Polysemy patterns involving non-scalar additive particles in Subsaharan languages: the coordinative connection

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1. Introduction

In Subsaharan languages, the discourse particles expressing non-sacalar additivity (corresponding to English 'also' or 'too') are rarely completely specialized in this function. However, their additional functions vary cross-linguistically.

Some of the historical processes that may be responsible for the polysemy of the words that have the expression of non-scalar additivity at discourse level as one of their possible functions have been discussed in the literature (see among others Abdoulaye 2004, Amfo 2010, Aubry 2014, Lord 1993, Mithun 1988, Trutenau 1973). In this presentation, after a brief survey of the polysemy patterns in which additive particles can be involved in Subsaharan languages, I focus on the use of the same morphemes as additive particles and plural markers. The semantic motivation of this coincidence is not difficult to imagine, but it was not mentioned in the announcement of the workshop, and to the best of my knowledge has never been discussed in the grammaticalization literature.

2. Polysemy patterns involving non-scalar additive particles: some Subsaharan illustrations

The chart on p. 2 illustrates the polysemy of words or clitics including the expression of non-scalar additivity at discourse level among their possible uses in a sample of genetically diverse languages from various parts of Subsaharan Africa. In this chart, the columns (whose ordering must not be taken as having any particular significance) refer to the following functions:

- 1 = non-scalar additivity ('also')
- 2 =scalar additivity ('even')
- 3 = topic shift ('in his/her turn', 'as for him/her')
- 4 = NP additive coordination ('and')
- 5 =comitative adjunction ('with')
- 6 =plural marking
- 7 = clause coordination
- 8 = contrast between successive clauses ('however')
- 9 = concessive subordination ('although')

	1	2	3	4	5	6	7	8	9	10
Amharic (Semitic) -mm	+	+	+				+			+
Goemay (Chadic) zák	+							+		
Hausa (Chadic) kúmấ	+						+			
Igo (Kwa) ká	+	+								
Jamsay (Dogon) kâ: ⁿ	+	+								
Kanuri (Saharan) yé	+						+			
Khwe (Central Khoisan) tamaxa	+	+								
Koyraboro Senni (Songhay) moo	+		+							
Maba (Maban) ká	+			+			+			
Mandinka (Mande) fánáŋ	+		+							
Mano (Mande) nì	+	+				+				
Sar (Central Sudanic) gēē	+			+		+				
Sereer (Atlantic) o	+			+						
Soninke (Mande) qá	+		+							
Tswana (Benue-Congo, Bantu) lí-	+	+		+	+					
Wolof (Atlantic) itam									+	
Yoruba (Benue-Congo) pệlú	+			+	+					
Zay (Semitic) -m	+								+	

10 = formation of indefinite pronouns from interrogatives.

This sample does not suggest any clear areal or genetic pattern, and in this presentation I will not try to pursue this issue further. I will concentrate on the coincidence between the equivalents of 'also', 'too' and plural markers, which among Subsaharan languages can be found in at least two language groups (Mande and Sara) that are not considered as genetically related,¹ and are spoken in areas very distant from each other.

3. Additive particles and plural markers

3.1. The Mande data

The table on top of p. 3 (adapted from Vydrin 2009) summarizes the classification of Mande languages. The languages quoted in the discussion are in italics.

Mano (South Mande) has a marker **nì** used as an additive particle (1a-b), but also as an associative plural marker (1c), and also to a limited extent as an ordinary plural (1d).

¹ The Mande language family was included by Greenberg in the Niger-Congo phylum, but the evidence for a Niger-Congo affiliation of Mande is rather slim, and for example Dimmendaal (2011) argues that Mande is best treated as an independent language family. Sara is a group of closely related languages included in the Central Sudanic family, which constitutes one of the major branches of the Nilo-Saharan phylum.

South-East Mande	South Mande	Dan Guro <i>Mano</i> etc.			
	East Mande	Bisa San Busa etc.			
West Mande	Soninke-Bozo	<i>Soninke</i> Bozo languages			
	Bobo-Samogo	Bobo Dzuun etc.			
	Central	<i>Manding languages</i> Jogo-Jeri Kono-Vai etc.			
	Soso-South-West-Mande	Soso-Jalonka South-West Mande languages (Mende, Kpelle, Loma, etc.)			

- (1) Mano (South Mande; Khachaturyan 2014: $114 glosses adapted)^2$
- (1a) **ī béē Franko nì lē.** 2SG friend Franko ADD OST 'There is also your friend Franko.'
- ระี้ ที่ (1b) **à** pē nū-pìà à ká à pónó nì. 1SG.LOCCOP come-INF 3SG thing all 3SG with 3SG oil ADD 'I am bringing everything, even oil.' lit. 'The whole of it, I am coming with it, even its oil.'
- (1c) kò bī nì 1PL.and 2SG.EMPH ASSPL 'you and me and other persons'
- (1d) **mōtōò nì ō ká píé.** motorbike PL 3PL.LOCCOP house several 'Several families have motorbikes.'

 $^{^{2}}$ ADD = additive particle, ASSPL = associative plural, LOCCOP = locational copula (also used as incompletive auxiliary), OST = ostensive, PL = plural, SG = singular.

A formally similar marker of associative plural with more or less restricted uses as an ordinary plural can be found in South-West Mande languages (Mende **ni**, etc.), and in Soninke (**-ní** or **-nú**, depending on the dialectal varieties).³ Ex. (2) illustrates the use of the plural marker **-nú** in the Kingi variety of Soninke.

- (2) Soninke (West Mande; pers.doc.)⁴
- (2a) Hàatú-nú sángà wùrí.
 Fatou-ASSPL play last_night
 'Fatou and her friends organized a dance last night.'
- (2b) **nàa-nú-n dà ó tèe-nú-n bònò-ndí.** cow-PL-D TR 1PL field-PL-D get_spoilt-CAUS 'The cows have spoilt our fields.'

Vydrin (2006) reconstructs an associative plural marker $*-ni(\eta)$ for Proto-South-West-Mande, but the distribution of the languages in which plausible cognates of this marker can be identified suggests considering $*-ni(\eta)$ 'associative plural' as a Proto-Mande reconstruction.

Khachaturyan (2014) does not mention a coordinative use of ni (plural marker and additive particle), although one of the examples she quotes can be suspected of having been misinterpreted: in (2), one may wonder whether ni really functions as a plural marker with the interpretation 'different sorts of', or rather as a marker of additive coordination.

(2) Mano (South Mande; Khachaturyan 2014: 114 – glosses adapted)⁵

wèīŋ nì, súò nì,salt ? pepper ?'different salts, different peppers,[or perhaps simply 'salt and pepper'?]

Be that as it may, comparative data suggest a connection between Mano ni and the expression of NP additive coordination, since Mano ni is a plausible reflex of Proto-Mande *-ni(n) 'associative plural', which in its turn is probably cognate with comitative prepositions also used for NP additive coordination found in Central Mande languages and in Soso-Jalonka. Ex. (4) illustrates the coordinative use of Mandinka (Manding) nin 'with'.

³ Unfortunately, at the current state of our understanding of tonal correspondences between Mande languages, the tonal coincidences or discrepencies between otherwise similar forms cannot be used to either confirm or reject the hypothesis of a common etymology.

 $^{^4}$ ASSPL = associative plural, CAUS = causative, D = default determiner, PL = plural, TR = transitivity marker.

⁵ PL = plural, PRET = preterit, SG = singular.

(4) Mandinka (Manding, Central Mande; Creissels and Sambou 2013: 296)⁶

Ifuta-táFúládûuníŋKaabúnaanéw-oto.3PLreach-CPLFuladuuCOORDKaabuboarder-DLOC'They reached the border betweenFuladuu and Kaabu.'

To summarize, within the limits of the documentation I have been able to gather on Mande languages, Mano is the only language providing direct evidence of a possible link between additive particles equivalent to English 'too' and plural markers, but comparative data suggest that markers cognate with Mano **n**i can be found in several branches of the Mande family, either as associative plural markers, or as comitative prepositions whose uses include NP additive coordination, i.e. with meanings clearly related to additivity.

3.2. The Sara data

As illustrated by ex. (5) and (6), Sara languages typically have a marker (Kenga $\mathbf{g}\mathbf{\dot{e}} \sim \mathbf{g}\mathbf{\ddot{e}}$, Bedjond $\mathbf{j}\mathbf{\ddot{e}}$) whose uses include the expression of associative plural, ordinary plural, and NP additive coordination (but not comitative adjunct marking – cf. $\mathbf{t}\mathbf{\ddot{e}}$ 'with' in Ex. (5b)). Note that, in Kenga, the variation between the allomorphs $\mathbf{g}\mathbf{\dot{e}}$ and $\mathbf{g}\mathbf{\ddot{e}}$ is purely phonological.

- (5) Kenga (Sara, Central Sudanic; Palayer 2004: 61-62)⁷
- (5a) pòòdò òs bēē gè.
 fire burn village PL
 'The fire burnt the villages.'
- (5b) Gòdì bàà tò cérè gē.
 Godi go with Tchéré ASSPL
 'Godi went with Tchéré and his friends.'
- (5c) Gòdì dūg kàmbàlt gē, kóór gē, kāād gè, cèté gē. Godi buy okra COORD sesame COORD calabash COORD pepper COORD 'Godi bought okra, sesame, calabashes, and pepper.'
- (6) Bedjond (Sara, Central Sudanic; Djarangar 1989)⁸
- (6a) **Kòdī jē Nàjī** Kody COORD Nadji 'Kody and Nadji'

 $^{^6}$ COORD = additive coordination marker, CPL = completive, D = default determiner, LOC = locative, PL = plural.

⁷ ASSPL = associative plural, COORD = additive coordination marker, PL = plural.

 $^{^{8}}$ ASSPL = associative plural, COORD = additive coordination marker, PL = plural.

- (6b) **Kòdī jē** Kody ASSPL 'Kody and other people'
- (6c) **bàtī jē** sheep PL 'sheep (pl.)'

As illustrated in (7), the Sar language presents a somewhat different picture. This language shares with Kenga and Bedjond the coincidence between the associative plural marker $\mathbf{g}\mathbf{e}\mathbf{\bar{e}}$ and (one of the possible forms of) $\mathbf{g}\mathbf{\bar{e}}\mathbf{\bar{e}} \sim \mathbf{g}\mathbf{\bar{s}}\mathbf{g}\mathbf{\bar{e}}$ 'and'. However, in Sar, the associative plural marker $\mathbf{g}\mathbf{\bar{e}}\mathbf{\bar{e}}$ and the ordinary plural marker $\mathbf{g}\mathbf{\bar{s}}$ are different, although probably cognate. But what is particularly relevant in the perspective of this presentation is the full coincidence between $\mathbf{g}\mathbf{\bar{e}}\mathbf{\bar{e}} \sim \mathbf{g}\mathbf{\bar{s}}\mathbf{g}\mathbf{\bar{e}}$ 'and' and the additive particle $\mathbf{g}\mathbf{\bar{e}}\mathbf{\bar{e}} \sim \mathbf{g}\mathbf{\bar{s}}\mathbf{g}\mathbf{\bar{e}}$ 'too'.

- (7) Sar (Sara, Central Sudanic; Palayer 1989: 388, 394-5, 554)⁹
- (7a) kàmỹō tɔ̄l kə̄njá-gə̄.
 car 3.kill chicken-PL
 'The car killed some chickens.'
- (7b) bɔ̀bō-í gē vs. bɔ̀bō-í-gō
 father-2SG ASSPL
 'your father
 and his friends'
 bɔ̀bō-í-gō
 father-2SG-PL
 'your father
 'your fathers' (your father and the persons socially
 assimilated to him in the classificatory kinship system)
- (7c) Kūtā màng bāngàw (gāgē) yìbā (gāgē) kānjā gāgē. Koutou 3.buy sweet_potato (COORD) oil (COORD) fish COORD 'Koutou bought sweet potatoes, oil, and fish.'
- (7d) **ī-màǹg pàndəlō gēē!** 2SG-buy trousers ADD 'Buy trousers too!'

To summarize, the situation in Sara languages is reminiscent of that observed in the Mande family, since among Sara languages, the coincidence between plural markers and additive particles equivalent to English 'too' is not widely attested, but the coincidence between associative plural markers and additive coordination markers equivalent to English 'and' is pervasive.

3.3. Discussion

The two Subsaharan languages in which I have been able to observe the coincidence between an additive particle equivalent of English 'too', 'also' and a plural marker belong to two language groups in which either the coincidence between associative

 $^{^{9}}$ ADD = additive particle, ASSPL = associative plural, COORD = additive coordination marker, PL = plural, SG = singular.

plural markers and additive coordination markers is pervasive (Sara), or there is comparative evidence of a relationship between associative plural markers and additive coordination markers (Mande).

Since the coincidence between additive particles and additive coordination markers is relatively common, both within and outside Africa, it seems reasonable to assume that, in the polysemy network in which additive particles are involved, additive coordination marking is the function that has a direct link with plural marking:

'also' ... additive NP coodinator – associative plural marker – ordinary plural marker¹⁰

As regards the possible explanation of the link between additive coordination of NPs and associative plural marking, Basque provides particularly convincing evidence, since Basque eta 'and' (possibly borrowed from Latin et) is the standard way of expressing additive NP coordination, as in (8a), and also has as an associative plural marking function that Basque grammars describe as the result of the ellipsis of the second coordinand in the N_1 eta N_2 construction, as in (8c).

(8) Basque¹¹

- (8a) [Koldo eta Patxi] joan dira. Koldo and Patxi go.CPL PRES.3PL 'Koldo and Patxi have gone.'
- (8b) [**Patxi eta Koldo**] **ikusi ditugu.** Patxi and Koldo see.CPL PRES.1PL.3PL 'We saw Patxi and Koldo.'
- (8c) [Patxi eta —] ikusi ditugu.
 Patxi and see.CPL PRES.1PL.3PL
 'We saw Patxi and the other persons with him.'

4. Conclusion

In this presentation, after examining Mande and Sara data on the possible coincidence between additive particles equivalent to English 'also', 'too' and plural markers, I have proposed that a plausible explanation of the presence of plural markers in polysemy networks that also involve additive particles is the grammaticalization of NP additive coordination markers as plural markers: conventionalization of the ellipsis of the second coordinand in NP additive coordination marker as an associative plural marker, which may subsequently be reanalyzed as an ordinary plural marker:

X and \emptyset > X and other persons associated with X > several X's.

¹⁰ The suspension points mean that I leave entirely open the question of the possible interconnections between the other functions involved in the polysemy network.

¹¹ CPL = completive, PL = plural, PRES = present, SG = singular.

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