Multiple spell-out and the realization of pronouns

1. Summary: In a number of cases, pronouns in a syntactic relation with a lexical DP seem to behave like full copies of that DP. This is true of resumptive pronouns in many languages (e.g. Zaenen et al. 1981; Aoun et al. 2001; Sichel 2014) and Harizanov (to appear) makes the same point for clitic doubling. In this talk, I show that one of the ways in which pronouns can act like more articulated copies is by means of partial spell-out, in which only a portion of a copy is spelled out. This proposal is based on novel data from the Nilotic language Dinka (South Sudan), in which long-distance movement of any plural XP, regardless of person or complexity, is associated with the appearance of a 3rd person plural pronoun at the edge of each verb phrase. I argue that this reflects partial spell-out of an intermediate copy, targeting only the Num(ber) in the extended nominal projection. On the assumption that pronouns are D heads without NP complements (Postal 1969; Elbourne 2001), this results in a plural pronoun.

2. Resumptive and clitic pronouns may act like full copies: Resumptive and clitic pronouns behave for LF purposes like full copies of lexical DP antecedents/associates in a number of languages (e.g. Zaenen et al. 1981; Aoun et al. 2001; Sichel 2014; Harizanov, to appear). Sichel (2014), for example, shows that resumptive pronouns in relative clauses in a number of languages reconstruct for binding (1), as well as scope, and idiomatic interpretations.

(1) ha-šmu’a al acmo [CP še-dani xašaš mimena] hufca al yedey rani,
the-rumor about himself C-dani feared from.it was.spread by Rani
‘The rumour himself that Dani feared was spread by Rani.’ (Hebrew; Sichel 2014)

A similar point can be made for clitic doubling. In Bulgarian, clitic doubling allows the associate to bind from the attachment site of the clitic (Harizanov to appear) (2):

(2) Petăr *[ja]$_v$ várna [na sobstvenika i$_v$] [vsjaka kola], vêera.
Peter 3RS.ACC returned to the.owner its every car yesterday
‘Peter returned every car, to its owner yesterday.’ (Bulgarian; Harizanov, to appear)

3. Kê-copying: In Dinka, Â–movement of a plural XP obligatorily triggers a 3rd person plural pronoun kê(ek) at every vP edge (kê is an optional variant of the pronoun). This happens regardless of the complexity of the antecedent:

(3) a. Yeţa y înt Ból [i$_v$ luáel [CP ĕ çí Āyen [i$_v$ ti[i$_v$]]]
Q IMPF.OV Bol.NOM say.NF C PRF.OV Ayen.NOM see.NF
‘Who does Bol say Ayen has seen?’

b. Ye k₃c₃-kó yî́ Ból [i$_v$ kê(ek) luáel [CP ĕ çí Āyen [i$_v$ kê(ek) ti[i$_v$]]]
Q people-which IMPF.OV Bol.NOM 3PL say.NF C PRF.OV Ayen.NOM 3PL see.NF
‘Which people does Bol say Ayen has seen?’

Just as in (1) and (2), such dependencies are movement chains: they are island-sensitive and allow reconstruction (4).

(4) Thùrajì ē nôth-kêní áa-cí k₃c₃ kêek ti[i$_v$]
pictures P self.PL-3.POSS.3P 3.PST-PL-PRF.OV people.NOM 3PL see.NF
‘The pictures of themselves, the people have seen.’

Kê-copying is a reflex of intermediate movement through vP. Plural subjects, for example, do not show kê-copying at the local vP edge, but do trigger it at higher vP edges if undergoing long-distance movement:

(5) Ye k₃c₃-kó ýük₃k₃ *([kê] tàak, [CP cám (*kê) cu[i$_v$]]?)
Q people-which IMPF.1PL 3PL think.NF eat.SV 3PL food
‘Which people do we think are eating food?’

Kê-copying is insensitive to person and is triggered also by 1st and 2nd person pronouns, as (6) and (7) show:

(6) W₃c₃$c_i$ Ból kê(ek)/w₃c₃$k_i$ ti[i$_v$]
1PL PRF.OV Bol.NOM 3PL/1PL see.NF
‘Us, Bol has seen.’

(7) Wêek $c_i$ Ból kê(ek)/wêek ti[i$_v$]
2PL PRF.OV Bol.NOM 3PL/2PL see.NF
‘You all, Bol has seen.’

4. Kê-copying is not resumption: At first glance, kê-copying may resemble resumption, but there are many syntactic differences. Resumptive pronouns in Dinka cannot otherwise occupy the vP edge, as in (8) or (9):

(8) *Yeţa $c_i$ rî̀g [i$_v$ yêen ti[i$_v$]]?
what PRF.OV men.NOM 3SG see.NF
‘What have the men seen?’

(9) *Yeţa cûkk₃ [i$_v$ yêen yî́en kitáp]?
who PRF.1PL 3SG give.NF book
‘Who have we given a book to?’

This is not because Dinka lacks resumption. Resumption may be used for complements of P and postverbal indirect objects. It shows no number asymmetry (10) or person insensitivity (11) (note that resumption optionally triggers kê):
(10) Yeṣa cuuku kitáp yíɛn yěen?
Who PRF.1PL book give.NF 3SG

(11) Wọsk cị Bọl (kẹ) cambil kẹnẹ wọsk.
1PL PRF.OV Bol.Gen 3PL eat.NF with 1PL

‘Who have we given a book to?’
‘Us, you have eaten with.’

Resumption also rescues islands, unlike kẹ-copying. Finally, copied kẹ(ek) appears where no other element may appear, including non-copied instances of the 3rd person plural pronoun: before a direct object at the vP edge (12).

(12) Ye tọpọ̀ kẹ díi cị Bọl [copies] kẹek cuunj tháal?
Q pots PL how PRF.OV Bol.NOM 3PL food cook.NF

‘How many pots has Bol cooked food with?’

5. Kẹ-copying as spell-out of Num(ber): I propose that kẹ-copying reflects partial spell-out of an intermediate copy. Specifically, I posit that kẹ(ek) is the spell-out of a Num head in an intermediate copy, as schematized in (13):

(13) Spell-out configuration behind kẹ-copying: [DP D Num N] ... [DP D Num N] ... [DP D Num N]

If pronouns are D heads without NP complements (Postal 1969; Elbourne 2001), this spells out as a 3rd person plural pronoun. (13) derives the insensitivity of kẹ-copying to person features, if person features are located on a different nominal head, and explains why kẹ-copying does not care about the complexity of the DP antecedent.

In addition, there is a general asymmetry between singular and plural in Dinka. In particular, k(e) is on a consistent spell-out of plural across paradigms. We can see this in the paradigms for pronouns (14), the declarative prefix, demonstratives (15), possessive clitics, subject clitics (16) (attaching here to the auxiliary c), and inflected prepositions.

(14) Pronouns: (15) Demonstratives: (16) Subject clitics:

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In fact, whenever plural has a regular spell-out, its exponent is k(e), though there are irregular forms of plural also (see Ladd et al. 2009; Andersen 2014). In contrast, singular has a regular spell-out in certain paradigms (e.g. -n in pronouns), but no consistent regular form. The notion of partial spell-out relates this difference to the number asymmetry in kẹ-copying: only plural has a spell-out unspecified for morphosyntactic context.

Crucially, any sort of approach in which pronouns act like more articulated copies because the copy undergoes a process of morphological merger or reanalysis with a head, as in Nunes (2004) or Harizanov (to appear), does not work for Dinka, because it does not make sense of the insensitivity to person or restriction to plural. Within such an approach, there is no reason why the 3rd person plural pronoun should behave in a special fashion.

6. Other patterns of partial spell-out: We have seen then that partial spell-out is one way in which pronouns come to act like full copies of a lexical DP. This idea fits well with the intuition that pronouns are the ‘elsewhere’ spell-out of copies that cannot be fully deleted (see, for example, the treatment of resumptive pronouns in Shlonsky 1992; Pesetsky 1998; Sicelh 2014). Sicelh (2014) suggests that resumptive pronouns in movement chains derive from a pressure to spell-out as little as possible of a lower copy (cf. MINIMIZE STRUCTURE in Cardinaletti and Starke 1999). Partial spell-out could be the mechanism behind this, if it can target more than a Num head.

For example, a variant of the Dinka pattern is found in Seereer (Atlantic, Senegal), as described by Baier (2014). Long-distance movement triggers full pronoun copying at each CP edge (17).

(17) Xar foog-o [cp yee ten Yande a-lay-u [cp yee ten Jegaan a-ga’-u]]?
what think-2SG.EXT C 3SG Yande 3-say-EXT C 3SG Jegaan 3-see-EXT
‘What do you think Yande said Jegaan saw?’ (Seereer; Baier 2014)

We can treat this as partial spell-out, but of a larger section of the copy, including a Pers(on) head.

7. Number-matching pronouns in resumption: Pronouns that only match in number are also found in resumption. In Nupe, resumptive subjects are always 3rd person, but match in number, as in (18) and (19) (Kandybowicz 2008:134).

(18) Mi Musa gân [gànán u pa eci] o.
1SG Musa say C 3SG pound yam FOC
‘Musa said that I pounded a yam.’

(19) Ye Musa gân [gànán a pa eci] o.
2PL Musa say C 3PL pound yam FOC
‘Musa said that YOU ALL pounded a yam.’

But other languages show full matching instead, such as Yoruba (Adesola 2010:82). We can similarly take this reflex variation in how much of a nominal’s extended projection is spelled out: Num in Nupe, but Num and Pers (and perhaps D) in Yoruba and other languages.