

- [13] a. Are you planning to be here this evening?  
 b. I asked her if she was planning to be there that evening.

When the context shifts, as for example in [13b<sub>1</sub>], to one in which I report the previous utterance, then the previous utterance is marked deictically as relative to the circumstances of asking. Note that the proximal forms presented in [13a<sub>1</sub>] have shifted to the corresponding distal forms in [13b<sub>1</sub>]. This very regular difference in English reported discourse marks a distinction between the 'near speaker' meaning of direct speech and the 'away from speaker' meaning of indirect speech. The proximal deictic forms of a direct speech reporting communicate, often dramatically, a sense of being in the same context as the utterance. The distal deictic forms of indirect speech reporting make the original speech event seem more remote.

It should not be a surprise to learn that deictic expressions were all to be found in the pragmatics wastebasket. Their interpretation depends on the context, the speaker's intention, and they express relative distance. Given their small size and extremely wide range of possible uses, deictic expressions always communicate much more than is said.

# 3

## Reference and inference

Throughout the preceding discussion of deixis, there was an assumption that the use of words to refer to people and things was a relatively straightforward matter. It is indeed fairly easy for people to do, but it is rather difficult to explain how they do it. We do know that words themselves don't refer to anything. People refer. We might best think of **reference** as an act in which a speaker, or writer, uses linguistic forms to enable a listener, or reader, to identify something.

Those linguistic forms are **referring expressions**, which can be proper nouns (for example, 'Shakespeare', 'Cathy Revuelto', 'Hawaii'), noun phrases which are definite (for example, 'the author', 'the singer', 'the island'), or indefinite (for example, 'a man', 'a woman', 'a beautiful place'), and pronouns (for example, 'he', 'her', 'it', 'them'). The choice of one type of referring expression rather than another seems to be based, to a large extent, on what the speaker assumes the listener already knows. In shared visual contexts, those pronouns that function as deictic expressions (for example, 'Take this'; 'Look at him!') may be sufficient for successful reference, but where identification seems more difficult, more elaborate noun phrases may be used (for example, 'Remember the old foreign guy with the funny hat?').

Reference, then, is clearly tied to the speaker's goals (for example, to identify something) and the speaker's beliefs (i.e. can the listener be expected to know that particular something?) in the use of language. For successful reference to occur, we must also recognize the role of **inference**. Because there is no direct relationship between entities and words, the listener's task is to infer correctly which entity the speaker intends to identify by using a



particular referring expression. It is not unusual for people to want to refer to some entity or person without knowing exactly which 'name' would be the best word to use. We can even use vague expressions (for example, 'the blue thing', 'that icky stuff', 'ol' what's his name', 'the thingamajig'), relying on the listener's ability to infer what referent we have in mind. Speakers even invent names. There was one man who delivered packages to our office whose 'real' name I didn't know, but whose identity I could infer when the secretary referred to him as in [1].

[1] Mister Aftershave is late today.

The example in [1] may serve to illustrate that reference is not based on an objectively correct (versus incorrect) naming, but on some locally successful (versus unsuccessful) choice of expression.

We might also note from example [1] that successful reference is necessarily collaborative, with both the speaker and the listener having a role in thinking about what the other has in mind.

### Referential and attributive uses

It is important to recognize that not all referring expressions have identifiable physical referents. Indefinite noun phrases can be used to identify a physically present entity as in [2a], but they can also be used to describe entities that are assumed to exist, but are unknown, as in [2b], or entities that, as far as we know, don't exist [2c].

[2] a. There's a man waiting for you.

b. He wants to marry a woman with lots of money.

c. We'd love to find a nine-foot-tall basketball player.

The expression in [2b], 'a woman with lots of money', can designate an entity that is known to the speaker only in terms of its descriptive properties. The word 'a' could be replaced by 'any' in this case. This is sometimes called an **attributive use**, meaning 'whatever/whatever fits the description'. It would be distinct from a **referential use** whereby I actually have a person in mind and, instead of using her name or some other description, I choose the expression in [2b], perhaps because I think you'd be more interested in hearing that this woman has lots of money than that she has a name.

A similar distinction can be found with definite noun phrases. During a news report on a mysterious death, the reporter may say [3] without knowing for sure if there is a person who could be the referent of the definite expression 'the killer'. This would be an attributive use (i.e. 'whoever did the killing'), based on the speaker's assumption that a referent must exist.

[3] There was no sign of the killer.

However, if a particular individual had been identified as having done the killing and had been chased into a building, but escaped, then uttering the sentence in [3] about that individual would be a referential use, based on the speaker's knowledge that a referent does exist.

The point of this distinction is that expressions themselves cannot be treated as having reference (as is often assumed in semantic treatments), but are, or are not, 'invested' with referential function in a context by a speaker or writer. Speakers often invite us to assume, via attributive uses, that we can identify what they're talking about, even when the entity or individual described may not exist, as in [2c]. Some other famous members of that group are the tooth fairy and Santa Claus.

### Names and referents

The version of reference being presented here is one in which there is a basic 'intention-to-identify' and a 'recognition-of-intention' collaboration at work. This process need not only work between one speaker and one listener; it appears to work, in terms of convention, between all members of a community who share a common language and culture. That is, there is a convention that certain referring expressions will be used to identify certain entities on a regular basis. It is our daily experience of the successful operation of this convention that may cause us to assume that referring expressions can only designate very specific entities. This assumption may lead us to think that a name or proper noun like 'Shakespeare' can only be used to identify one specific person, and an expression containing a common noun, such as 'the cheese sandwich', can only be used to identify a specific thing. This belief is mistaken. A truly pragmatic view of reference allows us to see

how a person can be identified via the expression, 'the cheese sandwich', and a thing can be identified via the name, 'Shakespeare'.

For example, it would not be strange for one student to ask another the question in [4a.] and receive the reply in [4b.].

- [4] a. Can I borrow your Shakespeare?
- b. Yeah, it's over there on the table.

Given the context just created, the intended referent and the inferred referent would not be a person, but probably a book (notice the pronoun 'it').

In a restaurant, one waiter brings out an order of food for another waiter and asks him [5a.] and hears [5b.] in reply.

- [5] a. Where's the cheese sandwich sitting?
- b. He's over there by the window.

Given the context, the referent being identified is not a thing, but a person (notice the pronoun 'he').

The examples in [4] and [5] may allow us to see more clearly how reference actually works. The Shakespeare example in [4] suggests that there is a conventional (and potentially culture-specific) set of entities that can be identified by the use of a writer's name. Let us call them 'things the writer produced'. This would allow us to make sense of the sentences in [6].

- [6] a. Shakespeare takes up the whole bottom shelf.
- b. We're going to see Shakespeare in London.
- c. I hated Shakespeare at school.

Obviously, this convention does not only apply to writers, but also to artists [7a.], composers [7b.], musicians [7c.], and many other producers of objects.

- [7] a. Picasso's on the far wall.
- b. The new Mozart is better value than the Bach.
- c. My Rolling Stones is missing.

There appears to be a **pragmatic connection** between proper names and objects that will be conventionally associated, within a socio-culturally defined community, with those names. Using a proper name referentially to identify any such object invites the listener to make the expected inference (for example, from name of writer to book by writer) and thereby show himself or herself

to be a member of the same community as the speaker. In such cases, it is rather obvious that more is being communicated than is said.

The nature of reference interpretation just described is also what allows readers to make sense of newspaper headlines using names of countries, as exemplified in [8a.] where the referent is to be understood as a soccer team, not as a government, and in [8b.] where it is to be understood as a government, not as a soccer team.

- [8] a. Brazil wins World Cup.
- b. Japan wins first round of trade talks.

### The role of co-text

In many of the preceding examples, our ability to identify intended referents has actually depended on more than our understanding of the referring expression. It has been aided by the linguistic material, or **co-text**, accompanying the referring expression. When [8a.] appeared as a headline, 'Brazil' was a referring expression and 'wins World Cup' was part of the co-text (the rest of the newspaper was more co-text). The co-text clearly limits the range of possible interpretations we might have for a word like 'Brazil'. It is consequently misleading to think of reference being understood solely in terms of our ability to identify referents via the referring expression. The referring expression actually provides a **range of reference**, that is, a number of possible referents. Returning to a previous example, we can show that, while the phrase 'the cheese sandwich' stays the same, the different co-texts in [9a.] and [9b.] lead to a different type of interpretation in each case (i.e. 'food' in [9a.] and 'person' in [9b.]).

- [9] a. The cheese sandwich is made with white bread.
- b. The cheese sandwich left without paying.

Of course, co-text is just a linguistic part of the environment in which a referring expression is used. The physical environment, or **context**, is perhaps more easily recognized as having a powerful impact on how referring expressions are to be interpreted. The physical context of a restaurant, and perhaps even the speech conventions of those who work there, may be crucial to the interpretation

of [9b.]. Similarly, it is useful to know that a hospital is the context for [10a.], a dentist's office for [10b.], and a hotel reception for [10c.].

- [10] a. The heart-attack musn't be moved.  
b. Your ten-thirty just cancelled.  
c. A couple of rooms have complained about the heat.

The examples in [10] provide some support for an analysis of reference that depends on local context and the local knowledge of the participants. It may crucially depend on familiarity with the local socio-cultural conventions as the basis for inference (for example, if a person is in a hospital with an illness, then he or she can be identified by nurses via the name of the illness). These conventions may differ substantially from one social group to another and may be marked differently from one language to another. Reference, then, is not simply a relationship between the meaning of a word or phrase and an object or person in the world. It is a social act, in which the speaker assumes that the word or phrase chosen to identify an object or person will be interpreted as the speaker intended.

### Anaphoric reference

The preceding discussion has been concerned with single acts of reference. In most of our talk and writing, however, we have to keep track of who or what we are talking about for more than one sentence at a time. After the initial introduction of some entity, speakers will use various expressions to maintain reference, as in [11].

- [11] In the film, a man and a woman were trying to wash a cat.  
The man was holding the cat while the woman poured water on it. He said something to her and they started laughing.

In English, initial reference, or introductory mention, is often indefinite ('a man', 'a woman', 'a cat'). In [11] the definite noun phrases ('the man', 'the cat', 'the woman') and the pronouns ('it', 'he', 'her', 'they') are examples of subsequent reference to already introduced referents, generally known as anaphoric reference, or

anaphora. In technical terms, the second or subsequent expression is the **anaphor** and the initial expression is the **antecedent**.

It is tempting to think of anaphoric reference as a process of continuing to identify exactly the same entity as denoted by the antecedent. In many cases, that assumption makes little difference to the interpretation, but in those cases where some change or effect is described, the anaphoric reference must be interpreted differently. In example [12], from a recipe, the initial referring expression 'six potatoes' identifies something different from the anaphoric pronoun 'them' which must be interpreted as 'the six peeled and sliced potatoes'.

- [12] Peel and slice six potatoes. Put them in cold salted water.

There is also a reversal of the antecedent-anaphor pattern sometimes found at the beginning of stories, as in example [13].

- [13] I turned the corner and almost stepped on it. There was a large snake in the middle of the path.

Note that the pronoun 'it' is used first and is difficult to interpret until the full noun phrase is presented in the next line. This pattern is technically known as **cataphora**, and is much less common than anaphora.

There is a range of expressions which are used for anaphoric reference in English. The most typical forms are pronouns, such as 'it' in [14a.], but definite noun phrases are also used, for example, 'the slices' in [14b.].

- [14] a. Peel an onion and slice it.  
b. Drop the slices into hot oil.  
c. Cook for three minutes.

When the interpretation requires us to identify an entity, as in 'Cook (?) for three minutes', in [14c.], and no linguistic expression is present, it is called **zero anaphora**, or **ellipsis**. The use of zero anaphora as a means of maintaining reference clearly creates an expectation that the listener will be able to infer who or what the speaker intends to identify. It is also another obvious case of more being communicated than is said.

The listener is also expected to make more specific types of inference when the anaphoric expressions don't seem to be linguistically connected to their antecedents. This point was noted in

Chapter 1 with the 'bicycle' example, and is further illustrated in [15].

- [15] a. I just rented a house. The kitchen is really big.  
b. We had Chardonnay with dinner. The wine was the best part.  
c. The bus came on time, but he didn't stop.

Making sense of [15a.] requires an inference (i.e. if *x* is a house, then *x* has a kitchen) to make the anaphoric connection. Such inferences depend on assumed knowledge which, as in [15b.], may be much more specific (i.e. Chardonnay is a kind of wine). In addition, the inference can be considered so automatic for some speakers (for example, a bus has a driver), that they can go straight to a pronoun for anaphoric reference, as in [15c.]. In this example, note that the antecedent ('the bus') and the anaphor ('he') are not in grammatical agreement (i.e. normally a bus would be 'it'). As pointed out already, successful reference does not depend on some strictly literal, or grammatically 'correct', relationship between the properties of the referent and the referring expression chosen. The word 'sandwich' can identify a person and the pronoun 'he' can be an anaphor for a thing. The key to making sense of reference is that pragmatic process whereby speakers select linguistic expressions with the intention of identifying certain entities and with the assumption that listeners will collaborate and interpret those expressions as the speaker intended.

The social dimension of reference may also be tied to the effect of collaboration. The immediate recognition of an intended referent, even when a minimal referring expression (for example, a pronoun) is used, represents something shared, something in common, and hence social closeness. Successful reference means that an intention was recognized, via inference, indicating a kind of shared knowledge and hence social connection. The assumption of shared knowledge is also crucially involved in the study of presupposition.

## 4 Presupposition and entailment

In the preceding discussion of reference, there was an appeal to the idea that speakers assume certain information is already known by their listeners. Because it is treated as known, such information will generally not be stated and consequently will count as part of what is communicated but not said. The technical terms presupposition and entailment are used to describe two different aspects of this kind of information.

It is worth noting at the outset that presupposition and entailment were considered to be much more central to pragmatics in the past than they are now. In more recent approaches, there has been less interest in the type of technical discussion associated with the logical analysis of these phenomena. Without some introduction to that type of analytic discussion, however, it becomes very difficult to understand how the current relationship between semantics and pragmatics developed. Much of what follows in this chapter is designed to illustrate the process of thinking through a number of problems in the analysis of some aspects of invisible meaning. Let's begin by defining our terms.

A **presupposition** is something the speaker assumes to be the case prior to making an utterance. Speakers, not sentences, have presuppositions. An **entailment** is something that logically follows from what is asserted in the utterance. Sentences, not speakers, have entailments.

We can identify some of the potentially assumed information that would be associated with the utterance of [1].

[1] Mary's brother bought three horses.

In producing the utterance in [1], the speaker will normally be