Deriving "restrictive" interpretations for clarificatory nominal appositives[*]

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In English, certain nominal appositives (NAs) appear to have "restrictive" interpretations - they can affect the felicity and interpretation of their hosts.

For instance, in (1), an infelicitous definite (1a) can be salvaged by a restrictive modifier (1b), but also a nominal appositive (1c).

(1)   Context: There are many boys, but only one with a hat.

    a.   # The boy sneezed.
    b.   The boy who had a hat on sneezed.
    c.   The boy, <u>the one who had a hat on (I mean)</u>, sneezed.

I'll call these **clarificatory NAs** (CNAs).

The pattern in (1) is surprising:

- NAs are thought to uniformly be supplements, which should not affect the felicity of the at-issue information in the sentence (e.g. Potts, 2005).

- Compare to appositive relative clauses (ARCs), another supplement, which do not permit these "restrictive" readings (2).

(2)   # The boy, who had a hat on, sneezed.

> I argue that despite these patterns, **we should still treat CNAs as NAs**, deriving apparent "restriction" as a **pragmatic side effect of a more typical meaning**.
>
> To do so, we'll need an account of NAs with two key ingredients:
> - Ingredient #1: By analogy to copulas, **NAs may be equative**.
> - Ingredient #2: NAs are connected to their hosts **anaphorically** (Nouwen, 2007).
>
> In this approach, **CNAs are simply definite, equative NAs used to clarify the extension of a host which is vague in context.**

1 Probing "restrictive" readings

Two key effects look "restrictive":

Ⓐ Definiteness Licensing   Ⓑ Quantifier Restriction

1.1 CNAs with definites

(1c) seems to be good because it lacks (1a)'s requirement for a unique boy in context.

(1a)   # The boy sneezed.

(1c)   The boy, <u>the one who had a hat on (I mean)</u>, sneezed.

The content of the CNA matters: the licensing effect is only achieved if there is a **single individual who uniquely satisfies the intersection** of the host description and the CNA description.

(3)   # The boy, <u>the one who had a green shirt on</u>, sneezed.

The CNA **does not have to be headed by *one*** to achieve this. (Suppose athletes wear hats.)

(4)   The boy, <u>the athlete</u>, sneezed.

Crucially, **the CNA description also doesn't have to be itself unique** to achieve this. (5b) and (5c) are better than (5a), even if they are not as good as (1c).

(5)   Context: There are many boys and girls. One of each has a hat.

    a.   # The athlete sneezed.
    b.   The athlete, <u>the boy (I mean)</u>, sneezed.
    c.   The boy, <u>the athlete (I mean)</u>, sneezed.

Naturally occurring examples seem to have the same flavor:

(6) a. Where's the doctor, the one from Atlanta?[1]
     b. Where's the doctor, the man from Atlanta?

> **(A) Definiteness Licensing**:
>
> A definite host with a definite NA is felicitous if the intersection of the host description and the NA description is unique, even if the host (or the NA) is not itself unique.

1.2 CNAs with quantifiers

Similarly, quantified hosts with CNAs can take as their restrictor the intersection of the host description and the CNA description.

(7) Context: All the girls with hats, but not all the girls or all the hat-wearers, ate tamales.

     a. # Every girl ate a tamale.
     b. Every girl, the ones who had a hat on (I mean), ate a tamale.
     c. Every girl, the athletes (I mean), ate a tamale.

(8) Context: Discussion on autonomous shipping as a solution to US supply chain trouble.

     As far as state-to-state, yeah, you can do that, but not with autonomous trucks. And that's just because every state, the ones that do have legislation on autonomous trucks, it is different.[2]

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[1] From the *American Gothic* episode "Rebirth", aired January 3, 1996.
[2] Patrick Penfield on Washington Journal (C-SPAN), October 18, 2021, https://www.c-span.org/video/?515364-6/washington-journal-patrick-penfield-discusses-delays-us-supply-chain

The same phenomenon extends to other quantifiers, like *few*.

(9) Context: A minority of children with hats, but a majority of children, ate tamales.
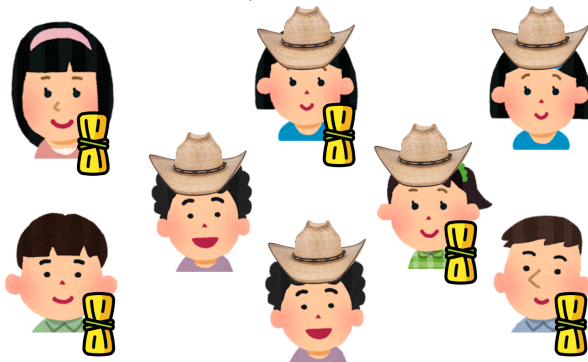
    a.   # Few children ate a tamale.

    b.   Few children, <u>the ones who had a hat on (I mean)</u>, ate a tamale.

But note that definite NAs following *few* also have a non-clarificatory reading, where they do not affect the truth conditions, but simply describe the subset of the restrictor that satisfies the nuclear scope (the nuclear scope set).

(10) Context: A minority of children ate tamales, in particular just the children with a hat.
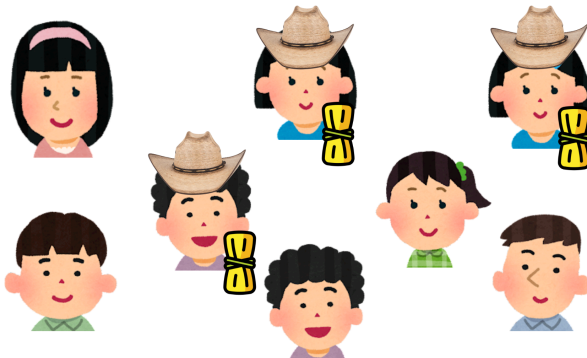
    a.   Few children ate a tamale.

    b.   Few children, (namely) the ones who had a hat on, ate a tamale.

> **Ⓑ Quantifier Restriction:**
>
> In a sentence with a quantified DP hosting a CNA, the quantifier may be interpreted with the intersection of the host description and the NA description as its restrictor.

1.3 "Restriction" from a distance?

We can unite these phenomena:

- standard theories of definite articles and nominal quantifiers rely on the content of the prejacent δ to the determiner

    - definite articles require that δ picks out a unique individual in context

    - quantifiers take δ as their restrictor

- In both (A) and (B), δ_{host} seems to be interpreted as $\delta_{\text{host}} \cup \delta_{\text{NA}}$

This is the parallel with restrictive modifiers, which standardly alter δ by composing with their own prejacents inside of the scope of D (Partee, 1975; Jackendoff, 1977).

In that picture, appositive content is blocked from affecting δ because it composes somewhere above D, capturing a correlation between the semantic independence of ARCs and their the obligatory late position.

(11)   Every girl that that had a hat on that ate a tamale loved it.

(12)   # Every girl, who had a hat on, that ate a tamale loved it.

CNAs have the same obligatory lateness, apparently diagnosing composition above D.

(13)   # Every girl, <u>the ones who had a hat on (I mean)</u>, that ate a tamale loved it.

(C) **Obligatory Lateness:**
CNAs must follow all restrictive modifiers of their host.

The puzzle: How is the NA influencing the interpretation of δ from a distance?

2   The intuition: Clarification by equation

I propose that the connection between the NA and δ is purely pragmatic: the NA provides an identity statement that can retroactively clarify implicit domain restriction on its host.

2.1   Pragmatic conditions on felicity

To motivate this, note that real examples, including (14) share a peculiar pragmatic condition.

(14)   Context: Discussion on the question "If a country had the means to conquer the world, why would they not conquer the world?"

Most nations, the ones today at least, see [global conquest] as a much bigger cost than the reward.[3]

In context, to use one of these, it seems necessary that the speaker believes the interlocutor could infer that the host description is meant to mean the host description intersected with the CNA.

The CNA becomes much less acceptable if it is a contextually unlikely subset of the description. (14′) seems to suggest that the addressee should know that in this context, it should be a settled matter that would be making claims only about nations in the Americas.

(14′)   # Most nations, the ones in the Americas, see global conquest as a much bigger cost than the reward.

Restrictive modifiers with the same content form strange assertions, but do not seem to have the same pragmatic conditions.

(14″)   Most nations in the Americas see global conquest as a much bigger cost than the reward.

> (D)   **Obligatory Inferability:**
> CNAs can only supply information that in context could plausibly be implicit in the meaning of the host.

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[3]User Alexis Leskinen on Quora, quora.com/If-a-country-had-the-means-to-conquer-the-world-why-would-they-not-conquer-the-world

2.2   Explaining the patterns

The intuition is that **English speakers use CNAs as a way of clarifying the reference of a vague description in the main sentence**.

- I assume that nominal descriptive content δ may be vague due to the possible presence of implicit domain restriction (e.g. Stanley & Szabó, 2000).

- If a speaker wants to ensure that their intended δ is recoverable, they can supplement their assertion with an alternate description of the individual via a CNA.

How would this explain the data?

- Restrictive effects (A) and (B) happen because pragmatic reasoning is affecting implicit restriction.

- CNAs are still appositives, so the linearization facts (C) can get a normal explanation.

- The pragmatic conditions (D) come about from general maxims: competent speakers do not typically leave information implicit unless it could be recovered.

To capture why NAs are a good tool for both definites and quantifiers, we need:

- **an equative semantics for NAs**

- **a theory of the host-appositive connection that does not require structural adjacency**
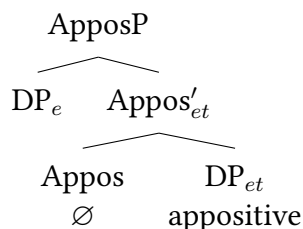
3 The proposal

3.1 Ingredient #1: Equative appositives

In Potts (2005), predicative NAs compose with their anchors through function application analogously to predicative copulas.
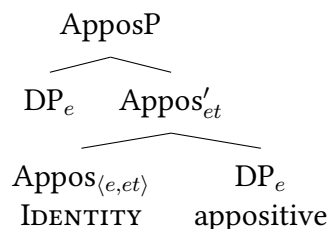
I will take the parallel between copulas and NAs further, and take NAs to have the internal structure of a copular small clause, that allows for a wider variety of relationships between host and NA (Heycock & Kroch, 1999).

- Potts' predicative NAs would have a semantically-vacuous head, leaving composition to function application.

- But these CNAs will feature a contentful Identity head, which derives an equative relationship between host and NA.

(15) **A predicative NA**

ApposP
DP$_e$ Appos$'_{et}$
Appos   DP$_{et}$
∅   appositive

(16) **An equative NA**

ApposP
DP$_e$ Appos$'_{et}$
Appos$_{\langle e,et\rangle}$ DP$_e$
IDENTITY   appositive

In fact, we have to make this move anyway to allow for e-type NAs like names and pronouns.

These are not standardly coerceable to et, as diagnosed by their infelicity with predicative copulas (17) (Mikkelsen, 2005), but they can serve nicely as NAs (18).

(17) a. * The winner of this competition is Susan, isn't she?
       b. * The winner of this competition is you, isn't she?
(18) a. The winner of this competition, <u>Susan</u>, will be taking home a fabulous prize.
       b. The winner of this competition, <u>you, (Susan,)</u> will be taking home a fabulous prize.

3.2 Ingredient #2: Accessing restrictor sets

If we were dealing just with e-type hosts, we could stick with a theory of host-appositive connection that is fixed compositionally, like Potts (2005). But this won't work for the quantified cases, which don't provide an e-type syntactic host.

Many proposals for ARCs involve a more free discourse relation to their hosts (e.g. Sells, 1985).

I won't discuss the status of ARCs (see Del Gobbo, 2003), but the analysis works fairly easily for NAs, which can pick up on any host that can establish a discourse referent (Nouwen, 2007, 2014), and do not have to be particularly local.

(19)   a. Every child ate a tamale. They (all) had a hat on.
        b. Every child, the ones who had a hat on, ate a tamale.

(20)   a. Few children ate a tamale. They (all)$_{\{restr \mid n.sc.\}}$ had a hat on.
        b. Few children, the ones$_{\{restr \mid n.sc.\}}$ who had a hat on, ate a tamale.

(21)   Few children ate a tamale, the ones who had a hat on I mean.

I'll assume that the specifier of the ApposP small clause features an implicit *pro* that picks up an available discourse referent.

Note that the choice of host for an NA patterns with discourse anaphora resolution.

(22)   a. Few children ate a tamale. They$_{restr}$ weren't hungry.
        b. Few children, the ones$_{restr}$ who weren't hungry, ate a tamale.

(23)   a. Few children ate a tamale. They$_{n.sc.}$ were hungry.
        b. Few children, the ones$_{n.sc.}$ who were hungry, ate a tamale.

Any dynamic semantics for quantification that can give us the restrictor meaning for cross-sentential discourse anaphora cases can also explain the availability of the restrictor as a host for a CNA (e.g. Brasoveanu, 2013).

3.3 Putting it all together

(24)   Few ρ children, *pro* the ρ' musicians, sneezed.

1. The quantifier *few ρ children* establishes a (vague) discourse referent x for the maximal set of individuals who meet the criterion ρ *children*. x is asserted to have a minority subset x' which meets the criterion *sneezed*.

2. The NA *pro the ρ musicians* can resolve *pro* to x, and imposes, somehow peripherally, that x is identical to the maximal set of individuals who meet the criterion ρ *musicians*.

3. Pragmatic reasoning to fix the particular content of the assertion can use the fact that x and y are identical to reach a better sense of the intended reference of x.

4 Discussion

4.1 Not-at-issueness

The above account derives three components of the meaning of sentences with CNAs.

- P1, the meaning without the appositive, potentially vague

- P2, equation introduced by the appositive

- P3, P1 as specified based on P2

(25) A: The boy, the one who had a hat on, sneezed.
     P1: The boy sneezed.
     P2: *The boy* and *the one who had a hat on* refer to the same individual.
     P3: The boy that had a hat on sneezed.

This seems to make the right predictions about apparent at-issueness. P3, as a resolution of the at-issue information, is able to be targeted for denial even though it reflects information gleaned from the not-at-issue P2.

(26) B: No, a different person sneezed (the other boy, with the pointy nose).

4.2 CNAs in another language

Though we have focused on English data, the proposal would expect that this is a more general phenomenon.

Indeed, recent discussion of nominal appositives in Santiago Laxopa Zapotec (*Dille' xhunh Laxup*; Oto-Manguean; Oaxaca, MX) finds the same quasi-restrictive behavior (Duff et al., 2022).

(27) Context: As in (1), many children.

  Bxixe'   bi'i xkwide'=nh [bi'=nh nhgu'u kachuche'=nh].
  sneeze.COMP CL.HU child=DEF CL.HU=DEF wear.STAT hat=DEF

  'The child, the one who is wearing the hat, sneezed.'

(28) Context: As in (7), not all children got a tamale.

  Yuge' bi'i xkwide'=nh [bi'=nh nhgu'u lhape'] bnhelljw=a' tu yetgu'.
  all CL.HU child=DEF CL.HU=DEF wear.STAT hat give.COMP=1SG a tamale

  'I gave all the children, the ones who are wearing hats, a tamale.'

4.3 Remaining questions

How do these "restrictive" phenomena for definites relate to exceptional low-scope readings for indefinite NAs in English? (Wang et al., 2005; Nouwen, 2014; AnderBois et al., 2015)

(29)   If a professor, a famous one, publishes a book, he will make a lot of money.

<div align="right">(Wang et al., 2005)</div>

Why are ARCs less able to offer any of these readings?

(30)   # If a professor, who is a famous one, publishes a book, he will make a lot of money.

<div align="right">(Wang et al., 2005)</div>

(31)   # Where's the doctor, who is from Atlanta?

(32)   # Most nations, who are around today, see global conquest as too costly.

A potential challenge: Is a merely pragmatic connection between the CNA and the actual restrictor enough to understand how CNAs license donkey anaphora?

(33)   Every farmer, the ones that own a donkey, hugged it.

(8)   ...every state, the ones that do have legislation on autonomous trucks, it is different.

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