

From polarity to reduplication in Gã

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Claim: I argue that Gã (Niger-Congo: Ghana) negative polarity items (NPIs) which are derived by reduplicating indefinite DPs are analyzeable as a spellout of a valued POL(arity) feature on such D heads. Given that all indefinite DPs in the language become NPIs whenever they are reduplicated, and all non-reduplicated indefinite DPs can be reduplicated under the scope of negation, I assume that all DPs which are headed by indefinite Ds are of this type: $D_{[uN(P), POL: _]}$; they have a polarity feature whose valuation is interpreted as reduplication at PF. The morphology of the relevant constructions suggests that the timing of the valuation operations (Pesetsky & Torrego 2007) of T(ense) on NEG and V, and POL on DP are strictly ordered especially for the purposes morpheme linearization.

Data: Reduplicating indefinite DPs to form NPIs is a productive morpho-semantic process in Gã. In (1), such NPIs, similar to the *any* series in English, are derived by totally copying indefinite D heads i.e. *ko* which have taken generic meaning N heads i.e. person, thing, place, time, day, as complements. Interestingly, all other NPs even with specific meaning N heads which can occur as complements of *ko* can participate in this derivational process, as (2a-b) show. It is significant to note that what is reduplicated is an XP, a phenomenon which may be described as ‘syntactic copying’ (Kemper 2008). Thus in (2c), the N head is modified by an adjective *agbo* ‘big’. (2d) shows that definite DPs do not allow this NPI formation strategy, and when *ko* selects a plural NP complement (in which case it agrees with the noun in number), the NPI formation process is again blocked (2e). The latter situation may be attributable to the presence of the plural marker, given that many languages form their NPIs with an indefinite DP headed by a form related to the numeral one. Here, it is insightful to note that the form *ko* may be morphologically related to how Gã expresses the numeral ‘one’ i.e. *e – ko*.

(3) shows that the indefinite DPs may freely occur with or without negation. But their reduplicated (NPI) forms are only possible in the context of negation as shown by (4a) and (5a), supporting a view in the literature e.g. Zeijlstra (2013), that though NPIs do not induce semantic negation by themselves, they are only licensed in the context of negation. (4) and (5) also show that unlike languages like English, Gã NPIs can freely occur in both subject and object positions in the clause, just like Hindi (Lahiri 1998), Japanese, Korean and Basque.

Analysis: To the best of my knowledge, there exists no formal account of the present phenomenon in the literature. Given that the semantics of the NPIs created via reduplication is non-compositional (Regier (1998), I assume that we get a reduplicated indefinite DP as an NPI when the D head of the indefinite DP which (I assume) also carries a polarity feature is valued by a c-commanding NEG head as in (8c) (see Laka (1990); but also Collins and Postal (2014) for an alternative view). A valued POL overtly realizes RED at PF. PF interpretes this as an instruction to totally copy the DP e.g. Frampton (2009). Meanwhile at LF, the valued POL is interpreted as an instance of negative polarity. Conversely, an unvalued POL realizes a null RED. This is the nature of indefinite DPs which are not NPIs. Thus I postulate two vocabulary items for indefinite DPs in Gã (7).

A few potential problems that the present proposal may present are: (i) how do the morphemes linearize, since the form of NEG depends on its T value (compare (5) and (6)), and NEG is pronounced on V, (ii) when do subject NPIs (in Spec *v*P) raise to Spec TP to reflect the word order at PF? To solve this problem, I assume that the valuation operations are strictly ordered: T on NEG is valued by T which has a valued T, before the T feature on V is valued by the valued T on NEG. Here, valuation is construed in terms of Pesetsky & Torrego (2007). An illustration is given in (8a-b). Regarding (ii), NEG values the POL feature of D (8c) before it is raised to Spec TP. And following Uribe-Etxebarria (1995), the c-commanding relation is only an LF requirement.

Summary: The analysis proposed here addresses the key questions about NPIs postulated by Ladusaw(1996): the licensor is NEG, the licensee is (indefinite) D which needs to value its POL feature, the licensing relation requires NEG to c-command D, and an unlicensed D results in a non-reduplicated indefinite DP at PF, and hence no NPI.

(1) *NPIs in Ga*

INDEF DP		NPI	
a. mɔ ko	‘a person/someone’	mɔko-mɔko	‘anybody/ nobody’
b. nɔ ko	‘a thing/ something’	nɔko-nɔko	‘anything/ nothing’
c. hé kó	‘a place/ somewhere’	hékó-hékó	‘anywhere/ nowhere’
d. bee ko	‘a time/ sometime’	beeko-beeko	‘anytime/ notime’
e. gbi ko	‘a day/ someday’	gbiko-gbiko	‘anyday/ noday’

(2) *Extension to other DPs*

INDEF DP		NPI	
a. shía ko	‘a house’	shía ko-shia ko	‘no house’
b. dátrefónyo ko	‘a doctor’	dátrefónyo ko-dátrefónyo ko	‘no doctor’
c. shía agbo ko	‘a big house’	shía agbo ko-shía agbo ko	‘no big house’
d. shía lɛ	‘the house’	*shía-lɛ-shia-lɛ	
e. shía-i ko-mɛi	‘some houses’	*shíai komɛi-shíai komɛi	

(3) a. Kwei na **shía ko** .
K. see house INDEF
‘Kofi saw a house.’

b. Kwei é-ná-áá **shía ko** .
K. SBJ-see-NEG house INDEF
‘Kwei did not see a house.’

(4) a. Kwei é-ná-áá **shíako-shíako** .
K. SBJ-see-NEG house-RED
‘Kwei did not see any house.’

b. *Kwei na **shíako-shíako** .
K. SBJ.see house-RED

(5) a. **Mɔko-mɔko** é-ná-áá shía ko.
someone-RED SBJ-see-NEG house
ko.
INDEF
‘Nobody saw a house.’

b. ***Mɔko-mɔko** na shía ko .
someone-RED see house INDEF

(6) **Mɔko-mɔko** é-ná-ɲ shía ko.
someone-RED SBJ-see-NEG house INDEF
‘Nobody will see a house.’

(7) *VIs for RED:*

- a. RED ↔ [POL: NEG]
b. ∅ ↔ [POL: —]

8a. [TP [T' T_[T:PST]] [NEGP NEG_[T:PST]] [v' v [VP V_[T:PST] ...]]]].

b. [TP [T' T_[T:PST]] [NEGP NEG_[T:PST]] [v' v [VP V_[T:PST] ...]]]].

c. [TP [T' T_[T:PST]] [NEGP NEG_[T:PST]] [v' v [VP V_[T:PST] ...]]]].

d. [TP [DP D_[POL:NEG]] [DP] [T' T_[T:PST]] [NEGP NEG_[T:PST]] [v' v [VP V_[T:PST] ...]]]].

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