Strictly Bound and Strictly Free Pronouns in Tangale

In Tangale (Chadic, Afro-Asiatic), there are two classes of 3rd person pronouns that are in complementary distribution. The pronouns of the first class cannot, those of the second class must be bound. This is shown in (1) to (4) for the singular masculine pronouns, *peenday* and *yi*. The contrast between (1a) and (1b) illustrates that *peenday* can occur free (and function anaphorically), whereas *yi* cannot. (2a,b) show that *peenday* cannot receive a bound/coreferent interpretation whereas *yi* must be bound by a quantifier or referential expression. The data in (3) highlight that, at least descriptively, the relevant binding notion is that of syntactic binding, i.e. c-command between binder and bindee (+coindexation, not represented in the Tangale sentences). Accordingly, dynamic binding of *yi* is not possible as is shown in (4b): the “dynamic extension” of the scope of a man from our hometown beyond its syntactic scope does not license *yi*. Rather, *peenday* or its null variant must be used in donkey anaphora contexts, cf. (4a).

In terms of distribution *peenday* behaves like a definite DP. This suggests that *peenday* is a reduced definite DP, a genuine e-type pronoun (Evans 1977, 1980). On this assumption, the occurrences of *peenday* in (1a) and (3a) have the underlying form and interpretation given in (5a) and (5b), respectively, (where strike-through marks phonological deletion). To account for the donkey-pronoun use of *peenday*, the situation-based approach proposed in Heim (1990) and expanded in Elbourne (2005) is employed, which yields (6) as interpretation of (4a). However, this approach not only yields an interpretation for donkey pronouns, but also for bound pronouns (see (7), Büring 2007). Hence, we are left to give a non-semantic explanation for why *peenday* cannot be bound. Arbitrary syntactic stipulations (to the effect that *peenday* is an R-expression in the sense of Principle C of Binding Theory) are clearly to be avoided. The complementary distribution with *yi* suggests a blocking account: *peenday* is blocked in contexts where *yi* (or an anaphor in the sense of Principle A, see below) can occur. What, then, determines the distribution of *yi*? Again, a syntactic approach would require arbitrary stipulations: the relation between *yi* and its binder can be non-local and is not subject to minimality conditions, see (8). However, *yi* cannot be bound too locally: it cannot function as a reflexive pronoun; instead, the pronoun *wokini* is used in this function, see (9). I assume that the distribution of *yi* is itself partly determined by blocking, i.e. it is blocked from positions where *wokini* can form a reflexive predicate (cf. Reinhart & Reuland 1993). To explain the binding condition on *yi*, I assume with Jacobson (1999) that *yi* denotes the identity function on individuals, see (10a). In the course of the semantic composition, the argument slot of this function is propagated upwards (see (10b) for illustration) up to the point where an argument is supplied to this slot. This is performed by a binding operator $\beta$ (= Jacobson’s z-operator; cf. also Büring 2007), which can be optionally adjoined at LF to the sister constituent of a quantificational DP or R-expression, see (10c) for definition and (11a) for a partial LF structure of one of the readings of (8) (where *yi*=*Petur*). Now I deviate from Jacobson (1999), who assumes that a root (declarative) clause can have a non-propositional denotation: a clause denotes a function from individuals (to a function from individuals ...) to propositions if it contains one (two, ...) free pronouns. I assume that a non-propositional denotation of a matrix declarative clause induces semantic deviance. This of course means that *yi* must be bound.

If this account of the distribution of *peenday* and *yi* is on the right track, we can conclude that “typical” personal pronouns, i.e. pronouns that can occur bound as well as free denote either variables or (e-type) definite descriptions. Typical pronouns do not denote identity functions.

Data

(1) Öno, n ɗim-go ga mu-m dok mwana ma mo.
    yesterday 1sg meet-perf with man-lnk one come from village 1pl.poss
    ‘Yesterday, I met [a man from our hometown].’

a. *Peenday* ga mana-m bufe.
   3sg.masc.impf have house-lnk big
   ‘He owns a big house.’

b. * Yi-ŋ* ga mana-m bufe.
   3sg.masc-impf have house-lnk big
   intended: ‘He owns a big house.’
(2) a. \{Konō | Apollos\} yimbo ka peendaŋ wa yaŋ ga mana-m bude.
   every relative of A. think that 3SG.MASC.FUT do.IMPF have house-LNK big
   ‘Every relative of Apollos\(_i\)\) says that he\(_{j/i}\) will own a big house.’

   b. \{Konō | Apollos\} yimbo ka yi wa yaŋ ga mana-m bude.
   every relative of A. think that 3SG.MASC.FUT do.IMPF have house-LNK big
   ‘Every relative of Apollos\(_i\)\) says that he\(_{j/i}\) will own a big house.’

(3) a. Kowane togo-r Apollos ka peendaŋ ga mana-m bude.
   every relative-of A. say 3SG.MASC.IMPF have house-LNK big
   ‘Every relative of Apollos\(_j\)\) says that he\(_{j/i}\) owns a big house.’

   b. Kowane togo-r Apollos ka yi-ŋ ga mana-m bude.
   every relative-of A. say 3SG.MASC.IMPF have house-LNK big
   ‘Every relative of Apollos\(_j\)\) says that he\(_{j/i}\) owns a big house.’

(4) a. Ka nu ga-ŋ kina, (peendaŋ) ga mana-m bude.
   if man have-IMPF money 3SG.MASC.IMPF have house-LNK big
   ‘If a man is rich, he owns a big house.’

   b. *Ka nu ga-ŋ kina, yi-ŋ ga mana-m bude.
   if man have-IMPF money 3SG.MASC.IMPF have house-LNK big
   intended: ‘If a man is rich, he owns a big house.’

(5) a. [peendaŋ the man from our hometown]\(9,w\) = the man from our hometown in \w

   b. [peendaŋ Apollos]\(9,w\) = Apollos

(6) [if a man is rich, peendaŋ the man] owns a big house\(9,w\) =
   for every situation \(s\) if \(s\) is minimal situation containing a rich man, then \(s\) can be extended to a minimal situation \(s’\) containing the unique man in \(s\) owning a big house

(7) [Every girl played her trumpet]\(9,w\) =
   for every girl \(x\) and minimal situation \(s\) containing girl \(x\), \(s\) can be extended to a situation in which \(x\) plays the unique trumpet of the unique girl in \(s\)

(8) Apollos yimbo ka Petur ne-go ka Laku ponu-yi-go.
   A. thinks that P. tell-PERF that L. know-3SG.MASC-PERF.
   ‘Apollos\(_i\) thinks that Peter\(_j\) claimed that Laku knows him\(_{j/i}\).’

(9) a. *Apollos ponu-yi-go.

   b. Apollos ten-go-ŋ woki-ni.

   A. know-3SG.MASC-PERF
   A. vote-PERF-FM have-3SG.MASC.Poss
   intended: ‘Apollos\(_i\) thinks that he owns himself.’
   ‘Apollos voted for himself.’

(10) a. \(\text{yi}^\(9,w\) = \lambda x.x,\) where \(x\) is of type \(e\)

   b. \[\text{nego ka Laku ponu-yi-go}^{9,w} = \lambda x \lambda y [y \text{ claims that Laku knows } x \text{ in } \w]\]

   c. \[\beta^{9,w} = \lambda R \lambda x.R(x, x),\) where \(R\) is of type \(⟨e, et⟩\)

(11) a. [Petur \(\beta\) [nego ka Laku ponu-yi-go]]

   b. \[\text{[(11a)]}^{9,w} = (\lambda R \lambda x.R(x, x)(\lambda x \lambda y [y \text{ claims that Laku knows } x \text{ in } \w])(\text{Peter})
   = Petur claims that Laku knows Peter in \(s\)

References