What have we learned about reference? What have we learned about denoting?

1. **Semantics** is the study of the meaning of representations, or related more closely to language, the study of relations between words and the world. Reference is one of these relations, and so is denotation.

2. ‘Reference’ can be used to talk in general about any word/world relationship, but it has traditionally been distinguished by theorists from other such relations (e.g., denotation (in Russell’s sense, which is the same as quantification), connotation, etc.). So distinguished, reference is understood as singular reference, that is, the relation of a word to a particular item in the world. So understood, proper names are regarded as referring terms *par excellence*. (This is sometimes distinguished from kind reference or general reference.)

• **Properties of Singular Reference:**
  
  - A relation R(x,y), where ‘x’ is replaced by a term (i.e., the “referring term”) and ‘y’ is replaced by an object (i.e., the “referent”). The relation is specific, in that it obtains between a specific term and a specific object.
  
  - The referring term stands for, or represents, the object to which it refers—that is, when you use the term, what you say depends on how things stand with that object.
  
  - You contribute that object to the meaning of the larger linguistic wholes into which the referring term figures.
  
  - If there is no referent, then you have an empty name. It might have some other aspect of meaning, but it will have no referent.

• **Referring Terms:**

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<tr>
<th>Proper Names</th>
<th>Demonstratives</th>
<th>Descriptions</th>
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<tr>
<td>-- Refer to objects that bear the names in question; context may play a</td>
<td>-- Refer to objects that stand in an appropriate contextual relation to the speaker and/or</td>
<td>-- Refer to objects that have the properties expressed by the descriptive phrase;</td>
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<td>disambiguating, pre-semantic role</td>
<td>the uttered token</td>
<td>context is generally not a part of the story</td>
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<td>-- Do not need perceptual or descriptive access to the referent; that is, you can use the term to refer to the item whether you know or not</td>
<td>-- Typically need perceptual contact with the item to refer to it (or identify the referent)</td>
<td>-- Need have no perceptual acquaintance with the referent; you can refer to it at a distance through the property</td>
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- **Theories of Reference:** These can be seen as attempts to specify just what the ‘R’ amounts to in the above formula, “R(x,y)”; that is, what conditions must be satisfied by a relation to qualify as this relation?

  - **Frege:** The referent is an object *nominated* by the term; the two-tiered theory implies that all meaningful linguistic items have referents, since all meaningful linguistic items must be able to contribute to the composition of meaningful linguistic items of which they are a part. The reference relation R involves *sense*, which is the mode of presentation that determines the referent. You get from x to y via the mediation of sense.

  - **Russell:** The referent is the object to which the referring term is connected directly, without a descriptive intermediary. Logically proper names are the only referring terms, since these refer of necessity; such a term would be utterly meaningless without a referent, and so anything that is *empty* in the relevant sense (or could be) must not be a referring term. Thus, R is very spare for Russell—there is no mediation; the connection is direct. (Think of a nametag here.)

  - **Strawson:** Terms do not refer, only uses of terms do, or more strictly, utterances that count as uses; that is, people use expressions to *refer* to things. To succeed in referring to an item, one must employ a device while exploiting context and convention with a view to conveying one’s intention; there must be an item (i.e., a referent) with certain characteristics that stands in a particular relation to speaker and context (i.e., the *contextual requirement*). Further, when you use a device to refer, you do not state (although you do presuppose/imply) that the conditions on a correct referring use are satisfied. The analysis he supplies for R is pragmatic, focusing on utterances and uses of language.

3. ‘**Denotation**’ is a word/world relation that is *general* and essentially *indirect* through a property or attribute. Classic examples of denoting phrases include indefinite descriptions, like ‘a man’ or ‘an apple’, existential phrases, like ‘some man’, ‘few good men’, and universal phrases, such as ‘every horse’ and ‘any philosopher’. Logicians refer to this relation as *quantification*, and that is what I will also call it.

- **Properties of Quantification:**
A relation \( Q(x; \{ \text{domain} \})[Px] \) involving a quantifier, a domain of discourse, a variable, and a predicate. The predicate expresses the property that you use to get at the world, e.g., <being windy>. The domain of discourse is the group of objects over which you quantify, e.g., every possible thing. (If you restrict the nature of this, you are using what is known as a restricted quantifier.) The quantifier indicates how you are sampling the domain—are you interested in all the items in the domain? Some? A few? Many? The variable binds the predicate that you use in sampling the domain and the quantifier that determines the nature of that sampling. For example, “Some(\(x\))[\(\text{days}(x) \& \text{windy}(x)\)]” would be read “Some things are days are windy,” or more colloquially, “Some days are windy”.

The quantifier expression, e.g., ‘some days’, does not stand for or indicate any particular thing; rather, it picks out a class of objects and directs you to some general and non-specific subgroup in that class.

There is no meaning that corresponds to the quantifier expression; rather, the quantifier changes the form of the claim. There is nothing in the expression “Some(\(x\))[\(\text{days}(x) \& \text{windy}(x)\)]” that you can point to which is the meaning of “some days”. The presence of the quantifier forces you to bust out with this long expression.

Thus, quantifier expressions are examples of those expressions that have what significance they have by virtue of their influence on the sentences in which they appear.

Theories of Quantification: Here there are several, but we won’t be getting into their details. There are a couple of points to make, though:


I gave you the syntax of quantification above, but the semantics of quantification was really developed initially by Frege but then really by Tarski, who showed us how to take an intuitive conception of satisfaction and use that to generate truth conditions for sentences containing quantifiers. For instance, “Some oranges are moldy” is true iff at least one thing in the domain satisfies the formula ‘orange(\(x\))’ and also satisfies the formula ‘moldy(\(x\))’, where “satisfies” amounts to “has the property”.

4. The Battle. Here is a graphic depiction of the state of play:
Why Quantifier Expressions are not Referring Terms.

- You might wonder why we don’t just extend reference to cover the denoting phrases that Russell mentions. Why not just treat ‘some men’ as a referring term that refers to some men? Thus, if we say, “Some men eat haggis,” then we make a true claim just in case the men we refer to eat haggis.

- There are several problems with this view, though. First, the identity of the items I refer to with referring terms makes a truth conditional difference to the statement I make with the terms, but this is not so with quantifier expressions. You can switch the group of men who eat haggis around from this subset to that without falsifying the sentence or changing its meaning. However, if I switch the referent of “you” around when I say “You eat haggis”, I change what it is I say.

- Second, what exactly would I refer to with ‘some men’? Would it be a set? If so, then I seem to be saying that a set (i.e., an abstract object) eats haggis, which can’t be right. Would it be the “collective man”? What is that? Would it be <this-man+this-man+…>? But what is that? True, this-man and this-man and … are what make the sentence true, if in fact it is true, but the referent would have to be a kind of sum of them, perhaps sequential. Thus, once again, we would be talking about the wrong kind of thing. We are talking about men, but not any specific men and not in a way that refers to any specific men.

The Debate: Where do DDs belong? Are they referring expressions or denoting expressions? How we determine this will influence what we take reference and denotation to be.