

# Distinct featural classes of anaphor against an enriched PERSON system

Sandhya Sundaresan, Universität Leipzig

Oddly, given the wealth of literature on anaphora, the question of *what* an anaphor is, formally speaking, still remains unresolved. Main problem: there are strong theoretical & empirical arguments for the two prevailing analyses of anaphora: no *single* anaphor can simultaneously satisfy the criteria for both. Anaphors crosslinguistically aren't created equal & must thus be divided across distinct featural classes.

**I.  $\phi$ -DEFICIENCY VIEW:** An anaphor is defined in terms of  $\phi$ -deficiency (Reuland, 2001, 2011; Kratzer, 2009; Rooryck and vanden Wyngaerd, 2011, a.o.) Theoretical support: a nominal needs a full set of  $\phi$ -features to be LF-interpretable (Bouchard, 1984); it is also featurally economical. Empirical support: (i) **Antecedent-Anaphor  $\phi$ -matching:** If semantic binding is triggered via syntactic  $\phi$ -valuation, antecedent-anaphor  $\phi$ -matching falls out for free (ii) **Morphological  $\phi$ -underspecification:** Many anaphors don't distinguish the full range of PERSON/NUMBER/GENDER combinations, given restrictions on their antecedence. This can be derived if we assume that anaphors lack, not only values, but *attributes* for  $\phi$ -features, which can be directly reflected in their morphology (see Kratzer, 2009, for such an analysis). (iii) **Anaphor Agreement Effect/AAE** (i.e. that anaphors cannot trigger covarying  $\phi$ -agreement, see Rizzi, 1990; Sundaresan, 2016, a.o.): if an anaphor itself lacks  $\phi$ -features at the point where it would trigger agreement, then it follows that it cannot itself value  $\phi$ -features on T/v under Agree.

**II. F-DEFICIENCY VIEW:** An anaphor is characterized as lacking some non- $\phi$  feature which tracks referential- or perspectival-sensitivity (Hicks, 2009; Sundaresan, 2012). Theoretical support:  $\phi$ -features restrict, but crucially don't exhaust, a nominal's domain of reference (Hicks, 2009): e.g. they introduce lexical presuppositions restricting the nominal's reference (Heim and Kratzer, 1998). Empirical support: (i) **Perspectival anaphora:** The anaphor's antecedent, in languages like Tamil (Sundaresan, 2012), Icelandic (Sells, 1987; Hellan, 1988), Italian (Giorgi, 2010) & Japanese (Kuno, 1987), on top of matching it in  $\phi$ -features, must denote a perspective-holder. As such, it is thematically restricted (yielding "subject orientation") and must be animate. In some Tamil dialects, local reflexivity is expressed either via a dedicated reflexive form *ta(a)n* or with a pro-form that is syncretic with a deictic pronoun; crucially, the former alone has a perspectival interpretation (Sundaresan, 2012). Such anaphors must thus have something "extra". (ii) **Person asymmetries:** Anaphors in many languages behave like local PERSON and *unlike* 3rd-PERSON for certain phenomena. Reflexive clitics in e.g. French (Kayne, 1975), Kiowa (Adger and Harbour, 2007) & Southern Tiwa (Baker, 2008) show PCC effects. In Swahili & Chicheŵa (Bantu) (Woolford, 1999; Baker, 2008), the anaphor triggers a "special" agreement differing from standard 1/2/3. Crucially, such agreement shows the same special categorial and distributional restrictions as 1st/2nd-PERSON agreement (Baker, 2008). Furthermore, the Bantu anaphors can be anteceded by 1st and 2nd-PERSON nominals. Taken together, these facts show that such anaphors must (at least) be specified for PERSON and must have features in common with 1st/2nd which contrasts from 3rd. (iii) **1/2 vs. 3 antecedence gap:** In a language with only one unambiguously anaphoric form, this must correspond to an anaphor that takes a 3rd-PERSON antecedent (seldom noted, but see Comrie, 1999). Thus, in e.g. Romance, German & Dravidian, anaphors with 1st/2nd-PERSON antecedents have forms that are syncretic with pronouns while 3rd-PERSON alone is unique. In Lezgian (Haspelmath, 1993, 184) (or arguably even English), a SG. anaphor with 1st/2nd-PERSON antecedent does have an unambiguous form but crucially, so does the 3rd-PERSON anaphor: thus, the language doesn't have a *unique* unambiguously anaphoric form. Again, under a purely  $\phi$ -deficiency approach to anaphora, there is no elegant way to capture this person asymmetry.

**Proposal:** We thus have two *mutually inconsistent but equally valid* views on anaphora. To satisfy both, anaphors must be categorized into distinct featural classes. We start out with (at least) five categories of PERSON, rather than the standard three, as in Table 1. The crux of such a classification is that there are now *three* PERSON-categories that are non-1st and non-2nd, as opposed to the standard one (= 3rd-PERSON). Furthermore, all categories except  $\emptyset$  have in common, the feature *Anim*. Against this, I now define the following classes of anaphor: **I: NULL-PERSON anaphor:** has an unvalued PERSON feature. PERSON-valuation via Agree by a c-commanding nominal/functional head feeds semantic binding. Empirical signature: allows antecedents of all PERSON (e.g. Chinese *ziji*, Albanian *vetja*). Such

Table 1: Person Classification:  $[\pm Author]$ ,  $[\pm Addressee]$  &  $[Anim]$ 

Features	Category	Exponents
[+Author, +Addressee, anim]	1INCL.	<i>naam</i> (Tamil, 1INCL.PL)
[+Author, -Addressee, anim]	1EXCL.	<i>naanga</i> (Tamil, 1EXCL.PL)
[-Author, +Addressee, anim]	2	<i>you</i>
[-Author, -Addressee, anim]	3	<i>him, sie</i> (German), <i>si</i> (Italian)
[anim]	REFL	Anaphors in Bantu
$\emptyset$	NULL	<i>ziji</i> (Chinese), <i>man</i> (German)

Table 2: Three Classes of Anaphor

Class	PERSON-Features	Exponents
3rd-anaphor	[-Author, -Addressee, Anim]	<i>taan</i> (Tamil), <i>zich(zelf)</i> (Dutch)
REFL	[Anim]	Bantu anaphors
NULL-anaphor	$\emptyset$	<i>ziji</i> (Chinese), <i>zibun</i> (Japanese)

an anaphor will also always match its antecedent in value for PERSON: if we include a grammatical vs. semantic feature-distinction, binding under imposters (Collins and Postal, 2012) may be accommodated too. The AAE can also be straightforwardly explained if (i) the anaphor has not itself been valued for PERSON when T/v probes to Agree with it and (ii) Agree for partial  $\phi$ -features is ruled out. **Class II: 3rd-PERSON anaphors:** are specified as  $[-Author, -Addressee, Anim]$ . Such anaphors must also be distinguished from *non-anaphoric* 3rd-PERSON pro-forms with respect to some *other* feature: e.g. by having an unvalued NUMBER/GENDER feature or for a non- $\phi$ -feature, like a feature that tracks perspective-sensitivity. Empirical signature: cannot be anteceded by 1st (INCL./EXCL.) & 2nd-PERSON (German *sich*, Dravidian *taan*, Romance *se/si*). Assuming that person asymmetries distinguish categories that are contentfully marked for PERSON from those that don't (Anagnostopoulou, 2005), such anaphors will behave like 1st & 2nd wrt. e.g. the PCC. Indeed, in Kiowa, 1st & 2nd-PERSON, reflexives and *animate* indirect objects in 3rd, pattern alike for the PCC (Adger and Harbour, 2007): which follows directly from the feature-system above. **Class III: REFL-anaphors:** are specified as  $[Anim]$ . The similarity of anaphoric agreement in Bantu with 1st/2nd-PERSON agreement can also be explained by assuming that such anaphors are 3rd-PERSON. But this doesn't explain how Bantu anaphors can take 1st/2nd-PERSON antecedents. A REFL-anaphor is the solution. Empirical signature: Restriction to animate antecedents. The  $[anim]$  feature explains why such anaphors pattern like 1st and 2nd wrt. agreement (and potentially also the PCC in some languages). Featural underspecification allows antecedence by 1st, 2nd, and 3rd. Finally, all anaphor classes fulfill the 1/2 vs. 3 antecedence restriction. There can be no special SpellOut rule that makes explicit reference to an anaphor in the 1st/2nd-PERSON ( $[+Participant]$ ) while yielding a syncretic pro-form in the 3rd, because an anaphor is either featurally underspecified, or negatively specified, wrt. *participanthood*. Empirical predictions: (i) Being  $[anim]$ , REFL-anaphor (in e.g. Bantu) should *not* allow inanimate 3rd-PERSON antecedents. Indeed, this seems to hold (Vitale, 1981; Woolford, 1999, for Swahili). (ii) A NULL-PERSON reflexive clitic should be immune to the PCC. This is fulfilled for Bulgarian *se*, which can crucially take antecedents of all PERSON (Nevins, 2007). (iii) A NULL-PERSON anaphor must match its antecedent for PERSON, but doesn't need to match it for NUMBER/GENDER. Indeed, such NUMBER mismatches are possible in Hausa (Haspelmath, 2008, 42, Ex. 8): crucially, Hausa anaphors can be anteceded by all PERSON (Newman, 2000).

Running *orthogonal* to these featural classes is that of perspectival anaphora, observed earlier. This can thus be defined for NULL-PERSON, 3rd-PERSON, or REFL. We saw earlier that, in certain Tamil dialects, it is possible to have two local reflexive forms, one perspectival, one not. In the current system, the 3MSG syncretic reflexive form *avan* would be spelled out by the following rule: [-Author, -Addressee, anim, m, sg]  $\leftrightarrow$  *avan*. The perspectival reflexive form *ta(a)n* would have these features and an additional perspectival feature (call it "DEP", following Sundaesan, 2012), thus would be: [-Author,

-Addressee, anim, Dep: x, sg] ↔ *taan*.

## References

- Adger, David, and Daniel Harbour. 2007. Syntax and syncretisms of the Person Case Constraint. *Syntax* 10:2–37.
- Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: a feature checking analysis. In *Clitic and affix combinations: theoretical perspectives*, ed. Lorie Heggie and Francisco Ordóñez, 199–235. Amsterdam: John Benjamins.
- Baker, Mark C. 2008. *The syntax of agreement and concord*. United Kingdom: Cambridge University Press.
- Bouchard, Denis. 1984. *On the content of empty categories*. Dordrecht: Foris.
- Collins, Chris, and Paul M. Postal. 2012. *Imposters: a study of pronominal agreement*. Cambridge, MA: MIT Press.
- Comrie, Bernard. 1999. Reference-tracking: description and explanation. *STUF - Language Typology and Universals* 52:335–346.
- Giorgi, Alessandra. 2010. *Towards a syntax of indexicality*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Haspelmath, Martin. 1993. *A grammar of Lezgian*. Berlin: Mouton de Gruyter.
- Haspelmath, Martin. 2008. A frequentist explanation of some universals of reflexive marking. *Linguistic Discovery* 6:40–63.
- Heim, Irene, and Angelika Kratzer. 1998. *Semantics in Generative Grammar*. Oxford: Blackwell Publishers.
- Hellan, Lars. 1988. *Anaphora in Norwegian and the theory of grammar*, volume 32 of *Studies in Generative Grammar*. Dordrecht: Foris Publications.
- Hicks, Glyn. 2009. *The derivation of anaphoric relations*. Linguistik Aktuell. John Benjamins.
- Kayne, Richard. 1975. *French syntax*. Cambridge: MIT Press.
- Kratzer, Angelika. 2009. Making a pronoun: fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40:187–237.
- Kuno, Susumo. 1987. *Functional syntax – anaphora, discourse and empathy*. Chicago: Chicago University Press.
- Nevens, Andrew. 2007. The representation of third person and its consequence for person-case effects. *Natural Language and Linguistic Theory* 25:273–313.
- Newman, Paul. 2000. *The Hausa language: an encyclopedic reference grammar*. New Haven: Yale University Press.
- Reuland, Eric. 2001. Primitives of binding. *Linguistic Inquiry* 32:439–492.
- Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, Mass.: MIT Press.
- Rizzi, Luigi. 1990. On the anaphor-agreement effect. *Rivista di Linguistica* 2:27–42.
- Rooryck, Johan, and Guido vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Sells, Peter. 1987. Aspects of logophoricity. *Linguistic Inquiry* 18:445–479.
- Sundaresan, Sandhya. 2012. Context and (co)reference in the syntax and its interfaces. Doctoral Dissertation, University of Tromsø and University of Stuttgart, Tromsø.
- Sundaresan, Sandhya. 2016. Anaphora vs. agreement: a new kind of Anaphor Agreement Effect in Tamil. In *The impact of pronominal form on interpretation*, ed. Patrick Grosz and Pritty Patel-Grosz. de Gruyter, Mouton.
- Vitale, Anthony J. 1981. *Swahili syntax*. Dordrecht: Foris.
- Woolford, Ellen. 1999. More on the anaphor agreement effect. *Linguistic Inquiry* 30:257–287.