

## On the nature of mapping among space, time and conditional domains

Yukinori Takubo

Kyoto University

ytakubo@bun.kyoto-u.ac.jp

In this talk I will examine the nature of mapping among three cognitive domains, namely, space, time and conditionals. For the illustration of the mapping, I will take up the word *tokoro*, a Japanese word meaning space, or location. *Tokoro* can take a clause to express 'location' as in (1). It takes a tense/aspectual clause as in (2) to mean 'just before', 'just after' and 'progressive' depending on the tense and aspectual form of the clause it takes. It can also attach to a consequent of a conditional as in (3), in which case the conditional can only be interpreted as a counterfactual.

(1) Kore-wa John-ga sun-dei-ru tokoro-da.

This-TOP John-NOM live-PROG-PRES TOKORO-COP.

'This is the place where John lives.'

(2) a. John-wa hon-wo yom-u tokoro-da.

John-TOP book-ACC read-PRES TOKORO-COP

'John is about to read a book.'

b. John-wa hon-wo yon-da tokoro-da.

John-TOP book-ACC read-PAST TOKORO-COP

'John has just read a book.'

c. John-wa hon-wo yon-dei-ru tokoro-da.

John-TOP book-ACC read-PROG-PRES TOKORO-COP

'John is reading a book.'

(3) kare-ga kono kusuri-wo non-dei-tara, sin-dei-ru tokoro-da.

he-NOM this medicine-ACC take-PERF-COND die-PERF-PRES TOKORO-COP

'If he had taken this medicine, he would be dead.'

I claim that the properties of *tokoro* can be accounted for if we assume that *tokoro* is a two place predicate that takes a reference point and the point to be located. Words that express spatial and temporal relation such as *mae* (before) or *ato* (after) can be characterized as a two place relation that takes a reference point and orders the point to be located relative to a reference point, precedence in the case of *mae* and succession in the case of *ato*. I argue that *tokoro* serves to locate a point in question to be located at the reference point, i.e. a sort of an identity function.

I will try to explain how the spatial identity property of *tokoro* can account for the temporal and conditional properties of *tokoro*, if the spatial property can be properly mapped to temporal and conditional domains.