

## Discourse anaphora and the computational system

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Evans (1977, 1980) pointed out that an NP interpreted as a quantifier may appear to serve as the linguistic antecedent for some expression in a subsequent utterance. For example, in (1) *few congressmen* in the first sentence appears to serve as the antecedent of *they* in the second sentence.

- (1) (Evans 1980: 340)  
Few congressmen admire Kennedy. They are very junior.

Prompted by Evan's observation, Kamp (1981) and Heim (1982), among others, have developed theories of discourse representation to account for the type of discourse anaphora exemplified by *a dog* and *it* in (2).

- (2) (Heim 1982:Chapter 1, [9])  
[A dog]<sub>i</sub> came in. It<sub>i</sub> lay down under the table.

The novelty of their approach is that each discourse representation, linguistically generated, includes the list of items that may serve as linguistic antecedents for expressions in subsequent utterances (henceforth *the discourse anaphora candidates list*).

In this paper, we follow Kamp and Heim and maintain that the discourse anaphora candidates list is linguistically generated. We defend this by demonstrating that the Japanese language has one type of expressions that requires a linguistic antecedent. We furthermore show that linguistic expressions that may serve as the antecedent of such type of expressions include singular-denoting NPs, plural-denoting NPs, and sentences, indicating that the discourse anaphora candidates list include items to be identified with individuals and eventualities. What corresponds to the discourse anaphora candidates list in the theories of discourse representation developed by Kamp (1981) and Heim (1982) only include items to be identified as singular individuals, leaving out those to be identified as plural individuals or eventualities. We thus introduce an alternative theory to provide such an extensive discourse anaphora candidates list, drawing on Ueyama (2015). Ueyama's theory generates a representation consisting of a set of objects (which we refer to as *a list representation*) directly from the structure of a given sentence at the output of the computational system, and crucially, the list representation includes singular and plural individuals and eventualities. We could thus conceive the discourse anaphora candidates list as a set of the list representations generated by the computational system, stored in the speaker's working memory. In the remainder of the talk, we consider what makes up the semantic representation at the output of the computational system. Standardly, the meaning of a given sentence is characterized with the truth condition of the sentence. We argue that the speaker reads off the truth conditional meaning independently from the list representation. Our claim is thus schematized as in (3).

