Generation of Temporal Deictic Expressions in Japanese and English Dialogues

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1. Introduction

The dialogue is a basic mode in the use of language in which a common pragmatic field of cognition is assumed between the speaker and the hearer. For it to take place, mutual understanding of spatiotemporal deixis is indispensable, where the default values in the speaker are "me-now-here". Clarification of the nature of the constraints imposed on such a field and of the departure from these values directly contributes to the understanding of dialogue construction. For instance, we are interested in the time-space where the following pairs of expressions are generated with contrastive tense markers: "Arigatou gozaimasu/gozaimasita." and "It's nice to meet you./It was nice meeting you." What is it that motivates the choice of these tense expressions? Our final goals are to construct models of temporal deixis, and, further, of interactions of objects in linguistic time-space. We report here the results of the following three subgoals we have reached in the last two years: [i] occurrence of case particle "ni" attached to time nouns, [ii] functions of tense markers in scene-depicting text, and [iii] case role assignment to case particles.

2. Case particle "ni" and its relation to temporal deixis

Time nouns in Japanese are used adverbially without case particle "ni" when representing a duration or a relative point on the time axis. We are interested in the occurrence/non-occurrence of "ni" in deictic and absolute time expressions, and would like to look into the mechanism that works there. What we have found out so far are the following. Particle "ni" does not co-occur with proximal deictic expressions, nor with absolute expressions used to replace proximal deixis. Proximity to "now" brings about the sense of temporal duration, which seems to prevent the occurrence of "ni". We have also seen some cases where "ni" is suppressed even in non-deictic context if duration is implied by that expression. Thus, the direct cause of "ni" suppression is not the relativity of the time noun, but the sense of duration it embodies. A natural agreement between the speaker and the hearer is that explicit expressions take shape in a dialogue only when they find it difficult to identify what the other side has brought up. Thinking that the occurrence of "ni" may also be affected by this principle, we attempt to further this topic, making use of the notion of iconic motivation in cognitive linguistics that relates linguistic expressions to the world of concept.

3. Tense markers "ru" and "ta" and the time-space they configure

In reading, for instace, a novel in Japanese, the reader configures an imaginary time-space where the people and objects in the novel are set and play their roles. Configuration of this time-space is done through tense markers "ru" and "ta" in combination with predicates. We have investigated cognitive functions the Japanese tense markers bear in simplex sentences in scene- depicting text. The predicate classes are defined as action, transition, and state predicates, where, within a certain span of time in the past, the first and second are time-dependent, and the last time-invariant. After an analysis of the text by various contemporary

writers, the findings are that the combination of action/transition predicates and the past tense marker creates a time flow by activating scenes. In the mean time, spatial elaboration is taken care of by state predicates using both the present and past tense markers. While the present tense as a whole renders spatial description of the scene activated by the past tense of the preceding action/transition predicate, the state predicate plus a past tense marker seems to signal the change in the focus of attention in the situation in the particular time frame.

4. Dynamic case role assignment in Japanese

We constructed a space where initial values of case particles "ga", "de", "wo", and "ni" are assigned to the objects participating in an event according to the causal relations, and proposed a model of case role assignment on the assumption that cognition-modifying operations such as applicativization, benefactivization, causativization and passivization relocate the objects in this space by preserving the causal relations expressed in the original proposition.

We frequently find instances in Japanese where the use of particles deviates from the prototypical semantic roles. What sort of event cognition is involved in expressing grammatical relations between the predicate and the nouns followed by case particles "ga", "de", "wo", and "ni"? The speaker recognizes an event generated in the time-space where causal relations hold among the participating objects. We assume that there is a space where the initial case roles are given to the nouns, that their relocation takes place in the process of cognition-modifying operations, and accordingly that particular assignment of the case particles implies the difference in the speaker's cognition of the event reflected in semantically equivalent or nearly equivalent expressions. We propose a case role assignment model that dynamically assigns semantic roles in the derivation of applicative, benfactive, passive and causative constructions. Consequently, systematic explanation becomes possible for the seemingly versatile functions of the particles. Specifically, the degrees of agentivity of "ga"-NP's and recipiency of "ni"-NP's are discussed in the causal space in terms of the behavioral patterns of the objects in the process of construction modifications.

Keywords: time noun, tense marker, proximal deixis, tense marker, action/transition/state predicates, semantic role, causal space