

### Three grades of indexical involvement: the deictic, the deferred, and the descriptive

Indexicality is a special kind of context dependence, which characterises expressions such as "I", "you", "here" or "tomorrow" (indexicals). The linguistic meaning of indexicals contains a rule that constrains the ways in which their semantic value depends on the various features of the context of their use.

During this talk I will be concerned with three kinds of uses of indexicals: deictic, deferred and descriptive. The mechanisms underlying these uses exhibit increasing grades of contextual involvement. All three are examples of the creative aspects of natural language which help us to communicate diverse ideas with limited linguistic resources by deploying the extralinguistic context. The context can change the functionality of an expression, allowing for novel and creative uses. I will focus on descriptive uses and propose a mechanism that underlies their interpretation.

The deictic uses of indexicals are their basic uses. The linguistic meaning of an indexical "I" - its *character* - contains a rule that dictates that on in its deictic use, each token of this word refers to the speaker of that token. For some indexicals, this rule is sufficient for providing reference in context. For other indexicals, especially demonstrative expressions such as "this", or "he", a demonstration of an object is required. According to the direct reference theory, the referent is the semantic value of the indexical - its propositional contribution (content). The proposition expressed by a sentence in which an indexical occurs is thus a singular proposition.

Also the deferred use of indexicals relies on characters and gestures. But deferred reference is a two-stage mechanism by which a linguistic expression refers to something in the world by first picking out an element in the expression's context of utterance (an *index*) and only then referring to (possibly) another element of the context that somehow corresponds to the index. This correspondence is of a pragmatic nature and is given by the context. Typically, the referent is an object or a property that the speaker has in mind, and the index is used to direct the addressee's attention to the referent. In typical cases of deferred reference we point to a photograph of a person in order to talk about that particular person. Since the semantic value of the indexical is again the referent - although the route from the expression to the referent is more involved - the proposition expressed by a sentence in which the indexical occurs is again singular.

The situation changes in the case of descriptive uses of indexicals. Descriptive uses of indexicals are uses where indexical utterances express general propositions, such as in the following example:

(\*) 'He is usually an Italian, but this time they thought it wise to elect a Pole.' uttered by someone gesturing towards John Paul II.

What is being expressed here is not a singular proposition about John Paul II, but rather a general one, which concerns all popes. Because "usually" is a quantifier that requires a range of values to quantify over, and because "he" in the standard interpretation provides just one object, there is a tension in this sentence which triggers the search for an alternative interpretation. The tension is not caused by the fact that John Paul II himself is the possible referent but it is a rather a tension between the generality of the quantifier and the singularity of

the indexical in its default interpretation. The tension would be there regardless of who the referent was.

I postulate that the alternative interpretation is obtained by a process I call descriptive anaphora. Via the descriptive anaphoric mechanism, an indexical expression inherits its semantic value from its antecedent. However, in contrast to classic anaphora, this antecedent stems from an extra-linguistic context: it is an object identified through the linguistic meaning of the pronoun (in the case of pure indexicals) or by demonstration (for demonstratives). The object is used as a pointer to a property corresponding to it in a contextually salient manner. This property therefore contributes to the general proposition. What is important is that the property is not a referent for the pronoun. The structure of the general proposition is determined by the binary quantifier which triggered the mechanism of descriptive anaphora in the first place and the property retrieved from the context serves as a context set that limits the domain of the quantification of the quantifier.