

On Case Markers Occurring in Japanese Temporal Expressions*

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0. Introduction

In this paper, we discuss three Japanese case markers, *-ni*, *-wa*, and *-niwa*, occurring in temporal expressions within the framework of Cognitive Grammar. In particular, we investigate how *-niwa* is related to verb, tense, and aspect.

Japanese temporal adverbials are shown in (1) and (2), for example.¹ (1a) shows that the speaker read a book at the specific time, ‘five’. In (1b), the speaker also read a book at five and in this case *5 zi* ‘five o’clock’ is topicalized. In (1c), it is implied that there is a time which is contrasted with another time, for example, ‘At five, I read a book and at six I played the guitar.’ *-wa* in (1b) can also have a contrastive interpretation. Interestingly, *-niwa* shows the meaning of limitation when it is used with verbs of initiation or termination as in (2).

- (1) a. 5 *zi-ni* hon-o yon-da.
5 time-DAT book-ACC read-PAST
‘I read a book at five.’
- b. 5 *zi-wa* hon-o yon-da.
5 time-TOP book-ACC read-PAST
‘At five, I read a book.’
- c. 5 *zi-niwa* hon-o yon-da.
5 time-DAT-TOP book-ACC read-PAST
‘At five, I read a book.’

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¹ Abbreviations used in this paper are: DAT = Dative marker, TOP = Topic marker, ACC = Accusative marker, NOM = Nominative marker, PAST = Past tense marker, ASP = Aspectual marker. *-niwa* is glossed DATIVE-TOPIC. Although one considers that *-ni* is a postposition when it attaches to a temporal expression, we assume that it is a case marker in this paper, for expository convenience. See Kumashiro (1994).

- (2) 5 *zi-niwa* kaigi-ga owaru.
 5 time-DAT-TOP meeting-NOM finish
 ‘The meeting will close by five o’clock (at the latest).’

In this paper, we argue that the Japanese case markers *-ni*, *-wa*, and *-niwa* occurring in temporal expressions are all captured by the cognitive notions of a setting and a reference-point construction, which are introduced by Langacker (1987). In particular, it is claimed that the two meanings of *-niwa* are motivated by these notions and the difference between them is captured by inheritance relations; one inherits each meaning from *-ni* and *-wa*; the other partially inherits each meaning and also has the meaning of limitation.

In section 1, we offer an overview of the basic data of Japanese temporal expressions which are case-marked by *-ni*, *-wa*, and *-niwa*. In section 2, we introduce the theoretical framework of this paper. In section 3, we analyze case markers in Japanese by using the cognitive notions of a setting and a reference-point construction. Finally, section 4 presents concluding remarks.

1. Data

From many Japanese case markers, we focus on *-niwa*, which attaches to temporal adverbials. Before concentrating on it, let us look at some data of Japanese temporal adverbials.

First, Japanese temporal adverbials may select case markers in two ways, as shown in (3):

- (3) a. haru-*ni* sakura-ga saku.
 spring-DAT cherry.blossom-NOM bloom.
 ‘Cherry blossoms bloom in spring.’
 b. haru-*wa* sakura-ga saku.
 spring-TOP cherry.blossom-NOM bloom.
 ‘In spring, cherry blossoms bloom.’

The temporal adverbials in (3) can also stand alone without case markers:

- (4) haru sakura-ga saku.
 spring cherry.blossom-NOM bloom.
 ‘In spring, cherry blossoms bloom.’

We have a slight difference in meaning among these three examples. *-ni* has a function of specifying time, while when a temporal adverbial is not case-marked, time is not specified but “established,” as pointed out by Masuoka (1995). *-wa* marks a topic, as it attaches to many words or phrases.

Second, the so-called deictic words are not marked by *-ni*, as in (5a-c):

- (5) a. kyoo (*-ni) gako-e iku.
 today school-to go
 ‘I go to school today.’
 b. asita (*-ni) gako-e iku.
 tomorrow school-to go
 ‘I go to school tomorrow.’
 c. kinoo (*-ni) gako-e it-ta.
 yesterday school-to go-PAST
 ‘I went to school yesterday.’

These deictic words are categorized as adverbs, while others are categorized as nouns or adverbs.

Let us now turn to *-niwa* that is attached to temporal adverbials. As we see in (6), we find that there are two types of *-niwa* in Japanese:

- (6) a. asita (*-ni) kaigi-ga aru.
 tomorrow meeting-NOM is
 ‘I have a meeting tomorrow.’
 b. ?asita-*niwa* kaigi-ga aru.
 tomorrow-DAT-TOP meeting-NOM is
 c. asita-*niwa* kaigi-ga owaru.
 tomorrow-DAT-TOP meeting-NOM finish
 ‘The meeting will close by tomorrow.’

As we see in (6a), the deictic word ‘tomorrow’ is not marked by *-ni*. The example (6b) shows that *-niwa* consists of *-ni* and *-wa* because the deictic word does not co-occur with *-ni*. On the other hand, in the example (6c), *-niwa* does co-occur with ‘tomorrow’. This indicates that *-niwa* does not consist of the composition of *-ni* and *-wa*. We argue that the latter forms a construction in the sense of Goldberg (1995).

Although *-niwa* is analyzed as a complex word by Nakamura (2001), it is not clear how *-ni* and *-wa* are related to *-niwa*. We would like to focus on the relation between them.

2. Theoretical Assumptions

Our analysis is based on the tenets of Cognitive Grammar proposed by Langacker (1987, 1991, 1999). In Cognitive Grammar, language comprises semantic structures, phonological structures, and symbolic structures between the two. In this theory, conceptualization is captured in terms of the canonical event model, which is shown in Figure 1.

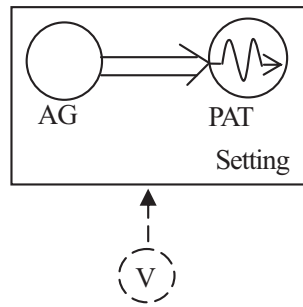


Figure 1. Canonical Event Model

This model assumes an event occurring within a setting and a viewer (V) observing it from an external vantage point. A setting indicates a “global, inclusive region within which an event unfolds or a situation obtains” (Langacker 1991:553). Based on this model, we propose that the Japanese *-ni* which attaches to temporal adverbials indicates a setting (cf. Kumashiro 2002).

We also assume that the Japanese topic marker *-wa* invokes a reference-point construction, as suggested by Langacker (1999) or Kumashiro and Langacker (2003). This is sketched in Figure 2:

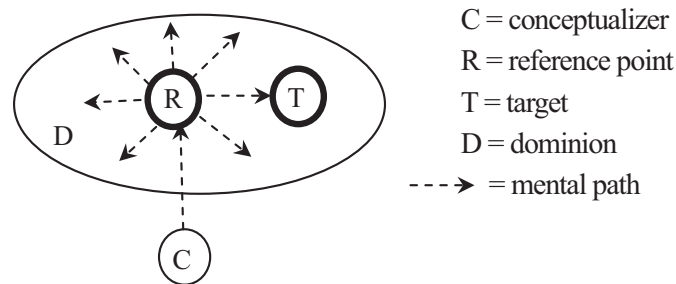


Figure 2. Reference-point relationship (Kumashiro and Langacker 2003: 10)

Figure 2 illustrates reference-point relationship. In this figure, a conceptualizer C accesses a target T via a reference point R in the dominion D.

In section 3, we will claim that one of two meanings expressed by *-niwa* is captured in terms of Construction Grammar (Goldberg 1995). According to this approach, a distinct construction is defined as in (7):

- (7) C is a CONSTRUCTION iff_{def} C is a form-meaning pair $\langle F_i, S_i \rangle$ such that some aspect of F_i or some aspect of S_i is not strictly predictable from C’s component parts or from other previously established constructions.

We assume that the Cognitive Grammar approach to constructions is parallel to that of Construction Grammar.

3. Proposal

3.1. Schemas of Case Markers

First, we propose that the Japanese *-ni* occurring with temporal adverbials designates a setting, which is illustrated in Figure 3:

- (8) a. 5 *zi-ni* hon-o yon-da. (= (1a))
 b. haru-*ni* sakura-ga saku. (= (3a))
- (9) a. 5 *zi-wa* hon-o yon-da. (= (1b))
 b. haru-*wa* sakura-ga saku. (= (3b))

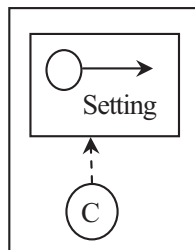


Figure 3. *-ni*

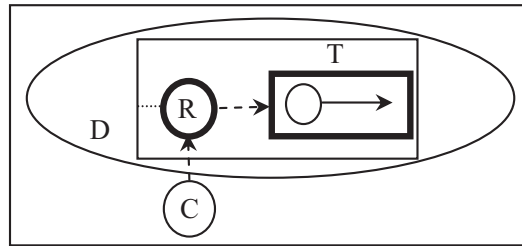


Figure 4. *-wa*

Figure 3 is based on a simplified canonical event model. The inner box indicates a setting. The Japanese topic marker *-wa* invokes a reference-point construction, as we mentioned in section 2. This is shown in Figure 4 on the basis of Figure 2. Since we are concerned with temporal adverbials, the dominion of the reference point corresponds to a setting, although they differ in their levels.

Second, we call the *-niwas* in (10a) and (10b) *-niwa₁* and *-niwa₂*, respectively, for convenience:

- (10) a. 5 *zi-niwa₁* hon-o yon-da. (= (1c))
 b. 5 *zi-niwa₂* kaigi-ga owaru. (= (2))

-niwa₁ indicates the contrastive interpretation, whereas *-niwa₂* indicates the limitative interpretation. In (10a), 5 *zi* ‘five o’clock’ indicates a setting and it is topicalized by *-wa*. This is predicted from the composition of *-ni* and *-wa*, which is sketched in Figure 5:

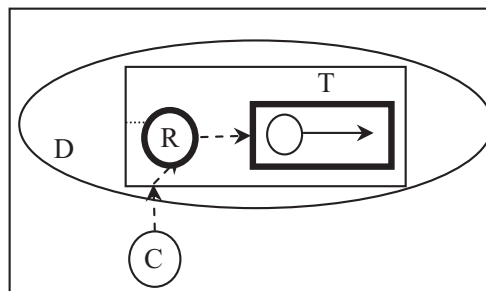


Figure 5. *-niwa₁*

Figure 5 shows the meaning of $-niwa_1$ and the dotted line indicates a correspondence relation.

In (10b), on the other hand, 5 *zi* ‘five o’clock’ indicates the limitation of the continuation of the meeting. This meaning is not predicted from the composition of $-ni$ and $-wa$. The meaning of $-niwa_2$ is sketched in Figure 6:

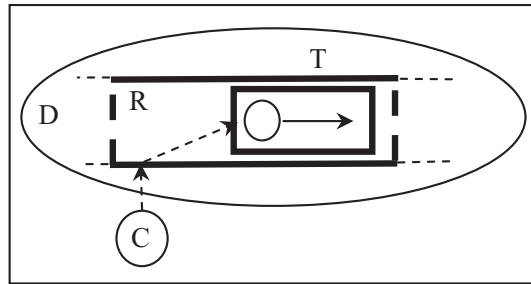


Figure 6. $-niwa_2$

In Figure 6, the left and right sides of the box which stands for a setting are expressed by dashed lines. This means that an event does not occur in the time that is indicated by a setting, although it shows the boundary of the occurring event. They are profiled because $-niwa$ itself invokes a reference point, not $-wa$. We claim that $-niwa_2$ partially inherits the meanings of a setting and a reference-point relationship and creates the meaning of limitation on its own. We consider that the emergence of this meaning is related to the concept of scale which temporal adverbials evoke. Thin broken lines show a temporal scale and the setting is located in this scale.

We integrate the figures that we propose above and look at the relation among them in Figure 7:

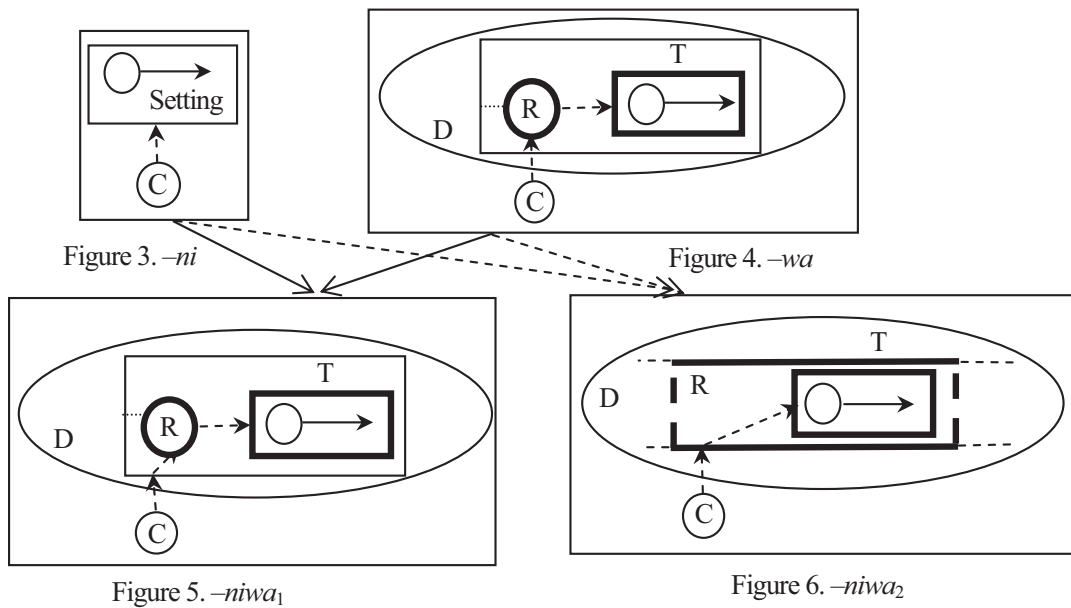


Figure 7.

As we mentioned above, *-niwa*₁ inherits from *-ni* its function, a setting, and inherits from *-wa* its function *-wa*, a reference point. On the other hand, *-niwa*₂ inherits these features from them partially, which is indicated by the dashed arrow in Figure 7. It creates the meaning of limitation when it occurs with the expression that invokes a scale.

By assuming a setting and a reference-point construction, we can capture the idiosyncrasies of *-niwa*. The setting indicates the two characteristics of *-niwa*, temporal duration and locating an event. *-wa* induces a process to the target as a reference point.

3.2. The Relation between *-niwa* and Other Elements

As we saw in Figure 6, we may predict that *-niwa*₂ is compatible with the verbs which have the termination in their components of time because of its limitative meaning. Those verbs are classified as accomplishment or achievement in Vendler's (1957) terms. Although it is controversial whether Vendler's classification is applicable to Japanese verbs (cf. Kindaichi (1950), Okuda (1984)), we shall tentatively apply it to them because we focus on the relation between *-niwa* and aspect.

According to Vendler's classification, accomplishment refers to a situation that is durative and has the termination of the action. Achievement refers to a situation that is punctual and instantaneous. They are represented by (11):

- (11) a. Taro-ga ie-o tateru.
 Taro-NOM house-ACC build
 'Taro builds a house.'
 b. kono nuno-ga kawaku.
 this cloth-NOM dry
 'This cloth dries.'

(11a) and (11b) include the transitive accomplishment predicate and the intransitive achievement predicate, respectively. In (11a), *ie-o tateru* 'build a house' indicates the activity and the termination of building a house. In (11b), *kawaku* 'dry' is punctual and has only the termination. When these sentences have temporal adverbials that are marked by *-niwa*, they have two interpretations, that is, the contrastive and the limitative interpretation:

- (12) a. 5 gatu-niwa Taro-ga ie-o tateru.
 5 month-DAT-TOP Taro-NOM house-ACC build
 'In May Taro builds a house.' (or 'By May Taro builds a house.')
- b. 5 zi-niwa kono nuno-ga kawaku.
 5 time-DAT-TOP this cloth-NOM dry
 'By five this cloth dries.' or 'At five this cloth dries.'

² The English translation that is parenthesized indicates the less preferred interpretation.

(12a) and (12b) have the contrastive interpretation as default. Also, since they both have the termination of an event, they have the limitative interpretation. The difference between the two is that in (12b) it is easier to get the limitative interpretation than in (12a) because they have only the termination, not activity. This stems from the characteristic of *-niwa*₂. That is, the concept of limitation is compatible with termination.

Let us now turn to the verbs that do not have the termination or initiation. We predict that temporal adverbials with *-niwa* do not have the limitative interpretation when they occur with stative and activity predicates, in Vendler's terms. In Japanese stative predicates are represented by *aru* and *iru* 'exist' because they cannot occur with *-teiru*, which is a Japanese progressive marker. Activity predicates are represented by *aruku* 'walk' or *hasiru* 'run' as in (13):

- (13) a. 5 zi-niwa Taro-ga hasiru.
 5 time-DAT-TOP Taro-NOM run
 'At five Taro runs.'
 b. 5 zi-niwa Ken-ga aruku.
 5 time-DAT-TOP Ken-NOM walk
 'At five Taro walks.'

It is difficult to have the limitative interpretation in (13). When we add to the verb the aspectual suffix *-dasu*, which means the initiation of action, it is possible to get the limitative interpretation, although it is still not preferred.

- (14) a. 5 zi-niwa Taro-ga hasiri-dasu.
 5 time-DAT-TOP Taro-NOM run-put.out
 'At five Taro starts running.'
 b. 5 zi-niwa Ken-ga aruki-dasu.
 5 time-DAT-TOP Ken-NOM walk-put.out
 'At five Taro starts walking.'

-niwa in (15), which includes the stative predicate, does not have the limitative interpretation.

- (15) 5 zi-niwa kaigi-ga aru.
 5 time-DAT-TOP meeting-NOM exist
 'At five there is a meeting.'

Thus, we can say that if predicates have the termination or initiation of action, *-niwa* can have the limitative interpretation.

The limitative interpretation is also affected by tense and aspect. Langacker divides English verbs into two classes in terms of the perfective and imperfective distinction. In

his terminology, only perfectives occur in the progressive construction, whereas only imperfectives occur in the simple present tense. If we apply this classification to Japanese verbs, we must pay attention to the characteristic of the progressive form *-teiru* in Japanese because it has another reading, as shown in (16):

- (16) kono nuno-ga kawai-teiru.
this cloth-NOM dry-ASP
'This cloth is dry.'

-teiru in (16) has the resultative interpretation, not progressive. We assume that if the predicate cannot occur with *-teiru*, it is classified as stative and if the predicate with *-teiru* has the resultative interpretation, it is classified as the achievement predicate, in Vendler's terms. Since *aru* and *iru* 'exist' cannot occur with *-teiru*, they are stative.³

Let us now consider the temporal adverbials that occur with non-past tense and the *-teiru* form:

- (17) a. 5 zi-niwa Taro-ga hasit-teiru.
5 time-DAT-TOP Taro-NOM run-ASP
'At five Taro is running.'
b. 5 gatu-niwa Taro-ga ie-o tate-teiru.
5 month-DAT-TOP Taro-NOM house-ACC build-ASP
'In May Taro will be building a house.'
(or 'By May Taro will have built a house.')
- c. 5 zi-niwa kono nuno-ga kawai-teiru.
5 time-DAT-TOP this cloth-NOM dry-ASP
'By five this cloth will have been dried.' or 'At five this cloth is dry.'

When the activity and accomplishment predicates occur with non-past tense and the *-teiru* form, the contrastive interpretation is preferred. On the other hand, when the achievement predicate occurs with them, it is easier to get the limitative interpretation. In other words, the *-teirus* in (17a) and (17b) show the progressive meaning and *-niwa* refers to an event time, whereas the one in (17c) shows the resultative meaning and *-niwa* refers to a reference time. This characteristic of *-niwa* is motivated by the reference-point construction of *-wa*.

Next, consider the relation between a temporal adverbial and simple past tense:

- (18) a. 5 zi-niwa Taro-ga hasit-ta.
5 time-DAT-TOP Taro-NOM run-PAST
'At five Taro ran.'

³ Although the distinction between progressive and resultative interpretations can be seen in the distinction between the transitive and intransitive verb, it does not affect our discussion.

- b. 5 gatu-niwa Taro-ga ie-o tate-ta.
 5 month-DAT-TOP Taro-NOM house-ACC build-PAST
 ‘In May Taro built a house.’
- c. 5 zi-niwa kono nuno-ga kawai-ta.
 5 time-DAT-TOP this cloth-NOM dry-PAST
 ‘At five this cloth dried.’

All the examples have the contrastive reading in *-niwa*. In other words, *-niwa* refers to an event time. We consider that this is because the past-tense marker requires an event time because of its function of locating an event in the past.

Finally, let us look at the relation between a temporal adverbial and past tense with the *-teiru* form:

- (19) a. 5 zi-niwa Taro-ga hasit-tei-ta.
 5 time-DAT-TOP Taro-NOM run-ASP-PAST
 ‘At five Taro was running.’
- b. 5 gatu-niwa Taro-ga ie-o tate-tei-ta.
 5 month-DAT-TOP Taro-NOM house-ACC build-ASP-PAST
 ‘In May Taro was building a house.’
 (or ‘By May Taro had been built a house.’)
- c. 5 zi-niwa kono nuno-ga kawai-tei-ta.
 5 time-DAT-TOP this-cloth-NOM dry-ASP-PAST
 ‘By five this cloth was dry.’ or ‘At five this cloth was dry.’

Here we have the same result as in (17), which has non-past tense with the *-teiru* form. That is, the *-niwas* in (19a) and (19b) indicate the contrastive interpretation, whereas the one in (19c) can have the limitative interpretation.

The data that we have seen above are summarized in Table 1:

	Activity	Accomplishment	Achievement
Non-past simple tense	contrastive	contrastive (/limitative)	limitative /contrastive
Non-past tense with <i>-teiru</i> form	contrastive	contrastive (/limitative)	limitative /contrastive
Simple past tense	contrastive	contrastive	contrastive
Past tense with <i>-teiru</i> form	contrastive	contrastive (/limitative)	limitative /contrastive

Table 1.

This result is motivated by the notions of a setting and a reference-point construction. First let us consider why we do not have the limitative reading when the activity verb is used. We argue that this is because the setting indicated by *-ni* locates the event and the reference point indicated by *-wa* accesses the target. Since the activity verb shows the continuation of successive phases in time, it is not compatible with the limitative interpretation. Second, when the accomplishment verb is used with the non-past tense

and the *-teiru* form, we can have the two interpretations. Since the accomplishment verb includes the terminal point in time, this is compatible with the meaning of limitation, although we still have the contrastive interpretation. Third, as found in the fact that the accomplishment verb expresses the progressive meaning with the *-teiru* form, it includes activity. Therefore, the contrastive interpretation is preferred when it occurs with the *-teiru* form. Fourth, the reason why the limitative interpretation is induced when it is used with the achievement verb is that since the achievement verb shows a single moment of time, it has a clear terminal point. Hence it is compatible with the limitative meaning. When it occurs with the *-teiru* form, it prototypically expresses the limitation, because of the meaning of perfect of *-teiru*. Since a past event needs to be located in the specific time, *-niwa* refers to an event time. Hence the contrastive interpretation is preferred when the verb is used with past tense. Moreover, the contrastive interpretation is at the discourse level, which is motivated by the inheritance of a reference-point construction from *-wa* in Figure 7. The limitative interpretation is at the sentence level, which is motivated by the partial inheritance of the setting.⁴

4. Conclusion

In this paper we argued that *-ni*, *-wa*, and *-niwa* occurring in temporal expressions are captured by a setting and a reference-point construction. In particular, we claimed that *-niwa*₁ inherits each meaning from *-ni* and *-wa*; while *-niwa*₂ partially inherits each meaning from both of them.

⁴ We have seen how *-niwa* is related to the predicate, tense, and aspect. Although we classify predicates into four classes, their boundaries are not clear. Since *-niwa* coerces the limitative interpretation, the predicates tend to have temporal duration, even though they are punctual. If we omit the subject, which can be contrasted with other subjects, we can have the limitative interpretation, even though the activity predicate is used:

- (i) 5 *zi-niwa* *hasiru*.
 5 time-DAT-TOP run
 ‘At five I run.’ (or ‘By five I start running.’)

Although the verbs can be classified into the four classes, we also notice that the predicate cannot be classified only in terms of temporal duration. As seen in (ii), the predicate *kiru* ‘dress’ is construed as an activity or achievement:

- (ii) a. *Ken-ga ima tonari-no heya-de fuku-o ki-teiru*.
 Ken-NOM now next-GEN room-in clothe-ACC dress-ASP
 ‘Ken is putting on his clothes in the next room now.’
 b. *Ken-ga kyoo akai fuku-o ki-teiru*.
 Ken-NOM today red clothe-ACC dress-ASP
 ‘Ken wears red clothes today.’

-teiru in (21a) has the progressive interpretation, while (21b) has the resultative interpretation. Although we need to analyze it from the other perspective, we do not discuss the classification of the predicates any further here. Rather we claim that *-niwa* indicates the domain of an event and does not fix its time, as shown in Figure 6. It motivates the observations that it refers to the initiation or termination and to a reference time, not to an event time, and when the past tense is used, it can refer to an event time.

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