Default Agreement Anaphor in Kakabe

1. The phenomenon

Anaphors are pronouns that co-vary with some DP in the same clause in their value assignment. Accordingly, they show the same grammatical features as the antecedent DP, such as gender, person, number (φ-features) (Reuland 2011, among many others). For example, reflexive pronouns in English co-vary in person, number and gender with the subject DP (1). The anaphor is commonly characterized as a deficient pronoun that inherits the φ-feature from another phrase in the sentence in the course of derivation.

(1) I_i saw myself$_i$ in the mirror.
        She$_i$ saw herself$_i$ in the mirror.

Kakabe, a Mande language,[1] has an anaphoric pronoun *ì* that shows a co-dependency with its antecedent DP of a rather unusual type. This anaphor is licensed in contexts where it is preceded, for example, by a universal-distributive (2a) or by a pronominal phrase under negation (2b), but never by a specific DP (2c). In the latter case, only a simple 3sg pronoun can be used.

(2a)   *kala$_i$ si   ì$_i$ kò   yàn   nɛtɔ*
        UNIV   POT   **PR.I**   wash   here   in
        Anyone can wash himself here.

(2b)   *dóodo$_i$ tée   ì$_i$ kò   yàn   nɛtɔ*
        person.NEG   POT.NEG   **PR.I**   wash   here   in
        Anyone can wash himself here.

(2c)   *Músa   bát'   à   (* ì)   kò*
        Musa   PFV.F   **3SG**   (PR.I)   wash
        Musa has washed himself.

On the top of it, the pronoun *ì* can also be licensed as a reflexive pronoun in a context where it is anteceded by PRO in an infinitive clause (3a), or by a relativized DP within a correlative clause (3b).

(3a)   *Músà   nà-ta   kɔ̀ɛ̂   tɔ   PRO$_i$ k'   ì$_i$ kò*
        Musa   come-PFV.I   river   to   INF   **PR.I**   wash
        Musa came to the river to wash himself.

(3b)   pronoun *ì* in a relative clause
        Mɔ̀gɛ́ɛ̂   mín$_i$ k'   ì$_i$ kò   kɔ̀ɛ̂   kɛ̀   tɔ,   wò   gbàndiya-ta
        Man.ART   **REL**   PFV.TR   **PR.I**   wash   river   that   in   that   fall.ill-PFV.I
        The man who washed himself in that river fell ill.

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[1] Kakabe (50 thousand speakers, Guinea) has a rigid S(aux)OVX word order, where object always precedes the lexical verb, whereas all indirect objects and adverbials appear after the verbs (for some adverbs it is possible, though, to appear in the left periphery of the clause). TAM values are marked on the auxiliary that follows the subject. For a part of the forms, it is signaled by a suffix on the lexical verb or by a combination of an auxiliary and a suffix. Kakabe has is no agreement morphology on the verb and morphological case marking.

2. The proposal

According to a view that is widely accepted in the literature, PRO and the relative pronoun are two types of a bound variable (e.g. Kratzer 1998: 6; 2009). Next, a universal-distributive phrase as in (2b) is characterized by referential variation, since it also introduces a bound variable (e.g. Beghelli, Ben-Shalom, and Szabolsci 1997). This suggest that the common property of the antecedents that are acceptable for *ì* is that they introduce bound variables and are non-referential.

I propose that the specificity of anaphoric *ì* form lies in the fact that it does not inherit any features from any other element in the structure: neither from the antecedent, which is related to its non-specific character, nor from the binding head, as discussed in what follows. I analyse *ì* as a type of form that can be characterized as a Default Agreement Anaphora (DAA). More specifically, *ì* is a spell-out form of the minimal pronoun, when no features are inherited by it from other elements in the sentence. The proposal is formulated in (4).

(4)   In the absence of features transmitted from the antecedent or from a binder head, a minimal pronoun can receive a default spell-out form.

The news that is brough by the Kakabe data is, therefore, the existence of a specific default anaphoric form.

This analysis will be formulated in the framework of the agreement approach to binding (Kratzer 2009). In this approach, variables are bound by functional heads such as v and C (more precisely, by the λ-operator on these heads). Crucially for the present analysis, features can be transmitted to the variable from two sources: either from the functional head itself or from the phrase in the specifier of the functional head (φ-features of the Specifier DP).

My proposal will be an extension of Kratzer's (2009) model motivated by the observed data. First, it will bring to light the existence of situations where no transmission of features from either of the two sources takes place. Second, it will show that these situations are dealt with by the use of a special default agreement form. The present research is based on first-hand data collected during my fieldwork in 2008-2020. It relies on a corpus of 20 thousand words with a large number of speakers and consisting of natural texts of various genres. The most part of the corpus is available online.[2] Apart from the corpus data, the investigation of the distribution of the pronominal form relies on elicitation and grammaticality judgements by Kakabe speakers.

3. Minimal pronouns introduced by a λ-binder

Kratzer (2009) pursues the approach (e.g. Borer 1989, Hale 1992, Kratzer 1998; Adger and Ramchand 2005), according to which the semantic binding is done through a functional head rather than the antecedent DP. Certain functional heads host λ-binders that serve to introduce minimal pronouns that are, at the same time, bound by them. Apart from hosting λ-binders that enable binding, the functional head transmits features to the minimal pronoun. Importantly, the minimal pronoun is deficient: it has no features of its own, and, in order to be spelled out, it needs to acquire feature from other elements in the sentence, and this transmission happens via the functional head.

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[2] The corpus is available at the ELAR archive: https://elar.soas.ac.uk/Collection/MPI43300, as well as at the Pangloss collection: https://lacito.vjf.cnrs.fr/pangloss/corpus/search.php?keywords=kakabe and the Corporan collection: https://corporan.huma-num.fr/Archives/corpus.php

For example, a reflexive utterance as in (5a) is parsed as (5b) where the v head bears a λ-binder. According to Kratzer's (2009) definition, the binder is a λ-abstraction operator that bears a numerical index [n] that allows for the binding of the pronoun. The pronoun appears as a mere numerical index "n". Next, λ-binder of the reflexive v head transmits a morphological reflexive feature to the pronoun that it binds, hence the *self-* part of the pronoun. As for the first-person make-up of the anaphoric pronoun in (5), it results from the feature transmission of the person feature of the DP that appears in the specifier of v. The first person and the singular φ-features are, first, transmitted to the v head, and these then are further transmitted to the anaphoric pronoun, through the same channel as the [reflexive] is transmitted to it.

(5)   a. I blame myself
         b. [$_{vP}$ I [v [λ[n] [$_{VP}$ blame [n]]]]]   Kratzer (2009: 194)

The representation of reflexivity through positing a λ-abstraction operator on the verbal head (in some approaches it is V rather than v) has a relatively long history in semantics (see e.g. Partee and Bach 1980); cf. also the notion of reflexive-marked predicate of (Reinhart and Reuland 1993). Reflexive marking on the verbal head, i.e. the presence of a λ-binder on the verb denoting this relation within the present framework, signals that two slots of a relation have been identified (Chierchia 1995: 217). It is a usual way to treat sloppy readings in semantics (Safir 2013: 517); thus in (6), due to the λ-abstraction, the semantics of the predicate is the property 'x loving x's mother' whereby the identity of the possessor varies with the identity of the subject.

(6)   George loves his mother and Bill does, too.
         [$_{TP}$ George [$_{T}$ Tns [$_{VP}$ λx (x love x's mother)]]]   (Safir 2013: 517)

Minimal pronoun is a semantic entity, namely, a variable that is produced by a binding head. Next, this semantic entity can be spelled out in a variety of ways. The possibilities that exist according the discussion in Kratzer (2009) are the following. Either the form that spells out the minimal pronoun bears the 'signature' of the binding head, as the relative pronoun and PRO. Second, the pronominal form can spell out both a φ-feature from the antecedent and a specific feature of the binding head, as is the case of the pronoun *myself*. Third, in case when the binder does not provide any features, the pronominal form can spell out only φ-features. In this case, there is a syncretism between a referential and a bound variable reading. This case can be illustrated by (7). Here, the first occurrence of *you* corresponds to a referential pronoun, whereas the second occurrence of the same from spells out a variable. The fact that it is indeed a bound variable semantically is entailed by the availability of the sloppy reading: (6) can have a sloppy reading whereby it has the inference that nobody else has the property 'x can eat what x cooks', therefore, *you* has a bound variable interpretation.

(7)   Only you can eat what you cook. (Kratzer 2009: 188)   ✔ sloppy reading

One of the findings in (Kratzer 2009) and, in particular, in Kratzer (1998), is that there is a sweeping syncretism between bound-variable as opposed to referential uses of pronominal forms. She points out that almost all pronouns that have a referential use can also have a bound-variable use, provided certain conditions are fulfilled. It is due to this broad coincidence of forms that, especially in case the locutor pronouns, that their ability to spell out bound variables (i.e. to spell out the minimal pronoun), rather than being used only referentially, often goes unnoticed.

Returning to Kakabe, it is not surprising, in the light of the above said, to find that here locutor pronouns also manifest a syncretism between a referential and a bound-variable uses. For example, the sloppy reading of (8) is judged as totally acceptable and even as a more 'natural' as compared to the strict reading. In the sloppy reading, the set of alternatives are of the type 'x sends x's children to study', hence the bound variable reading of the 1SG pronoun *ǹ*.

(8) *Ňdè   dɔ́rɔn dè   bi   ǹ   na   dénnɛ̀-nu   la-kàran*
    1SG.LG only   FP   be   1SG   POSS   child.ART-PL   CAUS-study
    It is only me who sends my children to study.

Therefore, the specificity of *ì* is not that it spells out a minimal pronoun, since minimal pronouns can be spelled out by other forms as well, including personal pronouns as in (8). In order to answer the question how *ì* contrasts with other pronominal forms, we need to establish the type of syntactic configuration in which the minimal pronoun is spelled out by *ì*.

The answer that I propose here is that *ì* appears in such configurations where the minimal pronoun receives no morphological features via agreement and can therefore be considered as a default agreement form. First, *ì* is licensed in reflexive contexts where the antecedent has no φ-features. As has already been discussed in Section 1, PRO, the relative pronoun and universal universal-distributive DPs are all characterized by referential variation since it also introduces a bound variable (e.g. Beghelli, Ben-Shalom, and Szabolsci 1997). In Kakabe, this semantic property of non-specificity corresponds to the absence of φ-features in morphology. This is manifest in the fact that the relative pronoun, the non-referential DPs such as polarity items and the universal pronoun, and, for obvious reasons, PRO never combine with the number marker nor with the referential article.

Second, Kakabe, as opposed to such languages that have specialized reflexive pronouns, has no morphological reflexive feature. In other words, the v head in a reflexive construction does not have what Kratzer (2009) refers to as the binding head's 'signature feature'. From this follows that the minimal pronoun in a reflexive construction does not differ from other pronouns that spell out φ-features in the subject position: these are the only features that the minimal pronoun inherits in this context, such as the 1SG features in (9).

(9) *ń   báti   ǹ   sìgi*
    1SG   PFV.F 1SG   sit
    I have sat down.

Therefore, no morphological features are transmitted to the minimal pronoun in configurations illustrated in (2a,b) and (3), and the form *ì* that appears there can be considered as the 'pure' minimal pronoun.

Importantly, the existence of such a 'pure' anaphoric form would potentially be a problem within Kratzer's model and models similar to it. If an anaphor is a deficient entity (as is assumed in Kratzer 1998, 2009, Heinat 2008; Reuland 2011; Sundaresan 2020 et al.), it requires to be completed by morphological features transmitted to it via agreement. However, the existence of a pronominal form appearing specifically when the antecedent lacks φ-features and no other morphological features are transmitted from the binding head that is found in Kakabe reveals the existence of the default agreement mechanism for anaphors. Therefore, the addition to Kratzer's (2009) model that is being proposed here, consists in the claim that, first, the agreement that involves anaphors can be default and, second, that the deficient minimal pronoun does not always

need to complete its feature set in order to be spelled out. The from *ì* is the specific default agreement form in Kakabe: if no features are available to complete the feature set of a minimal pronoun, it acquires the default agreement form *ì*.

4. Minimal pronouns introduced by other functional heads

Apart from v in a reflexive construction, λ-binder can be hosted by other functional heads. Kratzer (2009) discusses the C head of the infinitive and of a relative clause. C of an infinitive clause introduces a minimal pronoun that takes the phonologically null form (PRO). The relative C, on the other hand, introduces the relative pronoun due to the presence of λ[n] on it. The distinct shape that the minimal pronoun takes, results from the fact that each of the heads transmits a specific morphological feature to the pronoun it binds. CINF transmits the infinitive features, whereas CREL transmits the relative feature to the minimal pronoun imposing the corresponding morphological form on it. Finally, Kratzer also mentions that topicalization leading to left dislocation also entails the presence of a λ-binder.

Apart from the minimal pronoun introduced in a reflexive construction (Examples 2a, 2b and 3 given earlier), *ì* can spell out the minimal pronoun introduced through left-dislocation (11)

(11) *Sɛ̀nɛkɛ wó,*   *ì*   *si*   *báara ɲúmà*   *sɔ̀tɔ*   *yàn*
      Farmer UNIV PR.I   POT   work good.ART   get   here
      Any farmer, he can find a good job here.

In relative clauses, the minimal pronoun receives the [relative] feature from the C head of the clause and takes the shape of the relative pronoun *mín*. In the infinitive, the minimal pronoun introduced by C is PRO. In other words, the minimal pronouns produced by these heads have to spell out the relative and the infinitive features, respectively.

As opposed to infinitive and relative clauses, the reflexive and the left-dislocation constructions are environments where the binder head does not contribute any morphological feature of its own. As we have already seen, no reflexive feature is present in Kakabe morphology.

In the case of left-dislocation due to topicalization, again, the λ-binder does not contribute any 'signature feature' to the shaping of the minimal pronoun that it introduces. Thus, in (12), the minimal pronoun spells out only the 1sg feature that it receives from the specifier of the binder head.3

(12) *Ǹde,*   *ǹ*   *máa*   *sòbo dámu*
      1SG.LG   1SG   PFV.NEG   meat eat
      'Me, I have not eaten any meat.'

To be more specific about the possible location of the head with the λ-binder in case of left-dislocation, it must be a head of the projection within the left periphery. Within the split-CP approach (Rizzi 1997), the topicalized phrase appears in the specifier of Topic projection. If one assumes this topology, the λ-binder should be located on the head of this projection which gives us the following representation of (12). There appears to be no 'topicalization' pronoun as there is a reflexive pronoun in languages like English.

(12') [CP[TopP [DP *ňdè*] Topλ[n] [TP   *ǹ*   *máa*   *sòbo dámu*]]]
                                      1SG.LG   1SG   PFV.NEG   meat eat

Since the reflexive and the left-dislocation construction are the two contexts where (provided that the antecedent is non-specific and lacks φ-features as in 11) the pronoun *ì* can appear, the conclusion is therefore, again, that *ì* is licensed in configurations where no feature is contributed by the binding head and where its antecedent lacks φ-features.

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