Sanders 1974)

Ex. 1b. Excerpt from Conductus *Dum sigillum* (Perotinus); I-F, fol. 345v

mi - - - - - (randa)

Bushmen -- from Eland Song-litte (after England)

Figure 12.7 Comparison of Medieval and African Bushmen hocket (Sanders 1974; England 1995)

16

a

tut

24

28

Figure 12.8 Medieval Motet, *Amor Potest* (Nakamura 2004)

Chapter Thirteen

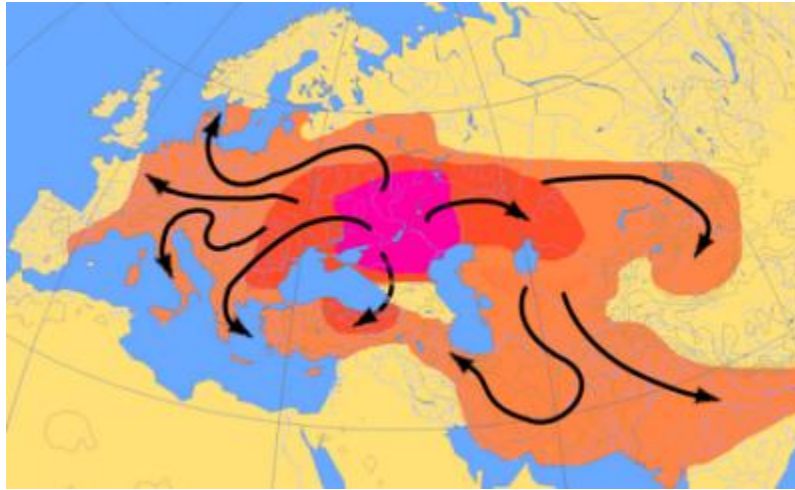


Figure 13.1 Indo-European Migrations (Wikipedia)

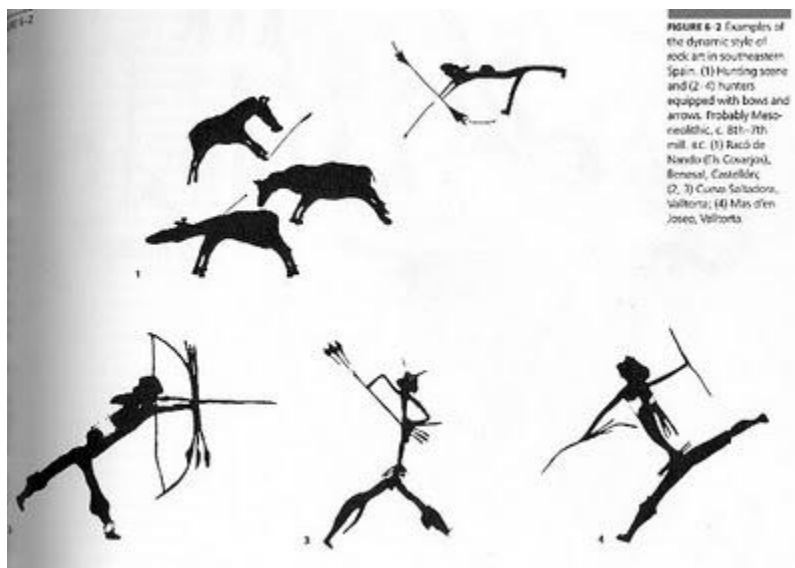


Figure 13.2 Paleolithic Rock Art -- from Spain (Gimbutas 1991)



Figure 13.3 Images from rock paintings attributed to Bushmen artists -- southern Africa

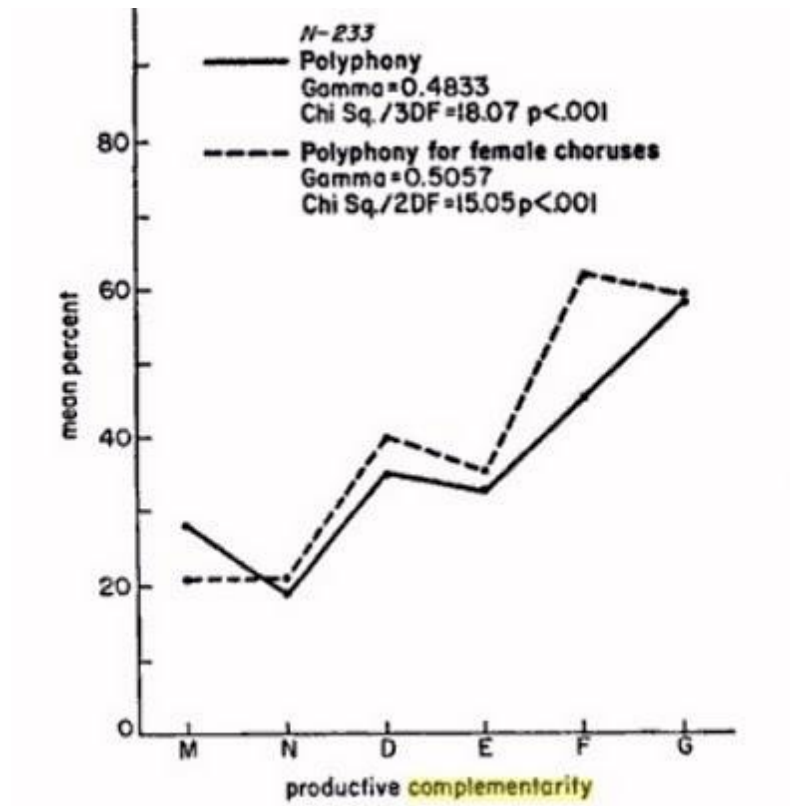


Figure 13.4 "Polyphony and Complementarity" (Lomax et al. 1968:167)

Chapter Fourteen

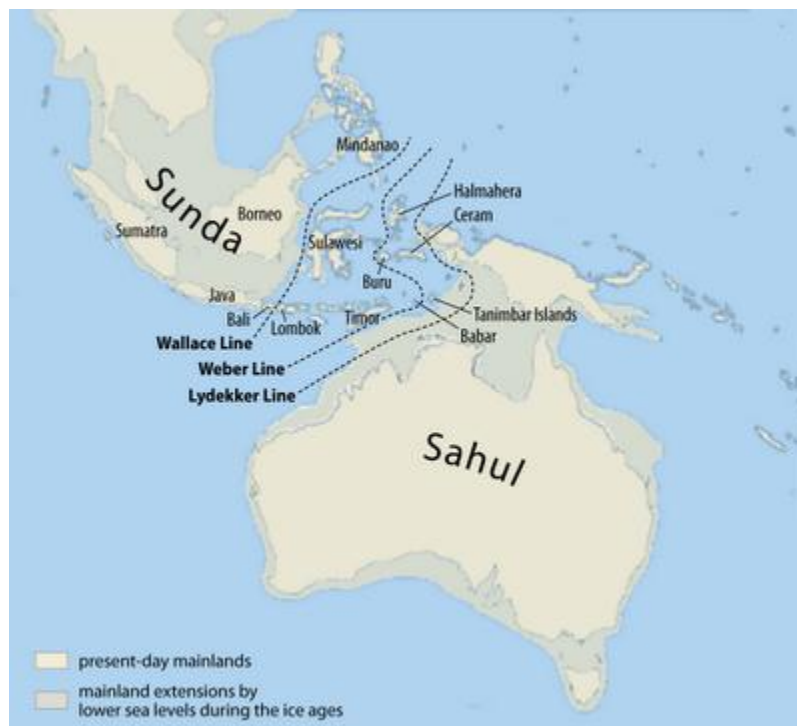


Figure 14.1 Sunda and Sahul

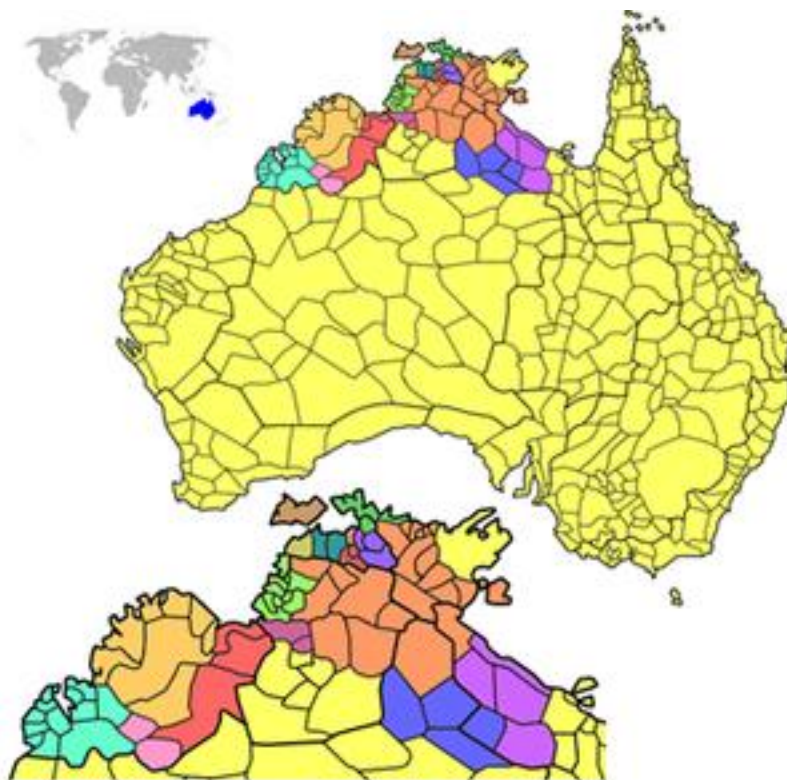


Figure 14.2 Native Australian Language Families



Figure 14.3 Joseph Birdsell with adult Australian Pygmy

Chapter Fifteen

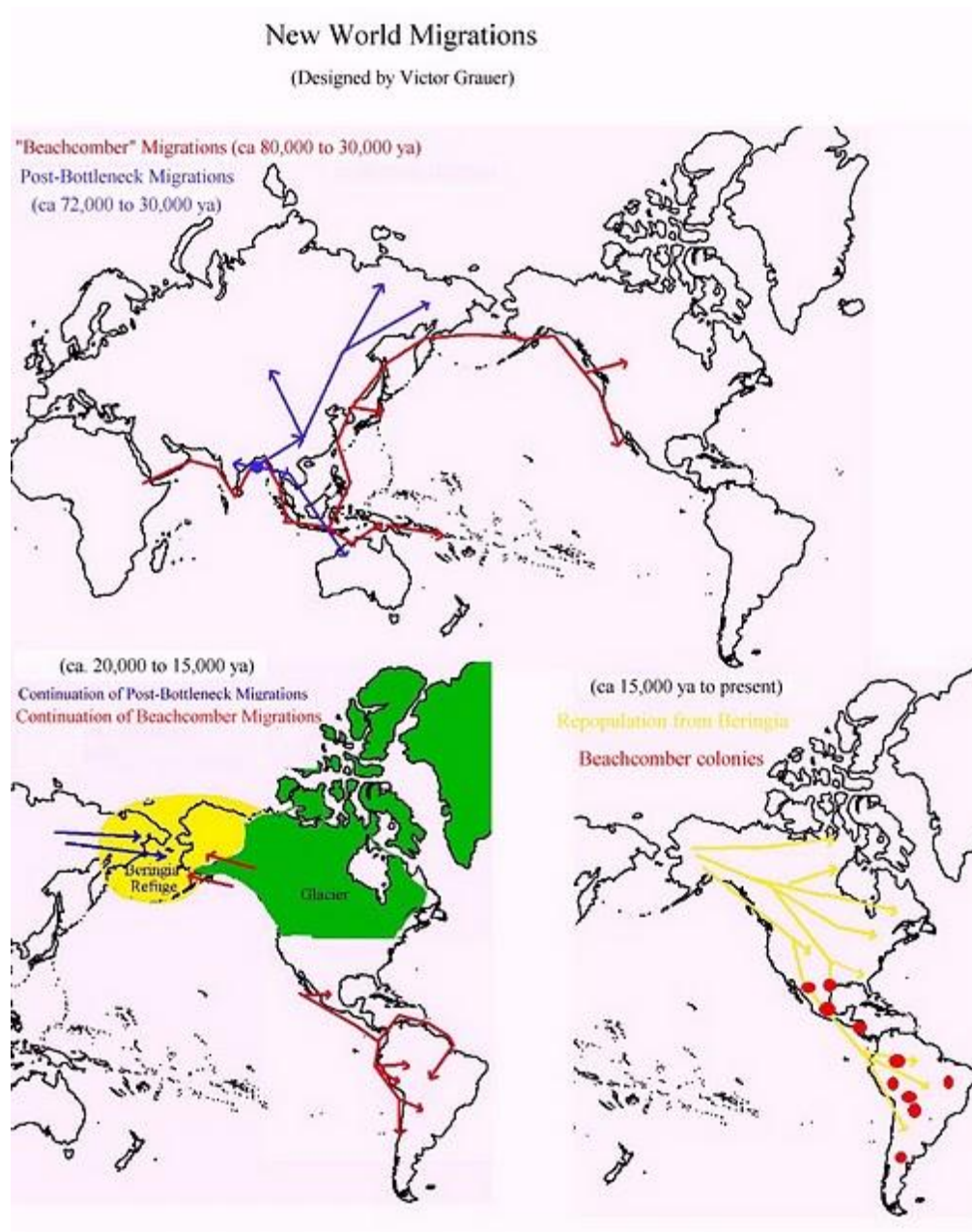


Figure 15.1 New World Migrations

Chapter Sixteen

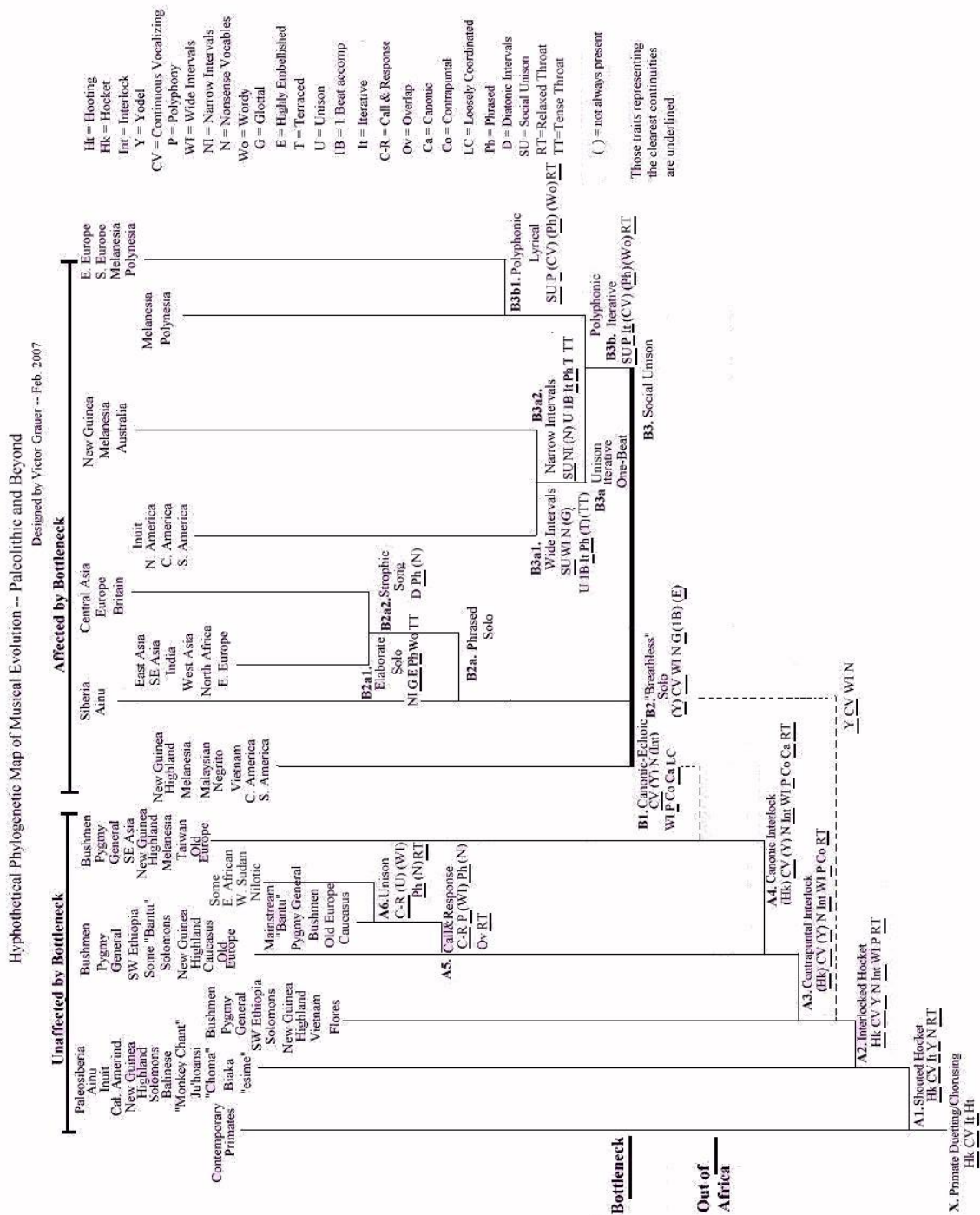


Figure 16.1 Phylogenetic Map of Musical Evolution. For details on how it was constructed and how to interpret it, see Appendix B.



Figure 16.2 Siamang Air Sac

Chapter Eighteen



Figure 18.1 (from Xinhuanet, April 5, 2004)

Appendix A

12/8 Tempo: ♩ = 80 to 130 → = shift 1/16 note (syncopation)

	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Dance beat: (clapping)	C			C					C				C				C				C			
Small drum:	X	X	X		X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X
Big drum: (improvising)	X									X	X	X	X	X	X					X		X		

Theme:

Ee Ya Ee Ya Ma - ka - la Eh Ah Ee Ya Na Le - le Oh Ho Ho

Elaborations:

A Oh Oh Oh Ho Oh Ho Oh Ho Oh Oh Oh

B Mbouya: Ho Oh Ho Oh Oh Oh Oh Oh Oh Ho Oh Ho Ho Ho Ho

C a Ndami: Ee Ya Hoo Eh Ee Ya Hoo Eh

D 1 Oh Ho Oh Ho Oh Oh Oh Ho Oh Ho Oh

E Ee Ya Le - le Oh Ee Ya Le - le Oh

Vertical lines and brackets are used to group notes and lyrics across staves, indicating tonal and motivic relationships. Brackets labeled 'a' and 'a1' indicate specific melodic motifs.

FIGURE 6-1 Mabo song, "Makala," sample cycle.

Figure A1: Outline of the Aka Pygmy song, "Makala," from Kisliuk 1998. Vertical lines and brackets have been added to clarify certain tonal and motivic relationships.

TRANSCRIPTION XLII

ŋŋ-ts'i-ma (Eland Song-little) MC 61-68, 3)

$\text{♩} = \text{ca. } 142$

Main Theme

Orig. begins almost a m2 higher

ŋŋ ku
ŋŋ si
ŋŋ aba

Voice 1

Voice 2

Voice 3

Voice 4

[Ve 5, ŋŋhuka ma, omitted]

Voice 6

Voice 7

Voice 8

etc.

Figure A2: Outline of the Ju/'hoansi Bushmen "Eland Song-little," from England 1995. Brackets added to clarify certain motivic relationships.

Ex. 8. ŋŋ -Ts'i ŋŋ!a (Eland Song Great).

a

b

c

Clap 1

Clap 2

etc.

Figure A3: Ju/'hoansi "Eland Song Great," from England 1967. Vertical lines added to indicate pitch class identities.

Mbuti--Amabeli-o-i-e

Recorded by Hugh Tracey

Transcribed by Victor Grauer



Figure A4 - Mbuti Song, "Amabele-o-i-e" -- recorded by Hugh Tracey, transcribed by Victor Grauer

Ju/'hoansi Lion Song

Recorded by Emmanuelle Olivier

Transcribed by Victor Grauer



Figure A5 -- Ju/'hoansi Bushmen Song, "The Lion," recorded by Emanuelle Olivier, transcribed by Victor Grauer

Diye -- Aka divining song

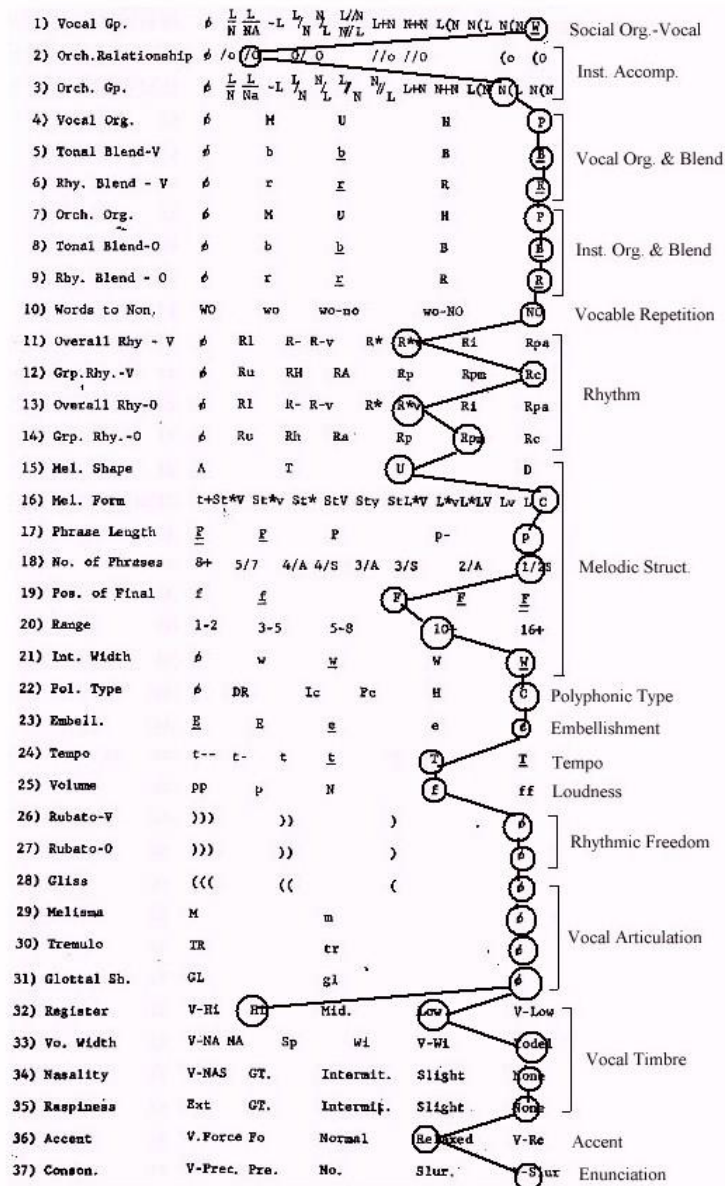


Figure A6: Cantometric Profile of Aka Divining Song, "Diye."

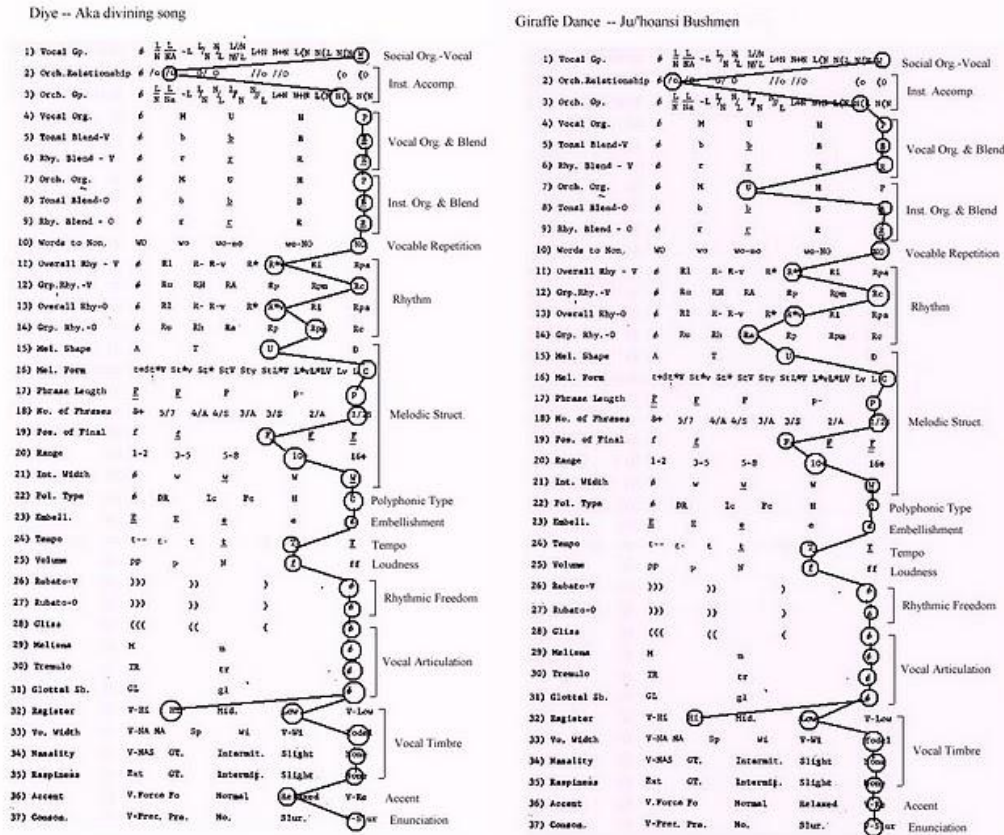


Figure A7: Pygmy and Bushmen Profiles Displayed Side by Side

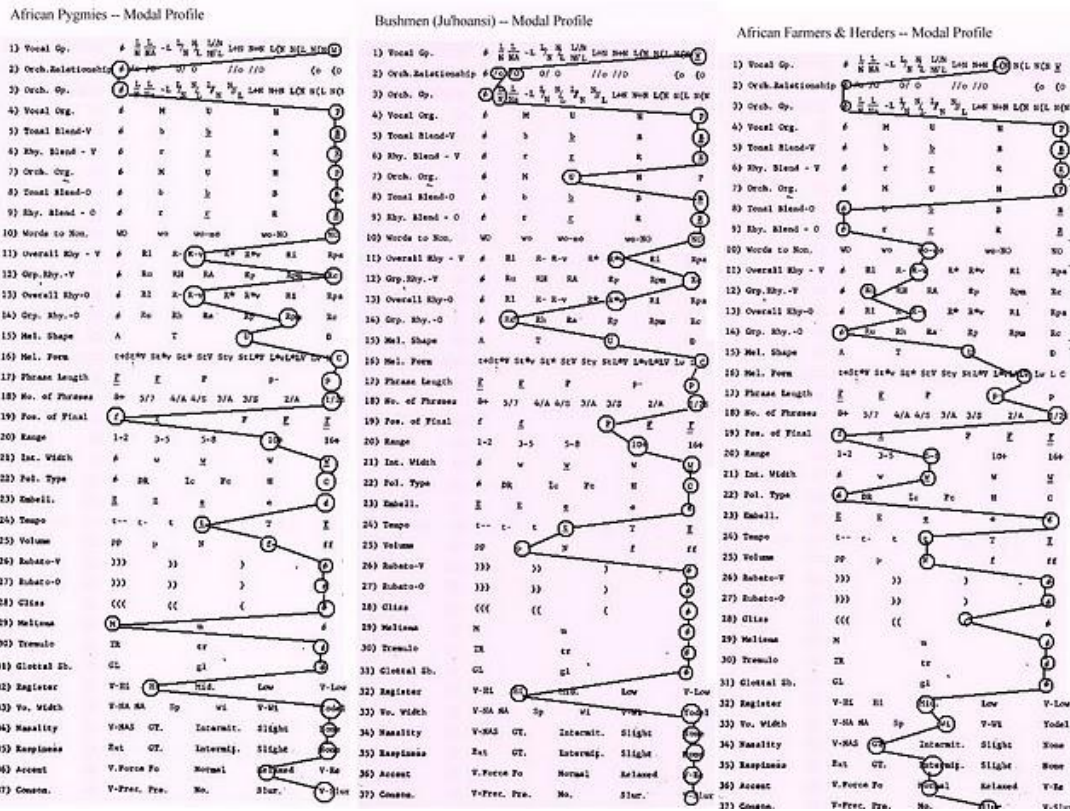


Figure A8 – Modal Profiles for African Pygmies, Bushmen and Farmer-Herders Compared (based on Tables A1-A3)

Appendix B

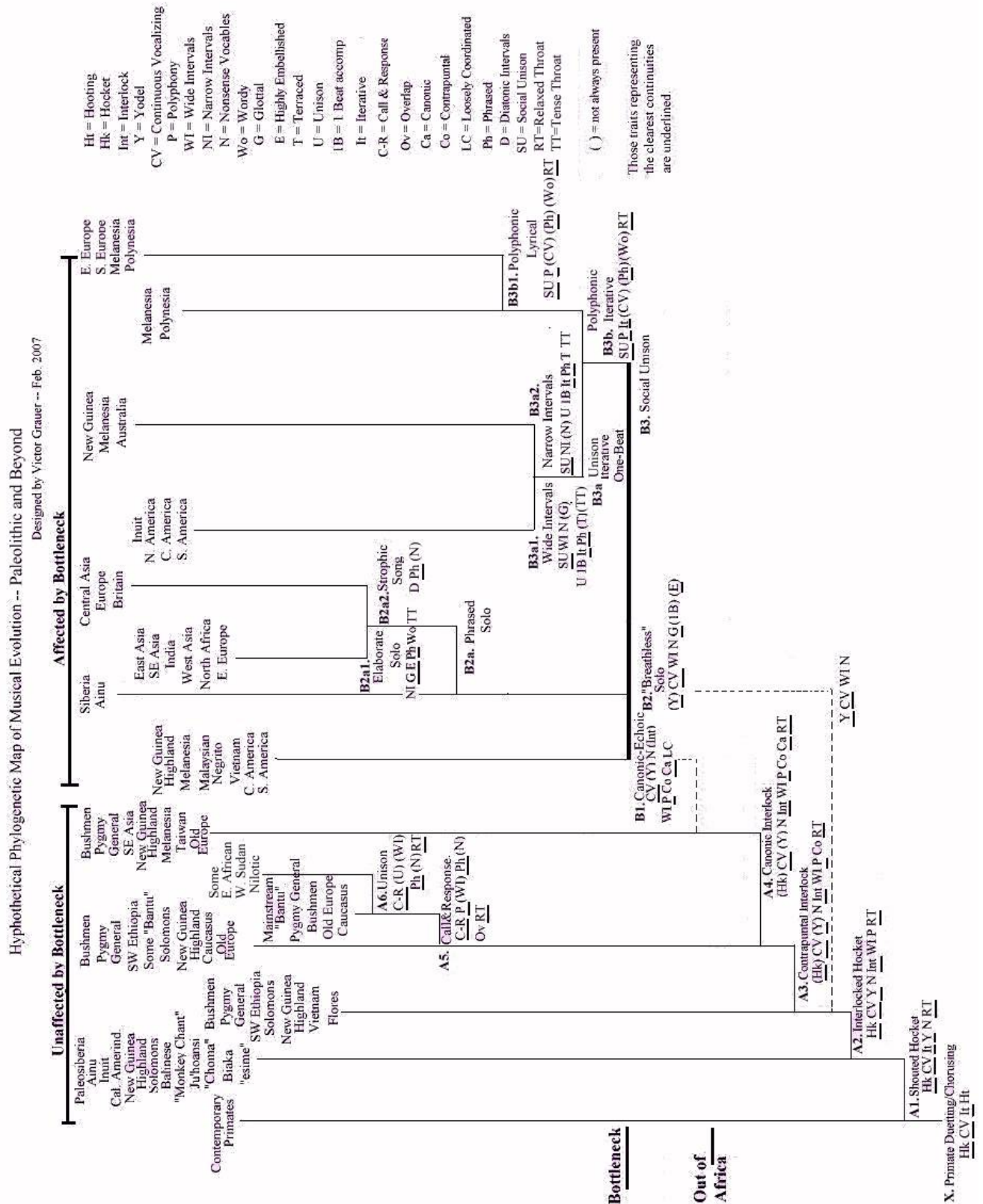


Figure B1 -- Phylogenetic Map of Musical Evolution -- Grauer

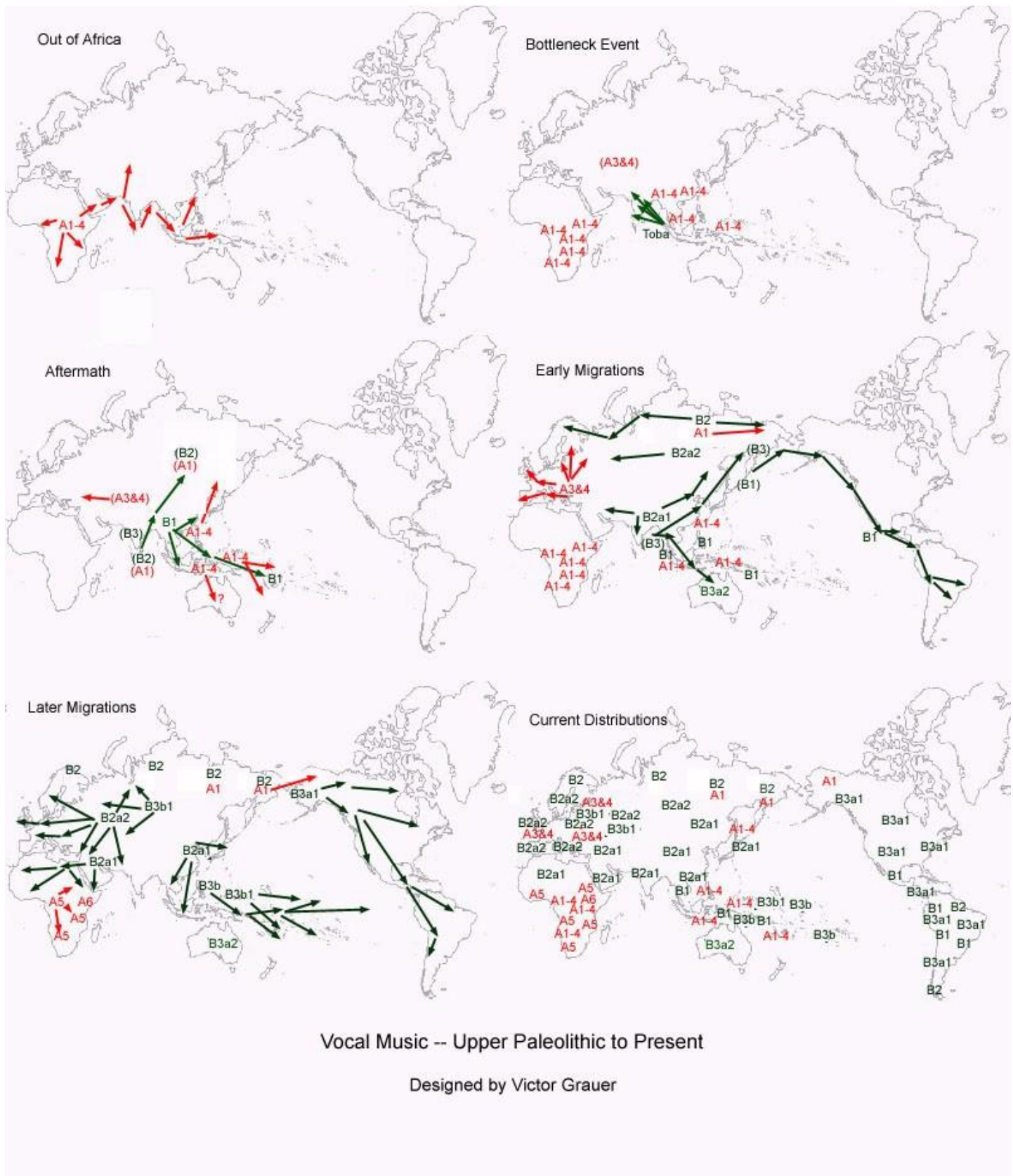


Figure B2 -- Historical Map of Musical Style -- Grauer