

# Updates Beyond Semantics and Pragmatics

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## 1 Discourse Uniqueness

- (1) A woman entered from stage left. Another woman entered from stage right. #The woman was carrying a bouquet of flowers.<sup>1</sup>
- (2) Sue bought a sage plant along with eight others. She loves the sage plant she bought.<sup>2</sup>

<sup>1</sup> Roberts 2003

<sup>2</sup> Mandelkern and Rothschild 2020

*Dynamics* A CONTEXT  $C$  is a set of partial assignment functions  $c : \mathbb{N} \rightarrow D$ . There is an F-DISOURSE REFERENT at index  $i$  of  $C$  iff  $\forall c \in C : \llbracket F \rrbracket(c_i)$ .

- (3)  $\llbracket an^i \rrbracket = \lambda P. \lambda C. \bigcup_{c \in C} \{c \bullet_i e \mid e \in D \ \& \ P(e)\}$ <sup>3</sup>
- (4)  $c \bullet_i e$  = the unique  $c'$  such that  $c'$  differs from  $c$  at most in that  $c'(i) = e$
- (5)  $\{\emptyset\} \llbracket an^1 F \rrbracket = \{\{\langle 1, b \rangle\}, \{\langle 1, c \rangle\}, \{\langle 1, m \rangle\}\}$ <sup>4</sup>
- (6)  $\llbracket G(x_i) \rrbracket = \lambda C. \{c \in C \mid c_i \in \llbracket G \rrbracket\}$

<sup>3</sup> Introducing a discourse referent, say with an indefinite “an<sup>i</sup> F,” minimally alters an input context so that it contains an  $F$ -discourse referent at index  $i$ .

<sup>4</sup> Assuming the only elements of  $D$  in  $\llbracket F \rrbracket$  are  $b, c, m$ .

- (7)  $\llbracket [\text{the NP}] \text{ VP} \rrbracket$
- (8)  $\llbracket the_i \rrbracket = \lambda P. \lambda Q. \lambda C. \frac{\forall c \in C(P(c_i))}{\{c \in C \mid Q(c_i)\}}$ <sup>5</sup>
- (9)  $\llbracket the \rrbracket = \lambda P. \lambda Q. \lambda C. \frac{\exists! i \forall c \in C(P(c_i))}{\{c \in C \mid Q(c_{ii(\forall c \in C(P(c_i)))})\}}$ <sup>6</sup>

<sup>5</sup> Heim 1982: a definite description “the  $F$ ” presupposes there is an  $F$  discourse referent at a given index. Less formally, “the  $F$ ” presupposes there is a familiar  $F$ .

<sup>6</sup> Roberts 2003, Barker 2004: definite descriptions presuppose uniqueness among discourse referents.

*Discourse Referents* A discourse referent at index  $i$  of  $C$  is DEFINITE iff  $\exists e \in D \forall c \in C : c_i = e$  (otherwise, it is an INDEFINITE discourse referent).

- (10)  $\{\{\langle 1, b \rangle\}, \{\langle 1, c \rangle\}, \{\langle 1, m \rangle\}\} \rightsquigarrow \{\{\langle 1, b \rangle, \langle 2, d \rangle\}, \{\langle 1, c \rangle, \langle 2, d \rangle\}, \{\langle 1, m \rangle, \langle 2, d \rangle\}\}$

## 2 Deictic Discourse Referents

- (11) *John and Mary are in an art gallery surrounded by paintings.*  
#The painting is beautiful.
- (12) *John and Mary are working together rearranging their living room.*  
#You will take the chair and I will take the chair.

*Not Pragmatic* The discourse referents for the multiple paintings/chairs are not *accommodated* into context. Nor are they introduced in virtue of being inferred to exist in virtue of mutually available information.

*Not Semantic* The discourse referents may be initiated by covert existential quantifiers, but that requires a sprawling notion of discourse-level logical form.

*Proposal* Discourse referents for objects in interlocutors' mutual perceptual environment are added to their discourse context, not via any pragmatic process nor any linguistic expression's semantically encoded update.

### 3 Antecedents

*Stalnaker's Commonplace Effect* A conversation is a process taking place in an ever-changing context...how does an assertion change the context? There are two ways, the second of which, I will suggest, should be an essential component of assertion. I will mention the first just to set it apart from the second: The fact that a speaker is speaking, saying the words he is saying in the way he is saying them, is a fact that is usually accessible to everyone present. Such observed facts can be expected to change the presumed common background knowledge of the speaker and his audience *in the same way that any obviously observable change in the physical surroundings of the conversation will change the presumed common knowledge. If a goat walks into the room, it would normally be supposed, from that point, that there was a goat in the room.*<sup>7</sup>

<sup>7</sup> Stalnaker 1999 page 86 (originally published 1978)

*Heim's Contextual Familiarity* In some sense, both deictic reference and anaphoric reference presuppose that the referent be already "familiar" to the audience: In the case of deictic reference, it has attained familiarity by being pointed at, being perceptually prominent, or being otherwise salient. In the case of anaphoric reference, it has been familiarized by previous mention...Let us assume that anything that is familiar for either reason is represented by a card in the file. An obvious implication of this assumption is that files must be able to change, and in particular, must be able to have new cards added, *without anything being uttered. For instance, if halfway through a conversation between A and B a dog comes running up to them and draws their attention, then that event makes the file increase by a new card.*<sup>8</sup>

<sup>8</sup> Heim 1982 section 2.3 of chapter 3

- (13) a. The tallest building is in Dubai.  
b. The dog is so cute!

### 4 A Puzzle about Context-Sensitivity

Consider two utterances  $u$  and  $u'$  of 14, where different men are pointed at.

- (14) That man was sad.

Here are three individually plausible but jointly inconsistent claims surrounding  $u$  and  $u'$ .

- (i) Different things are required in order to understand the sentence tokens in  $u$  and  $u'$ : different men pointed at so different men must be thought of.
- (ii) The logical form of a sentence (plus the lexical meanings of its simple constituents and rules of composition) determines what is required in order to understand any token of it.
- (iii) The sentence tokens in  $u$  and  $u'$  have the same logical form.

*The Traditional Kaplanian View* denies ii by introducing a notion of extralinguistic context, which a demonstrative's type-level linguistic meaning combines with in order to determine a particular referent.<sup>9</sup> But such a view struggles to explain how demonstratives may be used anaphorically (and quantificationally), where they pick up an indefinite discourse referent from the discourse context.<sup>10</sup>

<sup>9</sup> Kaplan 1989

<sup>10</sup> See Rothschild and Yalcin 2017 for an implementation of an ambiguity view.

- (15) A man walked in. That man was sad.

*Recent Work by Stojnić et al. [2013, 2017]* denies iii:  $u$  and  $u'$  contain different covert indefinites, to which the tokened demonstratives are anaphoric.<sup>11</sup> But these indefinites must establish *definite* discourse referents, to explain how the two utterances are about distinct men; hence, the covert indefinites must be roughly of the form *there exists some man identical to  $n$* , where  $n$  is a (covert) proper name.<sup>12</sup>

<sup>11</sup> Motivated by a theoretical approach that aims to respect ii [Fodor and Lepore, 2004, Lepore and Stone, 2015]

<sup>12</sup> e.g.  $\exists x \wedge x = n \wedge Fx$

*The Neo-Strawsonian/Gricean* denies i by distinguishing between sentence and utterance understanding: understanding the token *sentences* in  $u$  and  $u'$  is determined by type-level linguistic meaning, but grasping the reference is something further, a part of understanding the *utterances*.<sup>13</sup> But such a view proposes radically that there is no such thing as linguistic reference.

<sup>13</sup> Strawson 1950, Bach 2003, Heck 2014

*My Proposal* provides a way of denying ii, which meets the issues raised above. Deictic demonstratives are anaphoric to discourse referents, but which are not initiated by any element of logical form, even covert: so the discourse referents may be definite, without appeal to covert proper names. And the discourse referents are initiated into discourse's rule-governed linguistic context, not via pragmatic inferencing: so deictic demonstratives may be given a semantic treatment uniform with anaphoric ones.

## 5 Appendix: Do Definite Descriptions Really Presuppose Uniqueness?

### 5.1 Mandelkern and Rothschild

- (16) a. Sue bought a sage plant along with eight others. She loves the sage plant she bought.
- b. ??Sue went to the store and bought eight sage plants along with the sage plant she bought.
- c. Sue went to the store and bought eight other sage plants along with the sage plant she bought.
- (17) a. ??Several couples came in today. The man was being so annoying.
- b. Several couples came in today. The man was being so annoying by asking each of the couples where they met.

### 5.2 Salience and Discourse Structure

- (18) a. A woman entered from stage left. Another woman entered from stage right. #The woman was carrying a bouquet of flowers.
- b. If a bishop meets another bishop, the bishop blesses the bishop.<sup>14</sup>
- c. A woman met another woman. The woman hugged the woman.<sup>15</sup>
- (19) The cat is in the carton. The cat will never meet our other cat, because our other cat lives in New Zealand. Our New Zealand cat lives with the Cresswells. And there he'll stay, because Miriam would be sad if the cat went away.<sup>16</sup>
- (20) A man in a dark suit was talking to a man holding a large envelope. After talking for about a minute they left the station going in opposite directions. Thirty seconds after they left, the man showed up and nervously looked around.<sup>17</sup>

<sup>14</sup> Heim, probably.

<sup>15</sup> Anonymous reviewer

<sup>16</sup> Lewis 1979

<sup>17</sup> Szabó 2000

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