Relativized Anaphor Agreement Effect: Evidence from Koryak

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1 Introduction

- Anaphor Agreement Effect (AAE) is the generalization that anaphors do not trigger covarying ϕ-agreement.
- First proposed in Rizzi (1990) to account for the following observation about Italian: anaphors in object position of PP-subject verbs can only occur if the verb selects for an object with the genitive marker *di*, which prevents the object from agreeing.

(1) a. A me interessano solo loro.
to me interest.**3PL** only **they**
'I am interested only in them.' (Rizzi 1990, 14b)

b. *A loro interessano solo se stessi.
to them interest.**3PL** only **themselves**
'They are interested only in themselves.' (Rizzi 1990, 15b)

c. A loro importa solo di se stessi.
to them matters.3SG only of themselves
'They are interested only in themselves.' (Rizzi 1990, 15a)

- As of now, the most empirically adequate formulation of the anaphor agreement effect seems to be the following from Sundaresan (2016):

(2) Anaphors cannot directly trigger covarying agreement which results in covarying morphology.

- But a small class of exceptions have been pointed out in the literature, most exhaustively in Murugesan (2018).
- In this talk, we'll discuss some new data from the Koryak[1] anaphor *uvik*, which we'll argue is an especially revealing *partial* counterexample to the AAE.
- Specifically, *uvik* triggers obligatory number agreement consistent with its binder, but cannot trigger person agreement consistent with it.

(3) a. močγənan mət-lə?u-**net** **uviki-t**
We.ERG 1NSG.S-see-**3DU.O** **self-ABS.DU**
'We two saw ourselves/each other.'

b. * močγənan mət-lə?u-**mək** **uviki-t**
We.ERG 1NSG.S-see-**1NSG.O** **self-ABS.DU**
'We two saw ourselves/each other.'

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[1] Koryak (Chukotko-Kamchatkan) is an indigenous language of the Kamchatka Peninsula in the Russian Far East. The data reported here come from the Chauchu (Chawchuven) dialect, which was traditionally spoken by the nomadic reindeer herders of northern Kamchatka. The language is now spoken by around 600 (mostly elderly) people in various villages and herdings communities around Kamchatka.

- Such a pattern has not been reported in the literature: what cases of anaphors triggering non-trivial number agreement there have been, those anaphors can only be bound by 3rd person nominals (Sundaresan 2016; Murugesan 2018, Omer Preminger p.c.)
- In response to this, we propose the following revised generalization of the AAE, based on Sundaresan (2016):

  (4) **Revised AAE**: Anaphors cannot directly trigger covarying person agreement which results in covarying person morphology.

- To account for this, we adopt Preminger (2019)'s proposal that anaphors include an AnaphP projection that is impenetrable to *Agree*, but deviate from it by proposing that the head hosting the anaphor's number and gender features may be either below it or above it.
- Based on conclusions about the fine structure of pronouns in Moskal (2015); van Urk (2018), we argue that Preminger's AnaphP provides a principled explanation for why this excludes anaphors from triggering person agreement.
- From what we can tell, this account is the only one that accounts for all the claimed counterexamples and predicts no unattested languages.

2 Anaphor Agreement Effect

2.1 Preliminaries

- Let's first look at a more complete paradigm for the Italian facts we saw in (1). Consider especially (5e). Woolford (1999) reports that some speakers accept this sentence (the equivalent of (5c) with (default) 3SG agreement). In this case, the anaphor is nominative, but simply fails to agree.

  (5) a. A me interessano solo loro.
  to me interest.**3PL** only **they**
  'I am interested only in them.' (Woolford 1999, citing Rizzi 1990, 14b)

  b. A loro interesso solo io.
  to them interest.**1SG** only **I**
  'They are interested only in me.' (Stanislao Zompì, p.c.)

  c. *A loro interessano solo se stessi.
  to them interest.**3PL** only **themselves**
  'They are interested only in themselves.' (Woolford 1999, citing Rizzi 1990, 15b)

  d. A loro importa solo di se stessi.
  to them matters.3SG only of themselves
  'They are interested only in themselves.' (Woolford 1999, citing Rizzi 1990, 15a)

  e. % A loro interessa solo se stessi
  to them interest.3**SG** only themselves
  'They are interested only in themselves.' (Stanislao Zompì, p.c., based on Woolford 1999, citing Maria Nella Carminati p.c.)

- Rizzi's original formulation: 'Anaphors do not occur in syntactic positions construed with agreement.'[2]
- We'll see that Rizzi was not quite right, but much crosslinguistic research has shown that he wasn't far off. (Woolford 1999; Haegman 2004; Deal 2010; Grosz and Patel-Grosz 2014; Sundaresan 2016; Yuan 2018 a.o.)

[2]Though note that the data from the speakers who accept (5e) undermines this version.

2.2 Detransitivization

- Nez Perce: Subject gets NOM (instead of ERG) marking and verb loses transitive agreement when the predicate is interpreted reflexively.

(6) a. Háama-nm pée-'wi-ye wewúkiye-ne.
man-**ERG** 3.S > 3.O-shoot-PERF elk-ACC
'The man shot an elk.' (Woolford 1999, citing Rude 1988, 30)

b. Háama-nm pée-'wi-ye ('ip-né).
man-**ERG** 3.S > 3.O-shoot-PERF he-ACC
'The man shot him/*himself.' (ibid., citing Rude 1985, 205)

c. Háama 'ipnée-'wi-ye ('ipinníx).
man.**NOM 3SG.REFL**-shoot-PERF 3SG.INTENS
'The man shot himself.' (ibid.)

2.3 Agreement Switch

- Kutchi Gujarati: verb agreement in the perfective is with the object (7a). But the agreement exceptionally targets the subject (where we find first conjunct agreement) just in case the object is an anaphor (7b-7c).

(7) a. Bill [John ane Mary]-ne jo-y-a
Bill John and Mary-ACC see-PRF-PL
'Bill saw John and Mary.' (Patel-Grosz 2014)

b. [John ane Mary] potpotha-ne jo-y-o
John and Mary themselves-ACC see-PRF-M.SG
'John and Mary saw themselves.' (ibid.)

c. [Mary ane John] potpotha-ne jo-y-i
John and Mary themselves-ACC see-PRF-F.SG
'Mary and John saw themselves.' (ibid.)

2.4 Protected Anaphors

- Selayarese: Anaphors in object position must occur with a possessive suffix. Regardless of the person of the binder, the whole complex still triggers 3rd person agreement.[3]

(8) a. La-jañjang-i i Ali ando-na.
3.ERG-see-3ABS DET Ali mom-3
'His mom saw Ali.' (Woolford 1999, citing Finer 1994)

b. La-jañjang-i kalen-na
3.ERG-see-3ABS self-3
'He saw himself.' (Woolford 1999, citing Dan Finer p.c.)

c. Ku-jañjang-i kalen-ku
1.SG.ERG-see-3ABS self-1
'I saw myself.' (ibid.)

d. To-jañjang-i kalen-ba
1.EXCL-see-3ABS self-1.EXCL
'We saw ourselves.' (ibid.)

[3]This fact suggests that Selayarese might show a combination of anaphor protection and default agreement, as discussed below.

- Having the anaphor be the possessum is not the only way to protect it[4]: Iatridou (1988) shows that the *possessor* of the complex DP is the anaphor in Modern Greek, and Yuan (2018) shows that Inuktitut anaphors are obligatorily generated within a PP, and trigger no object agreement.

(9) a. Taiviti-up Kiuru nagli-gi-**janga**
David-ERG Carol.**ABS** love-TR-**3SG.S** > **3SG.O**
'David loves Carol.' (Yuan 2018)

b. Taiviti ingmi-**nik** nagli-gi-**juq**
David.ABS self-**MOD** love-TR-**3SG.S**
'David loves himself.' (ibid.)

2.5 Default Agreement

- Albanian: only nominatives (including objects) are the triggers of *phi*-agreement (10a). Anaphors have no problem being in NOM object position, they just trigger default (3rd singular) agreement, regardless of the features of their binders (10b, 10c)

(10) a. Dritës i dhimbsen fëmijët.
Drita.DAT 3SG.DAT pity.**3PL** the.**children**.NOM
'Drita pities the children.' (Run Chen, p.c.)

b. Fëmijëve iu dhimbset vetja.
the.children.DAT 3PL.DAT pity.**3SG** **self**.NOM
'The children pity themselves.' (Run Chen, p.c.)

c. Vetja më dhimbset
self.NOM **1**SG.DAT pity.**3SG**
'I pity myself.' (Woolford 1999)

- Languages with default agreement superficially look like AAE violations, but the full range of data shows this to be spurious.

2.6 Anaphoric Agreement

- One of the first significant updates to the original generalization was given by Woolford (1999), who pointed out that certain languages have special agreement morphemes specifically for anaphors.
- For example, in Swahili, verbs agree with their arguments in person, number, and noun class. When the object is the reflexive anaphor *mwenyewe*, the morph *ji-* appears in the object agreement slot.

(11) a. ahmed a-na-**m**-penda Halima
Ahmed 3SG.S-PRS-**3SG.O**-love Halima
'Ahmed loves Halima.'

b. Watu wa Kenya wa-na-**wa**-penda watoto
people of Kenya 3PL.S-PRS-**3PL.O**-love children
'Kenyan people love children.'

c. Ahmed a-na-**ji**-penda mwenyewe
Ahmed 3SG.S-PRS-**REFL**-love self
'Ahmed loves himself.'

- Based on this, Woolford proposes the following generalization for the AAE

(12) Anaphors do not occur in syntactic positions construed with agreement, unless the agreement is anaphoric.

[4]Though it seems to be quite common, especially in languages with body-part anaphors like Georgian and Basque.

2.7 Agreement with a Null Operator

- Another significant update comes from Sundaresan's work on Tamil, a language that was identified in Kayne (1994) as problematic for the AAE.
- Tamil: verb in an embedded clause with long-distance anaphor *taan* as subject takes gender agreement consistent with the anaphor's binder (Sundaresan 2016).

(13) a. **Mia**$_i$ [Sri$_j$ [taan$_{i,*j}$ too-pp-**aaɭ**-ŭnnŭ] nene-tt-aan-nŭ]
Mia.NOM Sri.NOM ANAPH.SG.NOM lose-FUT-**3SG.F**-COMP think-PST-3SG.M-COMP
paar-tt-aaɭ.
see-PST-3SG.F
'Mia$_i$ saw that Sri$_j$ thought that she$_i$/*he$_j$ would lose.' (Sundaresan 2016)

b. Mia$_i$ [**Sri**$_j$ [taan$_{j,*i}$ too-pp-**aan**-ŭnnŭ] nene-tt-aan-nŭ]
Mia.NOM **Sri**.NOM ANAPH.SG.NOM lose-FUT-**3SG.M**-COMP think-PST-3SG.M-COMP
paar-tt-aaɭ.
see-PST-3SG.F
'Mia$_i$ saw that Sri$_j$ thought that he$_j$/*she$_i$ would lose.' (ibid.)

- This would appear to violate the AAE, but Sundaresan (2016) argues that it is independently necessary to posit a null perspectival *pro* in the left periphery of the embedded clause to account for the full range of binding facts involving embedded subjects. This *pro*, she suggests, is what triggers *phi*-agreement on the verb.[5]
- Sundaresan therefore proposes the following generalization about the AAE:

(14) Anaphors cannot directly trigger covarying φ-agreement which results in covarying φ-morphology.

- We take (14) as our starting point.

3 Koryak

- Koryak verbs display obligatory agreement in person and number with their subjects and objects (15).

(15) a. močɣənan *(**mət**)-ləʔu-*(**net**) əčč-i
we.ERG **1NSG.S**-see-**3DU.O** they-ABS.DU
'We two saw them two.'

b. əčɣənan *(**ne**)-leʔu-*(**ɣi**) ɣəčči
they.ERG **INV**-see-**2SG.O** you.ABS.SG
'They saw you.'

c. ɣənan *(**na**)-laʔo-*(**la**)-*(**mək**) muj-u
you.ERG.SG **INV**-see-**PL-1NSG.S/O** we-ABS.PL
'You saw us.'

- Three agreement slots are going to come up in the examples
  - The leftmost prefix, which either indexes agreement with the subject or hosts the inverse prefix
  - The rightmost suffix, which (roughly) indexes agreement with the absolutive argument (intransitive subject and transitive object)[6]

[5] Needless to say, this summary does not do justice to the arguments in paper.
[6] This slot actually has far more complicated behavior than I'm letting on but this will do for today.

– The omnivorous plural *-la*, which is between the root and the suffixal agreement.[7]

- As (16) shows, this agreement is identical regardless of whether or not the object is the reflexive/reciprocal anaphor *uvik*, which has the same number specification as its binder (16).

(16) a. ɣəmnan t-ə-leʔu-**n** {uvik / qoja-ŋa}
I.ERG 1SG.S-EP-see-**3SG.O self.ABS.SG** / reindeer-ABS.SG
'I saw myself/ a reindeer.'

b. močɣənan mət-ləʔu-**net** {uviki-t / qoja-t}
We.ERG 1NSG.S-see-**3DU.O self-ABS.DU** / reindeer-ABS.DU
'We two saw {ourselves/each other} / two reindeer.'

c. močɣənan mət-ləʔu-**new** {uviki-w / qoja-w}
We.ERG 1NSG.S-see-**3PL.O self-ABS.PL** / reindeer-ABS.PL
'We (pl.) saw {ourselves/each other} / reindeer.'

- *uvik* can also be bound by 2nd and 3rd person nominals:

(17) a. ɣənan ləʔu-n uvik
you.ERG.SG see-3(SG).O self.ABS.SG
'You saw yourself.'

b. qojawjepəlʔa ləʔu-nin uvik
reindeer.herder.ERG see-3SG.A > 3.O self.ABS.SG
'The reindeer herder saw himself.'

- *uvik* is only a local anaphor:

(18) *ɣəmmo t-ə-ko-ɣajmat-ə-ŋ tit uvik enalvat-ə-k ʔije-k
1SG.ABS 1SG.S-EP-PRS-want-EP-PRS so.that self.ABS.SG win-EP-INF race-LOC
intended: 'I want to win the race.'

- *uvik* is also homophonous between an anaphor and the word *body*.

(19) ənneŋ-čeŋ čəvi-pt-u ʔujemtewilʔə-uvik-ine-w ɣa-ŋvo-lena-w
one-time cut-piece-ABS.PL human-body-GEN-PL UW.P-begin-3.UW.P-3.PL
ewwəp-čet-ə-k
argue-RECIP.VB-EP-INF
'Once upon a time, the parts of the human body began to argue.' (Vdovin and Jajletkan 1949)

- Crucially, *uvik* is not required to appear with a possessor[8], so we can't say that this is a case of an anaphor protected by being in a PossP like we find in Selayarese.

- While the verb shows agreement with the anaphor in number, agreement reflecting the phi features of the anaphor's binder is ungrammatical (20).

[7] This slot is also more complicated than I'm letting on.

[8] Putting the anaphor inside a possessive DP, as in (1), is accepted (sometimes reluctantly) in elicitation, though speakers rarely (if ever) provide such structures in translation tasks, and all textual examples I have seen with *uvik* and a possessor have the 'body' meaning. The unpossessed version seems therefore to be the default way to express this.

(1) ɣəm-nan t-ə-leʔu-n ɣəm-nin uvik
1SG-ERG 1SG.S/A-EP-see-3(SG).O 1SG-POSS.SG self.ABS.SG
'I saw myself/I saw my body.' (elicitation)

(20) *močɣənan mət-ləʔu-**mək** uviki-t
WE.ERG 1NSG.S-see-**1NSG.S/O** self-ABS.DU
intended: 'We two saw ourselves/each other.'

- This provides an argument that we're seeing here is not Kutchi Gujarati-style agreement switch, as we would then expect to see the suffixal agreement slot with *-mək*.[9]
- Note that there's nothing wrong with having both the 1NSG prefix and the 1NSG suffix: intransitive aorist verbs with a 1NSG subject have both (21).

(21) mət-ə-kjew-mək
1NSG.S/A-EP-wake.up-1NSG.S/O
'We two woke up.'

- It's worth noting that agreeing with the anaphor is not even dispreferred: Koryak has a detransitivizing suffix *-vəlŋ* that can be used instead of an anaphoric object, though only for reciprocals. Even so, using the agreed-with anaphor *uvik* is equally acceptable.

(22) a. məč-če-ləʔu-**vəlŋ**-ə-ŋ
1NSG.S/A-FUT-see-**RECIP**-EP-FUT
'We two will see each other.'
b. məč-če-ləʔu-ŋ-net uviki-t
1NSG.S/A-FUT-see-FUT-3DU.O self-ABS.DU
'We two will see each other (/ourselves).'

- To summarize: the anaphor *uvik* can be bound by a nominal of any number, and triggers agreement consistent with that number. However, it can also be bound by a nominal of any person, but nonetheless always triggers 3rd person agreement.
- Takeaway: anaphors can directly trigger some covarying agreement, contrary to previous formulations of the AAE, though that agreement cannot be in person.
- We therefore propose the following revised version of the AAE based on Sundaresan (2016):

(23) **Revised AAE**: Anaphors cannot directly trigger covarying person agreement which results in covarying person morphology.

[9] In light of (20), one might entertain a (wild) story on which the suffix in (16) is indexing agreement with the subject, just like the prefix is, but (somehow!) the person feature must be impoverished. This won't work, because Koryak morphologically distinguishes agreement with ABS subjects from ABS objects. The morphology of the 3rd dual aorist provides a case in point: if the suffixal agreement came from the subject, we would expect *-ɣəʔi* (1a), whereas we expect *-net* if the agreement is with the object (1b). As (2) shows, we find the object agreement morph here.

(1) a. ʔeqelʔ-ə-t ɣənt-ew-ɣəʔi
enemy-EP-ABS.DU run-VB-3DU.S.AOR
'The two enemies ran away.'
b. t-ə-leʔu-net ʔeqelʔ-ə-t
1SG.S/A-EP-see-3DU.O enemy-EP-ABS.DU
'I saw two enemies.'

(2) a. *močɣənan mət-ləʔu-**ɣəʔi** uviki-t
We.ERG 1NSG.S-see-3DU.S self-ABS.DU
intended: 'We two saw ourselves/each other.'
b. močɣənan mət-ləʔu-**net** uviki-t
We.ERG 1NSG.S-see-3DU.O self-ABS.DU
'We two saw ourselves/each other.'

- Based on Murugesan (2018)'s survey of AAE counterexamples, no language that violates (23) has been reported: all instances of anaphors directly triggering agreement involve number or gender.[10]
- The rest of the talk will be devoted to deriving (23).

4 Analysis

- As surveyed in the last two sections, the AAE is a diverse phenomenon, with different languages reacting differently (or to varying degrees) to the restriction on agreement with anaphors.
- Our goal here is to explain (23), which makes anaphor agreement subject to cross-linguistic differences when it comes to ϕ-features other than person.
- We thus focus on the difference between Albanian - a language that shows default number-person agreement with anaphors, and Koryak - a language which shows default person agreement with anaphors but non-trivial number agreement.
- Our account will also have something to say about Nez-Perce (see section 2.2).
- We won't say much about languages that show more complicated patterns of AAE, although it is important to note that those are not in conflict with our account.
  - Accounting for the other patterns requires enriching the theory to deal with the special circumstances of each language, which we can do but that is orthogonal to our main concern here.

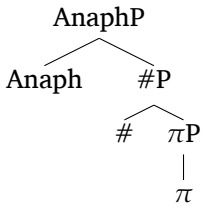
4.1 Syntax

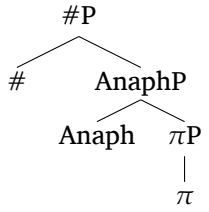
- Following the conclusions of Moskal (2015); Harbour (2016); van Urk (2018), we assume that Person is invariably generated below number (and gender) cross-linguistically.
- Following Preminger (2019), we take anaphors to differ from other DPs in that they contain a functional head ANAPH that is a barrier to agreement[11]. ϕ-heads that are below ANAPH will not be agreed with.
- Cross-linguistic differences in what kind of agreement (if any) anaphors trigger are then reduced to the relative height of ANAPH w.r.t the ϕ-feature heads: in a language like Koryak, ANAPH selects πP, making only Person agreement inaccessible, whereas in Albanian ANAPH selects #P, making both Number and Person agreement inaccessible.[12]
- The structure for Albanian anaphor is schematically in (24), and the one for Koryak is in (25).
  - In languages where anaphors trigger covarying gender agreement (Murugesan 2018), the structure would be like that in (25) but with gender above Anaph instead of number.
- Crucially, there's no way that ANAPH is placed below person because person is the lowest node in any pronominal DP. (26) is an illicit structure.

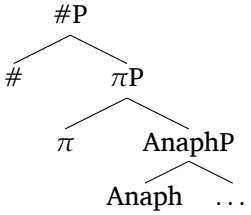
[10] Sandhya Sundaresan and Gurujegan Murugesan have pointed out that there is some question about the behavior of the Gujarati anaphor *pote*, which for a small number of speakers can trigger person agreement when it is a long-distance anaphor in subject position. Hopefully this is analyzable along the lines of the the Tamil facts described above.

[11] There's a sense in which this could just be stipulated, though Preminger cites evidence for this barrierhood from recent work by Middleton coming from *ABA patterns of syncretism between anaphors and pronominals. We haven't checked to make sure what we're saying fits with what Middleton argues, so we'll just stipulate the barrierhood for now.

[12] Depending on what the probe does when it encounters the phi-feature-less AnaphP, we can derive non-agreement (Inuit), default agreement (Albanian), and special anaphoric agreement (Swahili) in this case. For the first two, where the probe does not interact meaningfully with Anaph, this will ideally reduce to what the language usually does with agreement with feature-less nominals like expletives, though we have not looked at this in sufficient detail to be sure.

(24) 

(25) 

(26) * 

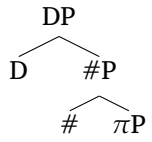
- Given that Anaph shields its complement from agreement, if it's merged as low as possible (sister to πP), it will shield person, but nothing else, from being agreed with.
- This derives our generalization.

4.2 Semantics

- Our job is not done; having postulated that anaphors are just pronouns with an additional ANAPH head in them, and assuming that ANAPH is semantically interpreted, we need to say how it contributes to the semantics, i.e. how exactly it establishes the required co-reference between the anaphor and its antecedent.
- In addition, given our account of the Koryak-Albanian difference, we must make sure that ANAPH cannot attach below Person.
- In a nutshell, the semantic part of our analysis incorporates the following ingredients:
  - We cash out the idea that person is the base of (pronominal) DP by having the Person head introduce the individual that the pronoun refers to (Person is being the 'locus of referencee'). In this we take inspiration from Sudo (2012).
  - ANAPH, which is generated inside the anaphoric DP, undergoes movement at LF to the predicate that it reflexivizes.
- In some more detail...

4.2.1 Structure and Interpretation of pronominal DPs: Person is lowest

- We make the assumption that Person is, semantically, the locus of reference, and base node of the DP, number and gender just imposing further restrictions on the reference of the DP. The tree of pronouns then looks schematically like this (we ignore gender for now):

(27) 

- More concretely, we assume (much in the spirit of Sudo 2012) that the category "person" introduces into the derivation a pair of a **numeral** and a **letter**, where:
  - The **numeral** represents the person information (by way of a presupposition) - and as such can only be either 1, 2 or 3 (possibly even just 1,2); and
  - The **letter** is the 'index' whose value is assigned by context (technically, by the assignment function g_c supplied by the context c).
- I.e., licit person heads include representations like $<1,i>$, $<1,j>$, $<2,j>$, etc. (but not e.g. $<4,i>$).

- The semantics of Person is presuppositional (Heim, Charnavel, Adger,...), where presuppositions are encoded as definedness conditions on denotations:[13]

(28) Examples of π-heads and their meanings:

a. $[\![<1,i>]\!]^c$ is defined only if $g_c(i)$ is or includes the speaker in c; when defined, $[\![<1,i>]\!]^c = g_c(i)$.

b. $[\![<2,i>]\!]^c$ is defined only if $g_c(i)$ is or includes a participant in c; when defined, $[\![<2,i>]\!]^c = g_c(i)$.

c. $[\![<3,i>]\!]^c = g_c(i)$.[14]

- We assume that number values are semantically predicates (type $\langle e,t\rangle$). I.e.:

(29) #:

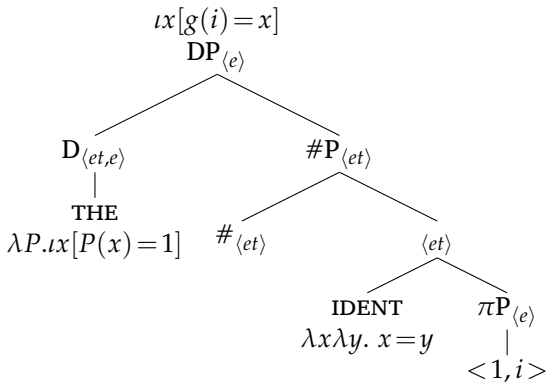
a. $[\![\text{SG}]\!] = \lambda x.\ x$ is an atomic individual.

b. $[\![\text{DU}]\!] = \lambda x.\ x$ is a dual individual.

c. $[\![\text{PL}]\!] = \lambda x.\ x$ is a non-atomic (non-dual) individual.

- To make the composition work, we assume the slightly richer representation in (30).[15] In (30) there are also the silent operators THE (the covert counterpart of the overt one), and IDENT which 'lifts' an individual into a predicate. Both of these have been argued to be needed in the grammar anyway (see e.g. Elbourne 2005 for the former and Partee 1986 for the latter), and we employ them to make the composition smoother. We assume that silent operators can be freely inserted (as long as the result is interpretable).

(30)



4.2.2 Anaphors

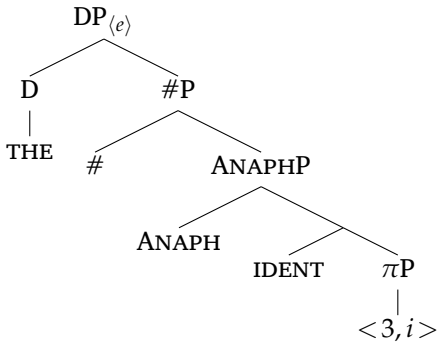
- We assume that anaphors are just like normal pronouns except they are generated with an ANAPH head which can be inserted somwhere along the DP spine. Concretely, in Koryak it attaches between number and person. An object anaphor will be generated in this language like this:

[13]Note that as far as the semantics is defined in (28), a use of a 3rd person pronoun is compatible with reference to the speaker or the addressee, and a use of a 2nd person pronoun is compatible with reference to the speaker. These are not intuitive inferences from the use of such pronouns. But, following Sauerland (2003,2008), there's a remedy that makes use of Gricean reasoning: the principle 'Maximize Presupposition' dictates speakers to choose the person feature with the strongest presupposition possible; since 3rd has no presuppositions at all compared to 1st and 2nd, a choice of 3rd pronoun gives rise to the inference that neither the speaker nor the addressee is referred to. Similarly, 2nd has a strictly weaker presupposition than 1st, so choice of 2nd generates the inference that a participant other than the speaker is referred to.

[14]Perhaps '3rd person' is the absence of any value for Person in the syntax, in which case we can simply omit the first member of the pair in (28) and represent it just with the index i.

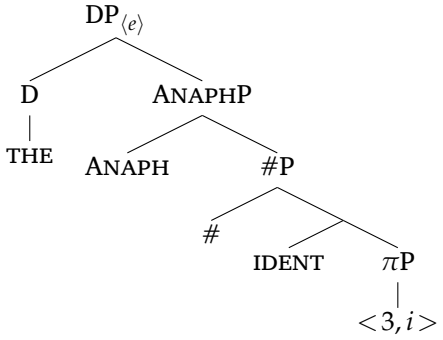
[15]The bracketing '⟨⟩' on a phrase is a label for the phrase's semantic type.

(31)



- Whereas in Albanian ANAPH will be generated above Number:

(32)



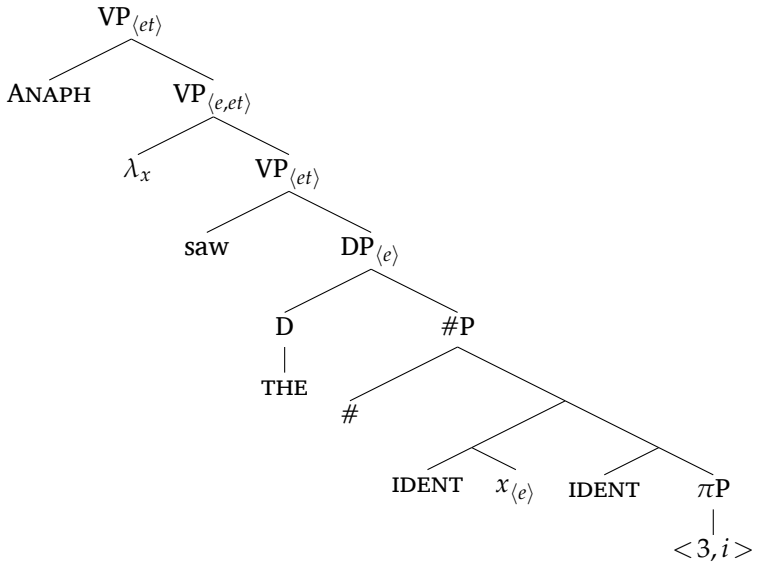
- Crucially, since Person is the base node in the DP, there's no sense in which ANAPH can be generated below person. This, we argued, is what explains the (revised) AAE.
- But, now, how does ANAPH contribute to the interpretation?
- Following many before us, we take ANAPH to be an 'arity-reducing' function: it transforms a 2-place predicate into a 1-place one by reflexivizing it:

(33) $[\![\text{ANAPH}]\!] = \lambda V_{\langle e,et\rangle}.\lambda y_{\langle e\rangle}.\ V(y)(y) = 1$

- According to (33) ANAPH needs to compose with a type $\langle e,et\rangle$ function, meaning it is not interpretable where it appears in (31), and in fact not anywhere inside the DP.[16] So it must move at LF to where it can be interpreted. We also follow standard practice in assuming that when phrases undergo LF movement they leave a trace in the base position (of type $\langle e\rangle$) and create a λ-absraction node at their adjunction site.
- Where does ANAPH move to? Given its type it needs to compose with type $\langle e,et\rangle$, so a suitable adjunction site would be a phrase whose type is $\langle et\rangle$ (which when abstracted over will give us $\langle e,et\rangle$). One such position is the edge of the VP, right after the verb has composed with the object. That is, the LF of the VP that we derive from (31) is the following (note the additional IDENT next to x, which - recall - we assume can be freely generated):

[16] Well, that's not *quite* right. Nothing in principle prevents ANAPH from composing with IDENT, which is a freely-available function of type $\langle e,et\rangle$, in which case ANAPH *would* be interpretable inside the DP. To see this, consider schematically the DP [THE [IDENT ANAPH] [IDENT $<i>$]]. This DP is interpretable in light of our lexical entries, and it means exactly what [THE [IDENT $<i>$]] means, i.e. the contribution of ANAPH is predicted to be vacuous here. This is not what we want because we need to guarantee that ANAPH always establishes a connection between the two arguments of the **verb** (by requiring them to be identical). At this point we can simply stipulate that ANAPH can take any $\langle e,et\rangle$-argument *except for* IDENT. Perhaps the very reason for this is that composing ANAPH with IDENT is vacuous.

(34) LF:



- The LF in (34) is interpretable and yields the right meaning for e.g. "saw myself/yourself/himself". The key fact is that the variable x left from movement of ANAPH contributes the presupposition that it co-refers with what's 'originally' generated as the object, namely the variable i. The crucial ingredient is the underlined part (the presupposition) in the meaning of the DP, (35):

(35) $[\![\text{DP}]\!]^c$ in (34) is defined only if $g_c(x) = g_c(i)$. When defined, $[\![\text{DP}]\!]^c = g_c(i)$.

- This presupposition projects up the tree like presuppositions usually do, and it will end up making sure that subject and object co-refer. Here are the next steps in the calculation:[17]

(36) a. $[\![\text{saw DP}]\!] =$ $\lambda z : g(x) = g(i).\ z$ saw $g(i)$.

b. $[\![\lambda_x\ [\text{saw DP}]]\!] =$ $\lambda x \lambda z : x = g(i).\ z$ saw $g(i)$.

c. $[\![\text{ANAPH}\ [\lambda_x\ [\text{saw DP}]]]\!] =$ $\lambda y : y = g(i).\ y$ saw y.

- The correct interpretation results due to the requirement in (36c) that y, the subject of the verb, be identical to $g(i)$, the object.

4.2.3 Condition A

- Now there's a question: what prevents ANAPH from undergoing long-distance movement to reflexivize a **non-local** predicate, overgenerating cases like **John$_1$ met with a woman who likes himself$_1$*?
  - In this example, ANAPH could LF-move from the embedded object DP all the way to attach to the matrix VP "meet ...", generating the wrong meaning. Nothing so fat prevents that.
- We stipulate that LF movement of ANAPH must be local - to the closest predicate.
- We propose that condition A of the binding theory reduces to this stipulation (we don't need condition A separately from this stipulation).

(37) Condition A: ANAPH can only move to the **closest** position in which it is interpretable.

[17] Presuppositions, recall, are encoded as definedness conditions. The way that the presupposition projects in (36) is technically achieved by defining the semantic composition rules so as to project definedness conditions from daughters to mothers. See Heim & Kratzer 1998 for the technical details.

4.3 Nez Perce

- Recall that in Nez Perce, there's special morphology on the verb whenever there's an anaphor, and according to the gloss the pronoun-ish thing in (38c) is not itself an anaphor. Data is repeated:

(38) a. Háama-nm pée-'wi-ye wewúkiye-ne.
man-**ERG** 3.S>3.O-shoot-PERF elk-ACC
'The man shot an elk.' (Woolford 1999, citing Rude 1988, 30)

b. Háama-nm pée-'wi-ye ('ip-né).
man-**ERG** 3.S>3.O-shoot-PERF he-ACC
'The man shot him/*himself.' (ibid., citing Rude 1985, 205)

c. Háama 'ipnée-'wi-ye ('ipinníx).
man.**NOM** **3SG.REFL**-shoot-PERF 3SG.INTENS
'The man shot himself.' (ibid.)

- On the present account this can be understood if ANAPH is directly generated on the verb, and it doesn't need to move from inside an object DP.
- Nez Perce overtly does what we claim other languages do at LF.

5 Conclusion

- Today, we've discussed the relevance of some Koryak data to the Anaphor Agreement Effect, and argued that the anaphor *uvik* presents a new type of counterexample to it.
- Specifically, despite it being bindable by nouns of any person and number, it can only trigger non-trivial number agreement.
- Based on this, we have proposed a new generalization for the anaphor agreement effect that bans only person agreement with anaphors.
- We have accounted for the crosslinguistic variation in what agreement we find by adopting a somewhat less constrained version of Preminger (2019)'s AnaphP proposal for the AAE that still makes falsifiable predictions.
- One thing that makes Koryak not *quite* the best example of what we're arguing is that you don't overtly see evidence of person on the anaphor, so we can't be sure that it's there.[18] So it would be nice to find a language where you do overtly see person features on the anaphor (where this isn't a case of protected anaphora).

[18] That being said, Koryak nominals are systematically surface-underspecified for number, but they still trigger number agreement, so it very well might be that the person features are there but just invisible.

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