

Journal of the International Phonetic Association

<http://journals.cambridge.org/IPA>

Additional services for *Journal of the International Phonetic Association*:

Email alerts: [Click here](#)

Subscriptions: [Click here](#)

Commercial reprints: [Click here](#)

Terms of use : [Click here](#)



Ega

Bruce Connell, Firmin Ahoua and Dafydd Gibbon

Journal of the International Phonetic Association / Volume 32 / Issue 01 / June 2002, pp 99 - 104
DOI: 10.1017/S002510030200018X, Published online: 17 June 2002

Link to this article: http://journals.cambridge.org/abstract_S002510030200018X

How to cite this article:

Bruce Connell, Firmin Ahoua and Dafydd Gibbon (2002). Ega. *Journal of the International Phonetic Association*, 32, pp 99-104
doi:10.1017/S002510030200018X

Request Permissions : [Click here](#)

ILLUSTRATIONS OF THE IPA

Ega

Bruce Connell

York University, Toronto & SOAS, London
bconnell@yorku.ca

Firmin Ahoua

Université de Cocody, Abidjan

Dafydd Gibbon

Universität Bielefeld, Bielefeld

Ega is an endangered language spoken in the south-central region of Côte d'Ivoire, in Divo Department. The precise number of speakers is not known at present; the 14th *Ethnologue* (Grimes 2000) reports 291 to 3,000, and notes that 'the ethnic group is growing, but they are shifting to the Dida language because of intermarriage and other influences'. Our own preliminary and impressionistic work suggests the number of Ega speakers to be closer to the upper end of this range, perhaps around 2,000, but we note that Ega now serves a decreasing number of sociolinguistic functions, to the extent that in at least some villages Dida has replaced Ega as the primary language of daily use. It is also clear that the degree of intergenerational transmission is low in many, if not all, Ega villages.

With respect to genetic affiliation, Ega is recognized as belonging to the Kwa branch of Niger-Congo, though it is surrounded by Kru languages (Dida and Godié). This classification is not uncontroversial and is based on only a small amount of comparative evidence. Bole-Richard (1983), while accepting the classification, nevertheless draws attention to similarities with Benue-Congo and hints at the sometimes mooted Benue-Congo – Kwa continuum. The most recent classification of Ega (Williamson & Blench, 2000) has it as an isolate within Kwa, coordinate with all other branches of Kwa.

Ega is of linguistic interest for a number of reasons. It appears to have a more complex phonetics, phonology and morphology than other Kwa languages, as well as syntactic characteristics atypical of Kwa. To some extent these may reflect more archaic stages of Kwa language development. Of particular interest from the standpoint of phonetics and phonology, Ega features contrastive implosive consonants at five places of articulation, depressor consonants and a system of nine vowels featuring ATR harmony.

Little has been written on Ega. The most accessible publication is that of Bole-Richard, mentioned above. In addition, Bole-Richard has published two other brief articles on the language (1981, 1982), an unpublished lexicon is in circulation (Bole-Richard n.d.), and the language has been the subject of a Master's dissertation at the Université de Cocody in Côte d'Ivoire. The sociolinguistic situation surrounding the endangerment of Ega has been explored by the present authors (Connell et al., 2001), who have a more extensive study of language knowledge and use among the Ega in

preparation. More detailed work on other aspects of Ega, including its phonetics and phonology, is also in preparation.

The two principal speakers used for the present study are Gnaoré Grogba Marc, aged 54 when the study was undertaken, and Baze Lucien, 35 at the time of the data collection. Gnaoré Grogba Marc is a native of Gniguedougou, a village with a population of approximately 750, and is the village storyteller. Gniguedougou is one of the few Ega villages where the language is still used for the entire range of daily functions. Baze Lucien is from the village of Gnama, a village where the language is under threat. Though there is said to be some dialect variation within Ega, both of these villages are of the same dialect area. Like Gnaoré Grogba Marc, Baze Lucien has an excellent command of his language and the speech of the two men cannot be said to differ in any substantial way. A number of other inhabitants of Gniguedougou also contributed to the work reported here. Audio renditions of all words and phrases transcribed in this paper are available at the Ega website: <http://coral.spectrum.uni-bielefeld.de/LangDoc/EGA/>.

Consonants

The consonant system has been described by Bole-Richard (1982) in terms of a fortis – lenis contrast, especially with regard to the two series of voiced obstruents. Here this contrast is presented in terms of plain voiced and voiced implosives. Ega employs this contrast at five places of articulation, and is one of the very few languages reported to have such an extensive set of implosives. The only other such language known to the authors is Mbatto, spoken in south-eastern Côte d'Ivoire. The ingressive airflow is readily perceptible with labials, alveolars and velars. It is often more difficult to discern with the palatal and particularly with the labial-velar, the plain variant of which also involves buccal suction, presumably through use of a velaric airstream mechanism. The ingressive airflow and reduced intraoral pressure has been observed instrumentally, in work that is to be reported elsewhere.

The voiced obstruent series /b, d, ɟ, g, ḡb, v, z/ are depressor consonants, the effect of which on tone realization is noted below. We only add at this point that their lowering effect on following M and H tones is a salient perceptual cue in distinguishing these from their implosive congeners. These consonants are all contrastive in initial position, as illustrated below.

	Bilabial		Alveolar		Palatal		Velar		Labial Velar	
Plosive	p	b	t	d	c	ɟ	k	g	kp̄	ḡb̄
Implosive		ɓ		ɗ		ɟ̄		ḡ		ḡɓ̄
Nasal		m		n		ɲ		ŋ		
Fricative	f	v	s	z			x			
Approximant						j				w
Lateral Approximant				l						

pá	'fish'	ḡḡḡé	'vegetable' (sp)
bá	'send away'	ùḡḡò	'cooking pot'
ḡá	'complete'	ùḡḡò	'mouse' (sp)
tá	'speak'	má	'leave nothing'
dá	'show'	nà	'walk'

ɖá	‘hide’	ɲà	‘suck’
ɓá	‘understand’	ɲʷà	‘tie’
ǰé	‘become numerous’	fá	‘consult’
fè	‘swear’	vá	‘excuse’
ká	‘and’	sá	‘break in two’
gà	‘cook’	sù	‘break (a piece of wood)’
ǰà	‘count’	ùzùzù	‘shadow’
kpá	‘build a hedge to enclose a field’	xé	‘carry’
ǰbá	‘finish’	ǰé	‘fill’
kpé	‘peel’	wá	‘kill’
ǰbé	‘become thin’	lá	‘sleep’

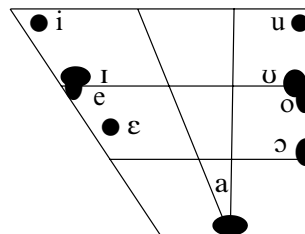
Conventions and distributional restrictions

1. Prevocalic /ɲ/ is realized as [ɲʷ] before front (unrounded) vowels and as [ɲ] before back (rounded) vowels; postvocally it is always realized as [ɲ].
2. /z/ occurs only rarely.
3. Clusters comprised of two consonants occur, but only with severe restrictions on what can appear in C2 position: only //l/. It can combine with virtually every other consonant, being realized as [r] after coronal fricatives, approximants and /c/, and as [n] when combining with nasals. Otherwise it is realized as [l], though in apparent free variation with [r]. Both /j/ and /w/ also co-occur with other consonants, though their status in this context – i.e. whether they form part of the onset or part of the nucleus – is at present unclear.
4. /x/ is realized either as voiceless [x] or as a voiced fricative [χ], and at times as a glottal fricative [h] by some speakers. These appear to be in unconditioned variation. As it does not pattern with the other voiced obstruents with respect to the depressor effect, in phonemicization it is notated as /x/.

Vowels

Ega has a system of nine vowels, divided into two sets according to tongue root advancement (ATR). This feature forms the basis of vowel harmony in Ega: within a noun or verb phrase, between noun and dependent grammatical elements or verb and dependent grammatical elements, the ATR value of vowels is consistent, either [+ATR] or [−ATR]. Except in prefixes, where it occurs with either set, the low vowel /a/ is [−ATR]. The vowels are transcribed using the symbols [i, e, u, o] for the [+ATR] vowels and [ɪ, ɛ, ʊ, ɔ] for [−ATR] to avoid the use of diacritics. There appears to be dialect variation (and perhaps aged-based variation) in the harmony system, with the [ATR] feature being confounded with one of height. This is unsurprising given that tongue height is frequently concomitant to tongue root advancement.

ɓì	‘give birth’
àɓì	‘beans’
ɓè	‘swallow’
ɓè	‘plant’
ɓù	‘become rotten’
ɓò	‘climb up’
ɓó	‘trap’
ɓónè	‘begin’
ɓá	‘complete’



Apart from its vowel harmony, the most striking feature of the Ega vowel system is the frequency of vowel hiatus phenomena. Vowel hiatus regularly results in the elision, coalescence or assimilation of one of the two vowels. The conditions governing hiatus phenomena are complex, and are explored in Dago (1999).

Conventions and distributional restrictions

1. Vowel harmony exists as described above.
2. Ega vowels are nasalized in the environment of nasal consonants. Nasalization is heavier when the nasal precedes the vowel.

Tone

Ega is a register tone language with three basic level tones, High (H), Mid (M) and Low (L). Tone functions both lexically and grammatically. Examples of the three tones are:

ní tá 'I speak'
 ní tǎ 'I spoke'
 ní tǎ 'I chew'

Tonal contours come about through a number of different processes. First, tones may combine on monosyllables to give contours of HM, HL, MH through synchronic or diachronic processes of vowel deletion, leaving the unassociated tone to dock on a preceding or following vowel (cf. Ahoua & Leben 2001, Leben 1999 for discussion of such processes in Kwa generally). In these instances, it is clear that two tones are associated with one tone bearing unit (TBU). Other contours arise through the effect of the voiced series of plosives which act as depressor consonants (see below): following M and H tones are realized with a rise, which may be analyzed alternatively as simply a phonetic effect of the depressor consonant or as the association of an L with the depressor consonant which spreads to the following TBU, giving LM and LH contours. Lending some support to the latter analysis, the depressor consonants also appear to exert an influence on the realization of preceding tones in that, at least for noun class prefixes, the tone is always L before a depressor, though this effect does not appear other than on the class prefixes. Tones following non-depressor consonants are level, other things being equal.

Minimal pairs are not easily found among the nouns of the language because, on one hand, the prefixes that occur before nominal stems generally bear a mid tone, and on the other because of the depressor consonants that create melodic tones or tonal contours.

Tables 1 and 2 show the distribution of tones classified according to consonant types.

Table 1 Tones of nouns before and after depressor consonants.

<i>LL</i>		<i>LM</i>		<i>LH</i>	
ùblù	'paddle'	èbǎ	'dismissal'	èbǎ	'race'
ìdà	'pile'	èdǎ	'showing'	òdǎ	'cloth'
ìgò	'hunger'	ìgǎ	'Ega' (language)	ìgò	'hedgehog'
ègbà	'sickle'	ègbò	'maturity'	ègbǎ	'sculpting, carving'
ìjǐ	'clay'	èjǎ	'raider'	èjǐ	'silence'
òvè	'silk cotton tree'	òvè	'dog'		

Table 2 Tones of nouns before and after non-depressor consonants.

L L		M M		M H	
àḍi	'beans'			ũḍó	'flour'
òḿà	'mouth'	ēmō	'smelling'	ēmá	'drying of a river'
èfì	'children'	ēfē	'taking flight'	ēfì	'eye'
òtā	'war'	ētā	'word, speech'	ētá	'finger'
èḍà	'kola'	ēḍā	'burial'	ēḍó	'bridge'
àlà	'sleep' (n.)	ēlā	'sleeping'	ēlá	'theft'
ìḿì	'name'	ēnā	'meat'	ēná	'walking'
àsò	'blood'	ōsī	'woman'	āsú	'sauce'
		ĩcō	'liver, heart'	ēcì	'laughing'
		ēfō	'blackening'	ēfú	'marriage'
òjì	'cold'	ũjē	'bundle of wood'	ējá	'yam'
ìḿà	'breast'	ējē	'arrival'	ējá	'sucking'
ìkà	'fire'			ēká	'eagle'
		ōxā	'millipede'	ōxá	'crab'
ìkḗ	'chair'	ēkḗ	'peeling'	ìkḗ	'hat'
òwà	'crocodile'	ēwā	'killing'	ēwá	'calabash'
àḿò	'air'	ōḿwī	'year'	ēḿó	'housefly'
èzò	'quarrel'	ìzē	'wood'		
ègà	'chewing stick'	ēgā	'widening'	ēgá	'calculation'
		ēgḗ	'suspension'	ìgḗ	'vegetable'

Tone realization at a more global (phrasal) level appears to be relatively uninfluenced by declination. There does appear to be some form of lowering, which we refer to as automatic downstep, however, detailed work to understand the true nature and motivation of this downtrend is only in the initial stages.

Transcription of recorded passage

Narrow phonetic transcription

To be especially noted is the degree of elision and contraction when compared to the phonemic transcription that follows.

mō wà: || ēsīēkpè té Ì xēlí ìḿwūl̃ ḿwè || kánōtō p^{wi} ógbì ||
 mā? ɔ́nā́ māséá | Ì wí nā | ká Ì kàbō ||
 kálì kò àbójúḿné | Ì kō máāgō |
 ɔ́nāmījímō ò:: klíḍiā tó::: | ɔ́sīē tó::: ||
 ká ésūōkpè | té ká l̃ ḿnē ||
 āpūtē ésīōkpè | té ḿēnāwà gànégbì d̀ò
 sīā || āí lí w̃l̃ ɔ́:ḿā | t̃:vlā Ì vláí: zéā || lí kò wā́ ìgā́ : ||
 k̃ ñ ḿā: || ñ k̃ w̃t̃ò m̃āg̃ó ||
 ñ wāwā mālōfó ||
 ñ sīā wé sā tó::: || ñ sí t̃ wí ||
 ɔ́nā má j̃ ḿ t̃ó sīā ésūōkpè | t̃ó ā vlāì vlá j̃á yínū gā ||
 áí yā kl̃ó || áḍíō ísḍà | ā ḍiābí j̃á ỹ úgbòg̃ōtū sí ɔ́nìgbì j̃ōfì ||

Phonemic transcription with English glossing

mō wàà é̄sūēkpè té lí xēlí ɪ̄n̄lí ɪ̄n̄wè ká ní òtò pō jí ògbì
 They – say – young girl – ART – she – be – years – five – then – her – father – give – her
 – husband.
 má ɔ̄n̄â má séā lí wá ínā ká lí kō ābō
 CONJ – man – DEM – DEM – he – kill – animal – and – he – please – parents-in-law
 ká lí kō ābō fún^wēnē lí kó mí ágō
 and – he – please – parents-in-law – things – he – build – them – houses.
 ɔ̄n̄â má jí klíðīā tó ɔ̄ síē tó
 Man – DEM – he – suffer – so much – he – become tired – so much
 ká é̄sūēkpè té lí n̄rē
 then – young woman – ART – she – become marriable
 āpūté é̄sūēkpè mé ɔ̄ n̄rē ká lō gánáwá ē̄gbì d̄òē
 when – young-woman – DEM – she – become pubescent. Then – she – be able –
 husband – go to bed
 séā ājí lí w̄līxē ɔ̄n̄â táā ò w̄là lí w̄lá jí séā lí kò w̄ájí ɪ̄gòā
 then – if – she – see – man – DEM. – Only – she – insult – him – then – she – NEG – go
 – feel like.
 ká ìnò ɔ̄n̄â nō kō wá òtò má ágō
 then – I – man – I – build – your – parents – houses
 nō wāwā mí álōfó
 I – cut down – their – palm trees
 nō síēwā tó ā ní ɔ̄sí té ɔ̄wí é̄sūēkpè té ò
 I – tire – so much – you – my – wife – DEM – be – young woman – DEM – only
 vlā lí vlā jí ā ájí xiā ìnū gá ájí xiā ē̄kló ká lí d̄íō jí
 insult – she – insult – him – you – with – your – head – big – with – your – legs – CONJ
 – she – leave – him
 ìs̄dā ālí d̄íō ābū jáxō úgbōgōtò òn̄ìḡb̄ì j̄iā òf̄i
 then – she decide – leave – now – as – Ugbogotu – rich – for its – child.

References

- AHOUA, F. & LEBEN, W. (2001). Tonal changes in the Bia languages of Central Tano. Paper presented to the Typology of African Prosodic Systems workshop. Bielefeld, May 2001.
- BOLE-RICHARD, R. (1981). Une autre approche de l'harmonie vocalique: Le mot phonologique en Ega. *Cahiers Ivoiriens de Recherche Linguistique* 10, 33–51.
- BOLE-RICHARD, R. (1982). L'Ega. In Herault, G. (ed.) *Atlas des Langues Kwa de Côte d'Ivoire*, 359–401. Abidjan: Institut de Linguistique Appliqué, Agence de Coopération Culturelle et Technique.
- BOLE-RICHARD, R. (1983). La classification nominale en Ega. *Journal of West African Languages* 13.1, 51–62.
- CONNELL, B., AHOUA, F. & GIBBON, D. (2001). Ega: a preliminary assessment of endangerment. Presented to the 32nd Annual Conference on African Linguistics. Berkeley.
- DAGO, G. (1998). Etude phonétique et phonologique de l'Ega. Mémoire de Matrisse, L'Université de Cocody, Abidjan.
- GRIMES, B. F. (ed.) (2000). *Ethnologue: Languages of the World* (14th edn.). CD-ROM version. Dallas, TX: Summer Institute of Linguistics.
- LEBEN, W. (1999). Weak vowels and vowel sequences in Kwa: sounds that phonology can't handle. In Fujimura, O., Joseph, B. D. & Palek, B. (eds.), *Proceedings of Linguistics and Phonetics '98*, 717–732. Prague: Karolinum Press.
- WILLIAMSON, K. & BLENCH, R. M. (2000). Niger-Congo. In Heine, B. & Nurse, D. (eds.), *African Languages: An Introduction*, 11–42. Cambridge: Cambridge University Press.