What appositives can tell us about names and definite descriptions

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Abstract

Previous research has shown that while hearer-new unique definites are felicitous on their own, hearer-new names and incomplete definites are typically infelicitous (Sommers 1982; Roberts 2003). This paper presents two new observations regarding how appositives interact with these referring expressions. First, the infelicity of both hearer-new names and incomplete definites can be ameliorated by appositives that, pre-theoretically, clarify the reference of their anchor. Second, hearer-new incomplete definites are more constrained than names in terms of which appositives can effectively clarify their reference. I account for these observations by assuming that definites—but not names—conventionally encode uniqueness. These semantics are integrated into the system of Beaver and Coppock (2015). In this system, appositives disambiguate the values of indices attached to referring expressions, in some cases circumventing a pragmatic principle that adjudicates between competing logical forms.

1 Introduction

It has long been observed that using a hearer-new name out of the blue is infelicitous¹, while a hearer-new description is felicitous (Sommers 1982; Maier 2009). This contrast is shown below:

- (1) Coffee Shop: Ana and Bella just met for the first time at a coffee shop, and are becoming fast friends. Bella says she's considering getting a degree in psychotherapy. Ana's son goes to a school that employs a therapist named Mia, but she hasn't shared this information with Bella yet. Ana intends to put Bella in touch with Mia.
 - a. #You should talk to Mia about this.
 - b. You should talk to the therapist at my kid's school about this.

This paper is concerned with the ability of certain appositives to ameliorate this infelicity:

(2) Coffee Shop: You should talk to Mia, the therapist at my kid's school, about this.

Pre-theoretically, the appositive is used to clarify the reference of its anchor (the modified NP).

I identify novel observations about which appositives can successfully ameliorate the infelicitous use of hearer-new names and definites. With names, I show that appositives have to (i) connect the name to some individual in the context (in a specific sense) or (ii) communicate that the intended referent of the name is not in the context. Then, I show that incomplete definites are infelicitous in parallel contexts to names, but the range of appositives that can be used to clarify their reference in these contexts is much more restricted.

I present an analysis of these observations in the system of Beaver and Coppock (2015). The core observations will be accounted for by an analysis where definite descriptions, but not names, conventionally encode uniqueness, and where appositives disambiguate the value of indices attached to referring expressions, in some cases circumventing Beaver and Coppock (2015)'s comprehension-based variant of Maximize Presupposition.

 $^{^{1}}$ The judgment marked by # is that knowing the facts at hand, it would be entirely uncooperative to use the name. Note that there are certain intonational contours, and other contextual strategies, that alleviate the infelicity of (1-a). This judgment only applies to (1-a) used as a canonical assertion with unmarked intonation.

2 Familiar and Novel, Old and New

In order to explain constraints on hearer-new names, I need to define "hearer-new". The definition here piggybacks on a theory of discourse reference outlined in Roberts (2003) (weak familiarity), which treats discourse referents (drefs) as individuated contextual representations linked to specific existence entailments in the common ground. These entailments can arise through linguistic mention, joint perceptual experience, or common knowledge. I will use this conception of discourse referents to analyze the data in the next section, as well as in the proposal.

Definition 2.1. Hearer old/new. The use of a referring expression E in context C is **hearer-old** if the speaker intends E to refer to a weakly familiar dref in C that is presupposed to satisfy the informational content of E in C. Otherwise it is **hearer-new**.

I assume the informational content of a name is bearing the name and the informational content of a description is the property in the restriction of the. In (1), the uses of Mia and the therapist at my kid's school are hearer-new, since the speaker intends to refer to a **novel dref**. But uses of referring expressions can be hearer-new even if the speaker intends to use the expression to refer to a (weakly) familiar dref, so long as that dref is not presupposed to bear the name or meet the property in the description. Hearer-new names are also infelicitous in this latter case:

(3) Party: Adam takes Ben, a new friend, to a party. They are greeted at the door by Mia, who does not introduce herself, so Adam knows that Ben does not know her name. Later on, Ben tells Adam that he is considering getting a degree in psychotherapy.

Adam: #[Without pointing.] You should talk to Mia about this.

Example (3) demonstrates that the issue with the hearer-new name in (1-a) is not about the intended referent of the name being novel, it's that there isn't a way to link the name to any familiar dref because no familiar dref is presupposed to bear the name.

3 Which appositives can clarify the reference of their anchor?

3.1 Names

One group of appositives that facilitate the use of hearer-new names are appositives that specify a weakly familiar dref. Many definite nominal appositives are in this group, including those used anaphorically (4), deictically (5), and those that pick out an entity in the common ground (6).

- (4) I'm excited for the dinner party tonight. A fireman is coming I want to talk to. Also, the dishes will be so good. I'm making chicken and Joe #(, the fireman,) is making a salad.
- (5) The speaker and hearer are looking at a number of women.

 Mia #([pointing], the girl with blue hair,) is coming over later.
- (6) The hearer knows that the UK has a prime minister but doesn't know his name.

 Keir Starmer #(, the prime minister of the UK,) is currently visiting the United States.

Appositive relative clauses can also serve this purpose. Consider the sentences below:

- (7) Party (see (3) above for context)
 - a. You should talk to Mia, who greeted us on the way in, about this.
 - b. #You should talk to Mia, who knows a lot about therapy, about this.

The appositive who greeted us on the way in specifies a referent that is weakly familiar in virtue of Adam and Ben's joint experience of her earlier in the party. The appositive who knows a lot about therapy doesn't specify any weakly familiar dref, and the infelicity remains.

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The other group of appositives that facilitate the use of a hearer-new name are appositives that communicate that the intended referent of the name is not weakly familiar, i.e., novel. One such case was in (2): since being the therapist at Ana's kid's school provides a source for Ana's, but not Bella's, acquaintance with the referent, the appositive signals that the referent is novel to Bella (and thus to the common ground). This group also includes certain indefinite nominal appositives, such as (8-a) but not (8-b), used in a variation on the **Coffee Shop** scenario:

- (8) Coffee Shop-Friend: Ana and Bella just met for the first time at a coffee shop, and are becoming fast friends. Bella says she's considering getting a degree in psychotherapy.

 Ana has a friend named Mia who's a therapist, but she hasn't shared this information with Bella yet. Ana intends to put Bella in touch with Mia.
 - a. You should talk to Mia, a friend of mine, about this.
 - b. #You should talk to Mia, a nice woman, about this.

The property in (8-a) provides an exclusive basis for acquaintance in the same manner as (2), and in so doing communicates that the referent is novel to the context. The property in (8-b) does provide such a basis, and the infelicity remains.

Notice that with both groups of appositives above, the speaker communicates that they are aware that there is no familiar dref that is presupposed to bear the name – i.e., they are aware that the name is hearer-new. With the first group, this is accomplished by (i) attributing the name to some familiar dref, in conjunction with (ii) the requirement that appositives be non-trivial (Potts 2004). With the second group, this is accomplished by attributing the name to a novel dref. In the analysis in section 4, I will argue that this implication allows the speaker to circumvent the default application of a pragmatic rule that legislates between logical forms.

3.2 Definites

I have already shown that definite descriptions can be hearer new in (1-b). This is only possible if the description is **semantically unique** – if there is only one satisfier in the world (Roberts 2003; Beaver and Coppock 2015). Indeed, what makes the description in (1-b) felicitous is the fact that it is somewhat regular for schools to employ a single therapist. It's infelicitous to use a hearer new description in this context for which such a uniqueness inference is unavailable (#You should talk to the teacher at my kid's school.).

Incomplete definites – definites that are not semantically unique – cannot be hearer-new (Roberts 2003; Beaver and Coppock 2015). We can see this in the **Coffee Shop** scenario:

(9) **Coffee Shop**: #You should talk to the therapist about this.

So long as Bella does not know about the therapist at Ana's kid's school, it is infelicitous for Ana to refer to her using an incomplete definite.

Crucially, however, the use of hearer-new incomplete definites cannot be facilitated by the same appositives as names:

- (10) Coffee Shop-Friend (see (8) above for context)
 - a. (8-a) You should talk to Mia, a friend of mine, about this.
 - b. #You should talk to the therapist, a friend of mine, about this.

Communicating that the referent is novel is not enough to ameliorate its infelicity.

Despite this contrast, there are appositives that can clarify the reference of an incomplete definite. In this paper I will only discuss the example below, used in a variation on the **Party** scenario in (3). In this example, a hearer-new incomplete definite is accompanied by subsequent verbal instructions for how to pick out the referent of the description in the context:

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(11) Adam takes Ben, a new friend, to a party. Adam knows that there's a single therapist at the party, and that Ben doesn't know this. This therapist is standing across the room from them. Ben tells Adam that he is considering getting a degree in psychotherapy.

You should talk to the therapist, [pointing] who is over there in the red hat, about this.

To summarize the data above: hearer-new names are infelicitous (1-a), but can be made felicitous by any appositive that links the name to a specific (weakly) familiar or novel dref. While hearer-new unique definites are felicitous (1-b), incomplete definites are not (9). Unlike names, the reference of an incomplete definite cannot be clarified by linking the name to a novel dref (10-b), but can be clarified by a deictically used appositive (11).

4 Deriving the observations

Beaver and Coppock (2015) propose a semantics for definite descriptions intended to capture, among other things, the inverse relationship between uniqueness and familiarity in definite descriptions exemplified by the contrast between (1-b) and (9). Below, I walk through their theory, and then show how, with a few additional assumptions, it can derive the data above.

Beaver and Coppock (2015)'s theory is built off their previous work in Coppock and Beaver (2015), which proposes that the uniqueness of definite descriptions is two-fold: first, there is **definiteness** – a conventional presupposition encoded by the definite determiner the that at most one (≤ 1) entity in the context satisfies its informational content. Second, there is **determinacy** - a presupposition of uniqueness + existence, or exactly one (=1), contributed via a type-shifter Iota that applies to noun phrases in argument positions. This division is intended to account for argumental uses of definites that presuppose uniqueness but not existence (e.g., in Mary didn't score the only goal, there is not just one goal). This is derived in the following way: in this theory, two different type-shifters are available: Iota (the determinate reading) and Ex (the indeterminate reading); the latter is an existential generalized quantifier. A general principle prefers **Iota** over **Ex**, but this principle can be overridden so long as there is explicit evidence in the message that the presupposition of **Iota** cannot be met. In the case of Mary didn't score the only goal., this evidence is focus on only, which, in conjunction with negation, signals that the focus alternative – multiple goals – is satisfied. This means that the sentence explicitly denies the existence of an *only goal*, overriding the default use of **Iota** over **Ex**. The general principle that regulates the use of **Iota** and **Ex** is defined in Beaver and Coppock (2015) as below:

(12) Maximize presupposition (comprehension principle): Suppose two LFs for a sentence are identical except for one item which could take values A or B differing only in that A has stronger presuppositions than B. Then, in the absence of evidence to the contrary [as to what the speaker presupposes], prefer the interpretation with A, if necessary [accommodating in order to meet] that interpretation.

This principle is distinct from the classic principle in Heim (1991), as it legislates between competing logical forms rather than expressions like the and a.

Beaver and Coppock (2015) embed **Iota** and **Ex**, as well as the conventional meaning of the (≤ 1), into a system called Partial File Logic (PFL), where formulas are interpreted relative to input and output sequences. This semantic system is wrapped in an update mechanism, where formulas are evaluated on each world-sequence < w, f > pair in a "file" F representing the common ground; what's important for our purposes is that if any $< w, f > \in F$ does not meet a presupposition of a given formula, the file F as a whole will not **accept** the formula.²

 $^{^2}$ See Beaver and Coppock (2015) for the full formal theory. This section will only define additions and modulations of the system.

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In this system, noun phrases in argument positions are labeled with indices. Labeling is done by a predicate **Labeled**(i)(x), which returns true so long as the output sequence assigns i to x:

(13) **Labeled** :=
$$\lambda i.\lambda x.\lambda f.\lambda g.$$
 $g(i) = x \wedge g \geq_i f$

The subformula $g \ge_i f$ is defined such that if i is familiar, g(i) = f(i), while if i is novel, g(i) can be assigned to any individual. This means that relative to an input sequence f, only one value of x will satisfy **Labeled**(i)(x) if i is familiar, but every value of x will satisfy **Labeled**(i)(x) if i is novel. Crucially, this predicate is involved in meeting the uniqueness presuppositions of **Iota** and i that is familiar will meet uniqueness in virtue of this predicate, while any i that is novel will have to use other material to meet uniqueness.

Let's see how their system derives the felicitous use of the unique description in (1-b). The description is translated in (14), where **TherapistAtKidsSchool**_i is a predicate conjoining the dynamic property x is a therapist at my kid's school with the dynamic property **Labeled**(i)(x).

(14) the therapist at my kid's school \rightsquigarrow The(TherapistAtKidsSchool_i)

In the **Coffee Shop** scenario, there is no explicit evidence against choosing the determinate reading, so the sentence is interpreted with **Iota**. Here, the file F will not accept any formula that labels the description with a familiar index i, because the presupposition is not met (you can always find some < w, f > pair where f(i) is not a therapist at Ana's kid's school). Despite having to choose a novel index, the conjoined property **TherapistAtKidsSchool** $_i$ will still meet **Iota**'s presupposition in virtue of the overt property in the description, so there's no infelicity.

I adopt a semantics for names where they are (i) always labeled with some index i, and (ii) presuppose the existence of an individual with the name. This is essentially the proposal of Geurts (1997), although I do not follow him in analyzing names as definite descriptions, as the latter in this proposal conventionally encode uniqueness. Below, I define a dynamic predicate representing the property of being called Mia (below, And represents dynamic conjunction):

- (15) **Mia** := $\lambda x.\lambda f.\lambda g.$ $f = g \wedge x$ is called Mia
- (16) $\mathbf{Mia}_i := \lambda x. \, \mathbf{Labeled}(i)(x) \, \mathbf{And} \, \mathbf{Mia}(x)$

For argumental names like Mia in (1-a), I propose this predicate is embedded under a covert determiner **REF** that adds the existence presupposition:

- (17) **Exists** := $\lambda \mathcal{P}.\lambda f.\lambda g.$ $f = g \wedge \exists h. \exists x. f[\mathcal{P}(x)]h$
- (18) **REF** := $\lambda \mathcal{P}.\lambda x. \ \partial_d(\mathbf{Exists}(\mathcal{P}))$ **And** $\mathcal{P}(x)$
- (19) $Mia \rightsquigarrow \mathbf{REF}(\mathbf{Mia}_i)$

Above, \mathcal{P} represents a variable over dynamic properties, and ∂_d represents the dynamic presupposition operator, which eventually returns the null truth value $\#_t$ if its prejacent is false.

Now we can derive the infelicity of hearer-new names, and how certain appositives ameliorate this infelicity. First, consider the use of the name Mia in the **Coffee Shop** scenario in (1-a). Since there is no evidence to the contrary, **Iota** is chosen. Moreover, like the description in (1-b), the file F will not accept any familiar index i, as you can always find some < w, f > pair where f(i) is not called Mia. Unlike this description, uniqueness is not able to be met in virtue of the dynamic property **Mia** either, since many individuals are or could be called Mia (Geurts 1997). Lastly, I assume accommodating there is one individual called Mia in the world is ruled out by **consistency**, a constraint on accommodation (Van der Sandt 1992; Beaver 2001). So there is no way to meet the presupposition of **Iota**, even by accommodation, and the name is infelicitous.

As discussed in section 3, appositives that communicate that the name is hearer-new are able to ameliorate this infelicity. Now, these appositives are exactly the ones that would be able

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to provide evidence about the speaker's presuppositions that can circumvent the comprehension variant of **Maximize Presupposition**, as they require the index on the name to be novel, and novel indices on names can never meet uniqueness.³ By circumventing this principle, these appositives allow the indeterminate reading to surface. Of course, **REF** still has to be met in this reading, but this only requires that the existence of some individual with the name *Mia* is accommodated, which I assume is straightforward. There is thus no apparent infelicity.

Before moving to incomplete definites, I should note one essential part of this proposal: how the classic version of Maximize Presupposition in Heim (1991) interacts with names and definites. This latter principle is used in Beaver and Coppock (2015) to derive why $\mathbf{E}\mathbf{x}$ is always chosen over **Iota** in the case of indefinites: since the has strictly stronger presuppositions than a, Heim (1991)'s MP requires the to be used if the determinate reading is intended. This reasoning crucially does not apply to names in our proposal as the presupposition of the (≤ 1) is not strictly stronger than the presupposition of \mathbf{REF} (≥ 1).

The infelicitous use of a hearer-new incomplete definite (9) is derived in the same way as names. Moreover, our assumption that the encodes uniqueness derives the infelicity of incomplete definites with indefinite appositives ($\#the\ therapist$, a friend of mine). In this case, even if \mathbf{Ex} is used, the presupposition of the still has to be met, and the appositive a friend of mine is not able to help as it (i) lies outside the scope of the (Potts 2004) and, even more, (ii) doesn't contribute a property that is unique.

In fact, with a few more assumptions, our analysis can also explain how the deictic appositive in (11) who is over there in the red hat, which is also outside the scope of the, can ameliorate the infelicity of the therapist. Here, I propose that the appositive disambiguates the value of a domain restriction index that is in the scope of the (Stanley and Szabó 2000; Elbourne 2002). Below, I assume that indices can be typed as both individuals and properties, and that the can be labeled with a property index that helps meet its uniqueness requirement:

- (20) $C_d = \lambda x.\lambda f.\lambda g.\exists P.f[\mathbf{Labeled}(C)(P)]g \wedge P(x)$
- (21) The_C := $\lambda \mathcal{P}.\lambda x$. $\partial_d(\mathbf{Unique}(\lambda x.\mathcal{P}(x) \mathbf{And} C_d(x))) \mathbf{And} \mathcal{P}(x) \mathbf{And} C_d(x)$
- (22) the therapist \rightsquigarrow **The**_C(**Therapist**_i)

Although this domain restriction index is available in (9) and (10-b), it cannot be disambiguated to a specific value that helps meet uniqueness in these examples (it is not clear whether the speaker intends to talk about the therapist that she goes to, or the therapist at this party, etc.). The deictic appositive in (11), in contrast, requires the referent of the description to be at the party, and thus can disambiguate the domain restriction to something like λx . x is at this party.

5 Conclusion

A number of recent theories have argued that names are covert definite descriptions (Geurts 1997; Elbourne 2002; Matushansky 2008; Fara 2015). I demonstrated in this paper that names and descriptions behave quite differently in similar contexts, and that their differences can be accounted for under the assumption that names lack a determiner with the semantics of the. Under an analysis where names embed the, these differences would have to be traced to some other property unique to names. In this way, the constraints on clarificatory appositives described in this paper provide a novel empirical argument for distinguishing the semantics of names and definites. Lastly, these appositives provide novel empirical terrain for investigating the semantics and pragmatics of referring expressions.

³With the group of appositives that connect the name to some familiar dref, the *initial* index on the name is required to be novel in order for the appositive to be non-trivial (Potts 2004). Of course, after the appositive update, this index becomes conversationally equivalent to the familiar index described by the appositive.

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