

silphi-ta (sad), *φrop-ta* (lonely), *səpsəpha-ta* (regretful); evaluative verbs like *cuŋjoha-ta* (important), *nap'i-ta* (bad), *phjənliha-ta* (convenient); attitude verbs like *chincəlhata* (kind), *koŋsonha-ta* (polite), *kjəmsonha-ta* (humble), *kəmanha-ta* (haughty); *is'-ta* (be), *kath-ta* (identical), etc. The *toŋan* adverbial is highly compatible with sensation and attitude verbs; sensation may begin, continue for any length of time and then terminate and attitude may be subject to control. Emotive verbs are less compatible with short period or specific time point adverbials, since the state of emotion has a rather long period of time to continue and has less clear starting and ending points than sensation.

- (3) ??na-nin tu sikan *toŋan silphi-əs'-ta*
 'I was sad for two hours.'
 Cf. na-nin haru coŋil *silphi-əs'-ta*
 'I was sad all day long.'

The same adverbial is most compatible with *is'-ta* (be), since the state of existence can have clear starting and ending points and a uniformly continuing period. The *toŋan* adverbial is less compatible with appearance or inherent nature description verbs, since their states have no clear beginning and ending points and usually continue for a comparatively long period of time.

Let us turn to the class of activity verbs. The *toŋan* adverbial is highly compatible with activity verbs. Observe.

- (4) Chəlsu-nin se sikan *toŋan kər-əs'-ta*
 Top three hours for walk Past Decl
 'Cholsu walked for three hours.'

This class includes such verbs as *ul-ta* (cry), *us-ta* (smile), *t'wi-ta* (run), *ca-ta* (sleep), *malha-ta* (talk), *chumchu-ta* (dance), *masi-ta* (drink), *jəncuha-ta* (play), *uncənha-ta* (drive), *'k'il-ta* (pull), *chac-ta* (look for), *po-ta* (watch), *tit-ta* (listen), *kuri-ta* (roll), *tol-ta* (rotate), *kjesokha-ta* (continue), etc. Agency of the subject of the verb is the most important character of this class of verbs and when the verb takes an animate subject volition is

involved.

The movement verbs of this class, however, may not take any goal or extent expression. This point will be raised later in the discussion of accomplishment verbs. The attitude verbs such as *chincalha-ta* (kind) included in the state class may have certain characteristics of this activity class. But the attitude verbs cannot take the progressive form (*-ko is'-ta*), while activity can (cf. 'She is being kind.').

On the other hand, achievement verbs do not occur with the *toŋan* adverbial. Observe the following.

- (5) *Minsu-nin han sikan *toŋan* hækjəlchæk-il palkjənha-jəs'-ta
 Top one hour for solution OM find Past Decl
 'Minsu found a solution for an hour.'

Verbs belonging to this class are: *tah-ta* (reach), *t'əna-ta* (leave), *əl-ta* (freeze), *cuk-ta* (die), *nah-ta* (be born), state verbs + *-ci-ta* (become), *palk-ta* (brighten), *ətup-ta* (darken), *kut-ta* (harden), *sik-ta* (cool), *sicakha-ta* (begin), *kichi-ta* (stop), *pat-ta* (receive), *ət-ta* (acquire), *ilh-ta* (lose), *nunchi-chæ-ta* (become aware of), *k'ætət-ta* (realize), *ara-chæ-ta* (recognize), *kiəkha-ta* (remember), *ic-ta* (forget), *k'æ-ta* (awaken), *cam-til-ta* (fall asleep), *ip-ta* (put on), *pət-ta* (take off), etc.

Some verbs from this class such as *ic-ta* (forget), *kiəkha-ta* (remember), *ip-ta* (put on) can occur with the *toŋan* adverbial and in that case the adverbial shows how long the result state of the achievement continues. Consider the following.

- (6) Yunhi-nin ki il - il haru *toŋan* ic - əs' - taka taim nal
 Top the event OM a day for forget Past and then next day
 kiəkha - jəs' - ta
 remember Past Decl
 'Yunhi forgot the event for a day and then she remembered it the next day.'

Here 'haru *toŋan* ic-əs'-ta' is similar to the result state expression 'haru *toŋan* ic-ko-is'-əs'-ta.' (Such verbs as *kichi-ta* take the *-ə is'-ta* form

instead.) Observe the following.

- (7) pi - ka tu sikan *tojan* kichi - əs' - ta (=kichi-ə is'-ta)
 rain SM two hours for stop Past Decl
 'Rain has stopped for two hours.'

The reason why achievement verbs rarely occur with *tojan* is that the achievement involved is perceived to take place momentarily rather than for any prolonged period of time. Therefore, in such cases as *nok-ta* (melt) and *əl-ta* (freeze), parts of a given amount of snow and water may be perceived to go on achieving melting and freezing respectively. So the progressive form 'nun (snow)-i *nok-ko is'-ta*' entails 'nun-i *nok-as'-ta*'. And 'nun-i han sikan *tojan nok-as'-ta*' can rarely occur but once it occurs it does not have any concept of the extent of the snow involved and there must be someone present who observes the process for the whole period of one hour¹⁾. In the progressive form its difference from activity lies in that it involves change of state whereas activity does not. Likewise all the achievement verbs involve change of state, possibly with BECOME as the higher predicate.

The class of accomplishment verbs cannot occur with the *tojan* adverbial, either. Let us observe examples.

- (8) *na-nin han sikan *tojan* hakkjo-k'aci ka - as' - ta
 I Top one hour for school up to go Past Decl
 'I went up to the school for an hour.'
- (9) *? ilk'un-til-in tu tal *tojan* cip tu chæ - ril
 worker Pl Top two month for house two Classif OM
 ci - əs' - ta
 build Past Decl

This class includes: (*won* (circle)-*il*, *kirim* (picture)-*il*) *kiri-ta*, *cit-ta* (build), *mantil-ta* (make); *həmul-ta* (destroy), *ciu-ta* (erase), (NP-*ril*) *cuk-i-ta* (kill), *k'æt'iri-ta* (break); *chilha-ta* (paint); *cop-hi-ta* (narrow), *nəlp-hi-ta*

1) At the workshop, Soo-song Shin raised the question of the possible occurrence of *nok-ta* with *tojan*.

(widen), *muk-hi-ta* (make NP stay); (*tæhwa* (conversation)-*ril*) *nokimha-ta* (record), (*noræ* (song) *ril*) *puri-ta* (sing); (NP-*ril* *tæthoŋnjəŋ* (president)-*iro*) *p'op-ta* (elect); (NP-*ril*) *kamchu-ta* (hide), (NP-*k'aci*) *kət-ta* (walk), *pihæŋha-ta* (fly); (30 *li* (distance unit)-*ril*) *tali-ta* (run), (NP-*ril* NP-*k'aci*) *mil-ta* (push), etc.

Anyone who accepts (8) or (9) as grammatical is interpreting them in the sense of *toŋan-e* with *e* deleted. If there is no extent expression in the object NP, the same verb can be used for activity. Consider.

- (10) *ki saram-til-in il-njən toŋan cip-il ci-əs'-ta*
 the man PI Top one year house OM build Past Decl
 'They built houses for one year.'

Here *cip* (house) may be used in the general kind sense making the VP an activity expression. In this case there is no concept of extent involved. It is noted here that the same kind sense is expressed in the singular form *cip* in Korean, whereas it is expressed in the indefinite plural form 'houses' in English. If *cip* is interpreted in the singular sense (though it is not normally done) the sentence can convey no sense of completion in building a house.

The major difference between activities and accomplishments, as is well understood, is that a sentence with an accomplishment verb in a progressive tense cannot entail the same sentence in a simple tense, whereas a sentence with an activity verb can. Consider.

- (11) a. *ki ai-nin won han-kæ-ril kiri-ko is'-əs'-ta*
 the child Top circle one Classif OM draw Prog Past Decl
 'The child was drawing a circle',
 → b. *ki ai-nin won han-kæ-ril kiri-əs'-ta*
 Past
 'The child drew a circle'.

The *toŋan* adverbial cannot be attached to either (11a) or (11b). If someone says 'ki ai-nin il (one)-*pun* (minute) *toŋan* won-il kiri-əs'-ta', his intended meaning is with the kind sense of *won*, making the VP an activity rather

than an accomplishment.

In Korean, the verb *chac-ta* is ambiguous between 'look for' (or 'try to find') and 'find', and it appears as if it were an accomplishment verb. But *chac-ta₁* (look for) is an activity and *chac-ta₂* (find) an achievement; the past progressive form 'ai (child)-ril *chac-ko is'-æs'-ta*' is necessarily in the 'look for' sense and entails the simple past 'ai-ril *chac-as'-ta*' in the same sense. *Chac-ta₁* can have the *toŋan* adverbial modification, which is not true of *chac-ta₂* (find). *Chac-ta₂* is a verb of momentary achievement and shows no result state that can be modified by the *toŋan* phrase. It cannot occur in the volitional context '(chac)-*taka mal-as'-ta*' (was (look) ing (for) and then stopped); *chac* in this context must be the activity verb. *Al-ta* (know) in the momentary achievement sense can hardly occur in the same context (*? *al-taka mal-as'ta*) but the occurrence of a proverb saying 'al-taka-to mori-l il' (something one almost comes to know but fails to) is interesting to see.

The verb *muk-hi-ta* (have NP stay) behaves as an accomplishment verb with some extent NP as follows:

- (12) John-in se sonnim-il chare-ro kathin jekwan-e muk-hi-
 Top three guest OM turn in same hotel at stay have
 æs' - ta
 Past Decl

'John had three guests stay at the same hotel in turn.'

Consequently, the *toŋan* phrase such as *sahil toŋan* (for three days) cannot be put before *se sonnim* in the above sentence. The phrase *sahil toŋan* (*s'ik*) can be made to modify *muk* (stay) by being placed just before it. The causative verb *cæ-u-ta* (have NP sleep) has the same behavior (cf. **na-nin se sikan* (hour) *toŋan se ai-ril cæ-u-æs'-ta*). Therefore, the occurrence of the *toŋan* adverbial must be restricted in the underlying form of a sentence like (12) and its movement must be constrained (cf. my 1973). It reveals scope ambiguity. All the accomplishment verbs may be analysed as involving [ϕ CAUSE [BECOME ϕ]]. Although it takes time to CAUSE the change, the goal of state change is understood normally to be reached

momentarily.

So far I have discussed the compatibility of the *toŋan* phrase with four different aspectual classes of verbs. Now let me turn to the compatibility of the *toŋan-e* adverbial with the different classes of verbs. First, observe the classes of state verbs.

- (13) *?na-nin tu sikan *toŋan-e* tiŋ-i se i *karjəw-əs'* - ta
 I Top two hour period in back SM itchy Past Decl
 'My back itched in two hours.'

However, the same sentence becomes all right with extent NP's. Observe.

- (14) na-nin tu sikan *toŋan-e* tiŋ-i se kunde - ka *karjəw-əs'*-ta
 three place SM
 'Three spots in my back itched in two hours.'
- (15) na-nin tu sikan *tonaŋ-e* tiŋ-i se pən *karjəw-əs'*-ta
 three time
 'My back itched three times in two hours.'

If the time period is specifically restricted *toŋan-e* may occur as follows:

- (16) na-nin cusa mac-in cikhu tu sikan *toŋan-e* tiŋ-
 I Top injection get Past Rel right after two hour period in back
 i *karjəw-əs'*-ta
 SM
 'My back itched in two hours right after I got a shot.'

Even in this case the interpretation is that my back itched (*at least*) *once*.

The *toŋan-e* phrase cannot occur with activity verbs as follows:

- (17) *Minsu-nin se sikan *toŋan-e* kər - əs' - ta
 Top three hour period in walk Past Decl
 'Minsu walked in three hours.'

However, observe the following possibility:

- (18) Minsu-nin nə-ka əps - nin *toŋan-e* kər - əs' - ta
 Top I SM absent Rel walk Past Decl
 'Minsu walked in my absence.'

The adverbial can occur with achievement verbs as follows:

- (19) Yøphi-nin han sikan *tojan-e* hækjølchæk-il palkjønha-jös'-ta
 Top one hour solution OM find Past Decl
 'Yonghi found a solution in an hour.'
 Cf. (Vt: $t \in 1$ hr) AT (t , BECOME [KNOW (y, s)])

The *tojan-e* phrase also occurs freely with accomplishments as follows:

- (20) ilk'un- til- in tasəs tal *tojan-e* kjøu cip han chæ - ril ci-
 worker Pl Top five month only house one Classif OM build
 əs' - ta
 Past Decl
 'The workers built only one house in five months.'
- (21) Minsu-nin se sikan *tonaŋ-e* kjøŋcu - k'aci kær - əs' - ta
 Top three hour Kyongju up to walk Past Decl
 'Minsu walked to Kyongju in three hours.'
- (22) nuna-nin han sikan *tojan-e* se aki - ril cæ - u - əs' - ta
 sister Top one hour three baby OM sleep Caus Past Decl
 'Sister got three babies off to sleep in an hour.'

Now we can notice that in general *tojan* is compatible with states and activities, whereas *tojan-e* is with achievements and accomplishments complementarily. Let me further examine how *man-e* (=right after) and *an-e* (within) are compatible with those classes.

- (23) (state) a. na-nin tu sikan *man-e* (right after) tiŋ-i karjəw-əs'-ta
 'My back itched right after two hours.'
 (Here my back didn't itch for two hours and then it itched.)
 b. ??na-nin tu sikan *an-e* (within) tiŋ-i karjəw-əs'-ta
- (24) (activity) a. ki ai (child)-nin han sikan *man-e* kær-əs'-ta
 (The child walked right after one hour.)
 b. ?ki ai-nin han sikan *an-e* kær-əs'-ta
- (25) (achievement) a. Minsu-nin han sikan *man-e* hækjølchæk-il pal
 kjønha-jös'-ta

(One hour passed before Minsu could find a solution.)

- b. Minsu-nin han sikan *an-e* hækjəlchæk-il palkjən-ha-jəs'-ta

(Minsu found a solution within one hour.)

- (26) (accomplishment) a. ilk'un-til-in tasəs tal *man-e* kjəu cip han chæ-ril ci-əs'-ta

(The workers built a house only after five months. The workers could have spent all of or less than five months for the completion but the idea or preparation should have started five months before the completion. However, if the time period is long enough, say, five years, and the time needed for building a house is not perceived as a particular duration, then it may mean they waited for five years before they could start and complete building a house.)

- b. ilk'un-til-in tasəs tal *an-e* cip han chæ-ril ci-əs'-ta

(The workers built a house within five months.)

The *man-e* adverbial can occur with states and activities only in the inchoative(BECOME) sense of the verbs involved. For instance, in (23a) *karjəw-ə ci*(become)-əs'-ta(become itchy) and in (24a) *kət-ke tφ*(become)-əs'-ta(came to walk) are their real meanings. The *an-e* adverbial, unless the time period is specifically designated, is not quite compatible with those verbs as we can see in (23b) and (24b). These adverbials are quite compatible with achievement and accomplishment verbs instead.

Let me turn to the negation of the aspectual classes of verbs. All the negative sentences of any kinds of verbs show the sense of state. Observe the following.

- (27) na-nin tu sikan *toyan* tiŋ-i kariəp-ci (Comp) *ani* (not)-ha-jəs'-ta

- (My back didn't itch for two hours.)
- (28) Minsu-nin se sikan *tonjan* kət-ci *ani* ha-jəs'-ta
(Minsu didn't walk for three hours.)
- (29) Yunhi-nin han sikan *tonjan* hækjəlchæk-il palkjønha-ci *mos*(not able)-ha-jəs-ta
(Yunhi couldn't find a solution for an hour.)
- (30) ki saram-til-in tasəs tal *tonjan* cip han chæ-ril cic-ci *ani*-ha-jəs'-ta
(They didn't build a house for five months.)

All the negative sentences take *tonjan*, not *tonjan-e*, for the sense of the stative duration of absence. (27) and (28) can be ambiguous between the negative state sense already mentioned ('itching' and 'walking' never happened for two hours and three hours respectively) and the external negation sense (*It's not the case* that my back itched for two hours (or Minsu walked for three hours); in these cases 'itching' and 'walking' could have happened, even though not for the whole specified period of time). This scope ambiguity cannot occur in achievements and accomplishments, since *tonjan* is impossible in their positive statements (see (29, 30)). It is to be noted that momentary achievement verbs take the negative morpheme *mos*(not able) instead of *ani* (see (29)). This is because momentary achievements are hardly subject to volitional control, for which usually *ani* (not) is used. Because of this stative nature of negative verbs, the following phenomenon occurs in English:

- (31) a. He won't go to Kyoto *until* next Saturday.
 b. *He won't go to Kyoto *by* next Saturday.
 c. He will go to Kyoto *by* next Saturday.
 d. *He will go to Kyoto *until* next Saturday.

Now let us consider further the difference between *tonjan* and *tonjan-e*. The *tonjan* adverbial depicts the sense of continuation for the whole specified period of time. Therefore, the prototypical situation for the adverbial is a homogeneous state and, next, a homogeneous activity. The negative state is one instance and the following is another:

- (32) *næ-ka kæki sal - ko is'-nin toŋan ki san - in noph -as'-*
 I SM there live Prog Rel for the mountain Top high Past
ta
 Decl

There is no interruption whatsoever in the mountain's being high for the specified period of time. The only thing is that, in this case of state, change is not easy and the viewer's situation rather than the state of the object changes. Some examples of homogeneous activity could be *is'-ta* (exist), *ca-ta* (sleep), *sumshwi-ta* (breathe), etc.

Prototypically, a viewer must be present to observe the state or activity for the whole period of time specified by the *toŋan* adverbial, for the state or activity must continue without interruption for the use of *toŋan*. However, pragmatically we allow gaps in this continuation and it is not easy to determine the extent of gaps allowable. When you have [*n+time unit+toŋan*] in the adverbial, the minimally required interval could be ($n-\frac{1}{2}$) unit. But depending on the kinds of verbs and contexts, there is much more variation. If you want to say,

- (33) *na-nin ilsæŋ toŋan ki jœca - ril sarapha-jœs' - ta*
 I Top life the woman OM love Past Decl
 'I loved her for my life.'

it is not enough for you to love her just for a while when you met her and again for a while when you die. There must be at least some period in the middle *and much more* so that the whole can be viewed or perceived as a continuation.

On the other hand, *toŋan-e* reveals the sense of time period at which some achievement or accomplishment takes place momentarily (at a time point) or taking some subinterval which may include the whole specified period. In this case, a viewer seems to be out of the time period putting the period on the line of continuous time. For the use of *toŋan-e*, there must be some *goal* (even extent can be conceived as goal) in mind. Observe.

- (34) sip-pun *tojan-e* il - il *almana* ha- I su is'-na?
 10 minute work OM how much do Fut Rel way be Q
 'How much work can you do in the period of ten minutes?'

The speaker of (34) has the extent goal in mind as a point of question. When the extent goal of ability is asked this way the time period to be used is the whole specified period, since ability (or efficiency) is usually measured by its maximum done in a specified time or by the minimal length of time spent on some specified task (cf. pæk (100) meter-ril (OM) mjəs (how many) cho (minute) *tojan-e* t'wi(run)-na (Q)? 'In how many minutes do you run 100 meters?')

Consider the differences in the following.

- (35) a. Tokyo-e is'-nin *tojan* na-nin chinku cip-e məmul-əs' - ta
 in be Rel I Top friend house at stay Past Decl
 'For the period of my being in Tokyo I stayed at a friend's.'
 b. ? Tokyo-e is'-nin *tojan-e* na-nin chinku cip-e məmul-əs'-ta
 c. Tokyo-e is'-nin *tojan-e* na-nin chinku cip-e məmul-əs'-əs'-ta
 (məmul-in cək-i is'-ta) 'While in Tokyo I (at least) once stayed
 at a friend's.'

Another difference lies in that *tojan* can have an immediately following special marker such as *in* (Topic), *il*(OM, Emphatic), *to*(also) or *man* (only), whereas *tojan-e* cannot have a following marker *il*, though it also can have *in*, *to* or *man* following without deletion of *e*.

The difference between *tojan* and *tojan-e* in Korean is analogous, to a certain degree, to the difference between the two locative adverbials *-esə* and *-e* respectively. The locative *-esə* shows the sense of participation and use of the space, whereas the locative *-e* shows the sense of place point viewed from a distance.

Still things remain to be done on the important difference between the two time adverbials in connection with aspectual classes of verbs in Korean.

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