Reexamination of Garey's Telic Concept*

Keedong Lee

(Konkuk University)

0. In studying the verbal aspect of French Garey presented interesting concepts of telic and atelic constructions. The purpose of this paper is to examine Garey's concepts and similar ones proposed by different linguists, and to define the concepts more vigorously so that they can be used in describing similar phenomena in different languages. The paper will proceed in the following way. In section 1 some data from Kusaiean, English and Korean will be presented. The data from these languages will show a need for classifying verbs into two groups, besides the usual dichotomy of transitive and intransitive verbs, or of stative and nonstative verbs. In section 2 a chronological survey of past works on aspect will be presented. The survey will show that factors involving the natures of verbs and those of nouns are important in studying aspect. Finally, in section 3 an attempt will be made to redefine Garey's concepts, using the case frame features in the form of redundancy rules.

1. In this section some data relevant to the present study will be drawn from Kusaiean, English and Korean.

1.1. Kusaiean

In Kusaiean all transitive verbs with a few exceptions have their corresponding intransitive verbs. These intransitive verbs are often called *pseudo-transitive verbs* or *transitive rerbs with included objects*. For example, the transitive verb *muhsahi* 'to build' has its corresponding intransitive verb *muhsah*, which can also be translated as 'to build'. Formally we can see the following differences: the transitive verb has the word-final *i* but its intransitive verb does not. (For the sake of convenience the pseudo-transitive verbs will be called simply as intransitive verbs.)

Syntactically, the pair of transitive and intransitive verbs shows an interesting patterning. Let us observe the following sentences.

(1) Tom el muhsahi lohm se.

Tom he build house one 'Tom is building a house.'

(2) *Tom el muhsahi lohm.

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*A Korean version of this paper was presented at the 9th LRI Linguistics Conference, Oct. 24, 1975.

(3)*Tom el muhsah lohm se.

(4) Tom el muhsah lohm.

　　Tom he build house 'Tom is building houses.'

In (1) the transitive verb is used and its object is modified by a numeral *se* 'one' and the sentence is grammatical. In (2) the same transitive verb is used but its object consists of a noun alone and the sentence is ungrammatical. In (3-4) the intransitive verb is used. Sentence (3) is ungrammatical because its object is modified by a numeral. Sentence (4), in which the object is not modified, is grammatical. This shows that superficially both the transitive verb and its corresponding intransitive verb look similar in that both can take objects. But the nature of the objects is quite different: with the transitive verb the object noun phrase must be quantitatively specified, whereas the object noun phrase must not be so specified with the intransitive verb.

There are many pieces of evidence which show that the unmodified noun phrases used with the intransitive verbs behave as a unit with the intransitive verbs. The position of the suffixes can be one piece of evidence. Notice the position of the instrumental suffix *-kihn*.

(5) El muhsah-kihn simacn ah.

　　he build-with cement the 'He is building with the cement.'

(6) El muhsah-lohm-kihn simacn ah.

　　he build-house-with cement the 'He is building houses with the cement.'

In (5) no object is used and the suffix is attached to the intransitive verb. In (6) the included object is used and the suffix appears after it. This is an indication that the intransitive verb and its included object behave as a unit with regard to suffixation. Let us observe another pair.

(7) El muhsahelah lohm se.

　　he build-away house one 'He has finished building a house.'

(8) El muhsah-lohm-lah.

　　he build-house-away 'He has become a carpenter.'

In (7-8) the completion suffix *-lah* is used. In (7) it appears after the transitive verb, but it appears after the included object *lohm* in (8).

In the preceding paragraphs we have observed some syntactic differences between the transitive verbs and their corresponding intransitive verbs. Syntactically the differences are clear-cut. But semantically it is not so easy to differentiate the two constructions. The intransitive verbs with their included objects simply name activities and the function of the included object is to limit the possible range of the activities denoted by the verbs. On the other hand, the transitive verb with its object denotes an action directed toward a goal. To see this, let us return to sentences (7) and (8). The suffixed form *muhsahelah* denotes completion. That is, the action of building something has come to a logical conclusion and as a result a house may have come into existence. But the suffixed

form of the intransitive verb *muhsah-lohm-lah* in (8) does not carry such an implication. It simply denotes that an activity of house-building took place or that someone has begun to build houses.

The semantic difference between the two constructions is reflected in the use of certain time adverbials. Look at the following sentences.

> (9) El muhsahelah lohm ah *ke mahlwem se.*
>
> he build-away house the in month one
>
> 'He built a house in one month.'

> (10) El muhsah-lohm-lah *ke mahlwem se.*
>
> he huild-house-away in month this

The time adverbial *ke mahlwem se* is used in (9-10). In (9) the adverbial denotes the amount of time that was required to build a house, but in (10) the same expression is interpreted as a point of time. (The word *se* can mean either 'one' or 'this (one)'. This is an indication that in (9) the predication has a set terminus point, whereas in (10) no such terminal point is implied.

1.2. English

In English identical verb forms are used regardless of the specifiedness of their object noun phrases as can be seen below.

> (11) John built a house.

> (12) John built houses.

In Kusaiean different verb forms must be used. ;Semantically, however, the pair of sentences in (11-12) is very similar to that of sentences (9-10). Sentence (12) is used to name activities one was engaged in previously. No goal is implied in (12). On the other hand, the predication in (11) has a set terminus. The difference is reflected in cooccurrence restrictions. There are two kinds of duration time adverbials in English. One simply denotes duration and the other denotes completion in addition to duration. The prepositions *for* and *in* are used to express the two kinds of adverbials. The adverbials have interesting cooccurrence restrictions. Let us observe the following sentences in which the different time adverbials produce different results.

> (13) He built a house in two years/*for two years.

> (14) He built houses *in two years/for two years.

The time adverbial *for two years* cannot be used when the object noun phrases are quantitatively specified. But when they are not specified quantitatively, they can be used. On the other hand, the time adverbial *in two years* cannot be used when the object noun phrases are quantitatively unspecified. But when they are quantitatively specified, they can be used.

With the adverb *almost* we can observe some differences, as can be seen below.

> (15) He has *almost* killed a pig.

> (16) He has *almost* killed pigs.

Sentence (15) can be ambiguous. In one reading, the scope of the adverb is the verb *killed*, and it means that the action did not take place. In another reading, the scope of the adverb is the whole verb phrase and sentence (15) means that he did something but it did not achieve its intended result. In contrast, sentence (16) has only one reading: it means that he almost became a pig-slaughter.

The perfective form in English denotes result, among other things. But, compare the following two sentences and their meanings.

    (17) He has built a house.

    (18) He has built houses.

The results denoted in (17) and (18), however, are different in kind. In (17) the perfective aspect denotes that as a result of building a house, a house has come into existence. But no such result is implied in (18).

The progressive form in English means incompletion in some cases, but no such meaning is imparted in some other cases. Look at the following sentences.

    (19) He is building a house.

    (20) He is building houses.

Sentence (19) denotes that building a house is in progress and it is not finished yet. But no such meaning is implied in (20).

In order to state the cooccurrence restrictions between duration adverbials and transitive verb constructions as in (13-14), and to make it possible to state more specifically the meanings of the perfective and progressive forms, we have to distinguish two types of predications in English.

1.3. Korean

As in English, Korean does not have different verb forms according to the nature of the object noun phrases. Whether the object noun phrase is specified or not the same verb form is used, as can be seen below.

    (21) Ku-nun cip -ul ci -ess-ta.

        he- TM house-OM build-past-DS

        'He built houses.'

    (22) Ku- nun cip han chay- lul ci -ass -ta.

        he-TM house one CL-OM build-past-DS

        'He built a house.'

        Note: TM=topic marker

              DS=declarative sentence marker

              CL=classifier

In (21) the object noun phrase is quantitatively unspecified. But in (22) the object noun phrase is quantitatively specified. In the light of Kusaiean data, the Korean verb morphology is underspecified. However, despite the same verb form, we observe some clear differences between the two constructions.

First, the time adverbial *X man-e* (where X stands for a period of time) can be interpreted in two different ways: in one reading it denotes an interval between two events. In another reading it denotes an amount of time required for completion of a process. Observe the following sentences.

(23) Ku- nun il-nyen man-e kel -ess -ta.

he-TM   one year-in   walk-past -DS

'He walked one year afterwards.'

(24) Ku- nun il-nyen man-e sipli -lul kel -ess -ta.

he-TM   one year -in   ten *li*-OM walk-past-DS

'It took him one year to walk ten *li*s.'

The same time adverbial is used in (23-4). However, in (23) it denotes an interval between two events. One event is that of walking and another, though not explicitly expressed, can be easily understood. In (24) the adverbial denotes the amount of time required for him to cover ten *li*s by walking. These example sentences show also a need for classifying predications into two classes.

The following examples show also a need for the dichotomy. One type of compound verbs in Korean is the resultative form. The verb *noh-* 'to put' is used with transitive verbs to form the compound verb *Vt-noh-*. The existential verb *iss-* is used with intransitive verbs to form compound verbs *Vi-iss-*. But not all transitive verbs and intransitive verbs can appear in the compound verb forms. Let us observe the following examples.

(25) Ku- nun phyenci-lul ssu-e noh- ass- ta.

he-TM   letter-OM   write put- past-DS

'He has written a letter.'

(26) ?Ku- nun ku khal- ul ssu-e noh- ass- ta.

he- TM the knife-OM write put- past-DS

(27) Ku phyenci-ka yenphil- lo ssu- i-e iss-ta.

the letter-SM   pencil-with write passive be -DS

'The letter is written in pencil.'

(28) ?Ku khal- i ssu- i-e iss- ta.

the knife-SM use-passive be- DS

The verb *ssu-* 'to write' can be input to the compounding process *Vt-noh-*, but its homophonous verb *ssu-* 'to use' cannot be. The verb *ssu-* in both senses has the same passive form. But the passive form can have its resultative form used in the sense of 'to write', but there is no passive resultative form for *ssu-* when used in the sense of 'to use'.

So far we have observed some data from Kusaiean, English and Korean. The data suggest a need for classifying verbs into two classes to state certain cooccurrence restrictions, to account for ambiguity and to restrict input verbs to compounding processes. In the following section we will review previous works on this particular classification of

verbs.

2. In order to account for phenomena similar to those in the previous section, many linguists tried to define concepts relevant to the data we observed. We will review some previous works in a chronological order, pointing out problems.

2.1. Jespersen (1933)

Jespersen distinguished two kinds of verbs. They are conclusive and nonconclusive verbs. Conclusive verbs are those that imply a final aim. Verbs such as *to make* and *to adorn* are regarded as conclusive verbs. Nonconclusive verbs are those verbs that do not imply a final aim and the activity of these verbs is not begun in order to be finished. The main difference between conclusive and nonconclusive verbs is reflected in the meaning of the past participles. A past participle of a conclusive verb, when used attributively, denotes a result of a past action as in *a caught lion*. A participle of a nonconclusive verb does not have such an implication.

Classifying verbs into two classes of conclusive and nonconclusive verbs is very useful. But his notional definitions are not rigorous enough to be used in describing the phenomena we observed. The distinction itself is valid and can be used very usefully. But the method of classification leaves much to be desired. As will be pointed out later, the conclusive or nonconclusive nature of verbs does not lie in the verbs alone in the case of transitive verbs.

2.2. Sandmann (1954)

Sandmann also recognized two classes of conclusive and nonconclusive verbs. Like Jespersen, Sandmann defined the two classes notionally. The verb *to kill*, for example, denotes an action that cannot be prolonged beyond a certain point. It has a certain terminal point. In this sense the verb *to kill* is a conclusive verb. On the other hand, verbs like *to stand* and *to run* may be prolonged *ad libitum*: they do not have any set terminal point. In this sense these verbs are nonconclusive ones.

2.3. Garey (1957)

In his study of French verbal aspect Garey also recognized two classes of verbs: telic and atelic verbs. Telic verbs are those that express an action tending toward a goal and atelic verbs are those that do not have to wait for a goal for its realization. Atelic verbs are realized as soon as they begin. Garey also classifies verbal complements into two classes. So telicity of a whole construction is determined by the nature of the verbs and also of the complements, as in the following.

(29) a. telic verb+telic or atelic complement=always telic
     b. atelic verb+telic complement=telic
     c. atelic verb+atelic complement=atelic

For instance, Garey regards the verb *to play* as atelic, but depending upon the telicity of complements, the whole construction can be either telic or atelic. Look at the following sentences.

(30) He played the piano. (atelic construction)

(31) He played a Beethoven sonata. (telic construction)

In (30) the complement *the piano* is atelic and the whole construction is atelic. On the other hand in (31) the complement *a Beethoven sonata* is telic and the whole construction is telic.

But Garey failed to present us any criteria for the telicity of complements. We do not know what makes a complement telic or atelic. Without a certain criterion for telicity it would be necessary for the telicity of complements to be specified in the lexicon or somewhere in the grammar. However, it seems to be the case that a complement by itself cannot be either telic or atelic. The telicity is to a large extent determined by the nature of the verb. The complement in (32) is atelic but it can also be interpreted as telic in (33).

(32) She used *the piano*. (atelic)

(33) She repaired *the piano*. (telic)

Besides, a verb can be used with more than one complement. But Garey did not point out what complement imposes telic nature or a terminal point to a predication.

2.4. Kenny (1965)

Kenny's classification is very similar to Vendler's. (See §2.6.) Verbs are classified into stative and nonstatives. Nonstatives are subclassified into performance verbs and activity verbs. Performance and activity verbs are distinguished from each other in terms of *tense implications*. In the case of activity verbs, "A is *verbing*" implies "A has *verbed*." If someone is giggling and stops next moment, he has giggled. In the case of performance verbs, "A is *verbing* implies A has not *verben* yet." If someone is building a house and stops building it, he has not built it yet.

Another difference between performance and activity verbs is that only performance verbs take time. Activities go on for a time. Sentence (34) in which a performance verbs is used can be paraphrased as (35). But sentence (36) in which an activity verb is used cannot be paraphrased as (37).

(34) He built a house in one year.

(35) It took him a year to build a house.

(36) ?He built houses in one year.

(37) It took him a year to build houses.

2.5. Allen (1966)

Basically Allen agrees with Garey's distinction. But he objects to classifying verbs into the two classes.(See §2.3.) Instead, he proposes that predications rather than verbs must be classified into two classes. Thereby one can avoid calling the same item such as *to play* telic and atelic. The following quotations shows his reason for the objection.

It would appear, then, that it is not so much the verb itself which is telic or atelic, but rather the kind of predication in which the verb participates. If we substitute *the*

terms "bounded" and "non-bounded" for Garey's "telic" and "atelic", and use the
"bounded" not for verbs but for predications, we can avoid calling the same item both
"bounded" and "non-bounded". Thus the predication *are playing a rubber of bridge* is
bounded, whereas the predication *are playing bridge* is non-bounded. (1966 : 198)

Allen is more specific than Garey in pointing out that bounded nominals(noun phrases)
make predications bounded. But he fails to point out what makes a nominal bounded.
And as we will see later, bounded nominals do not always make a predication bounded.

2.6. Vendler (1967)

Vendler classifies verbs in the following way.

(38)   verbs
                        ┌─────────────────┴─────────────────┐
                    −continuous   +continuous
                                                ┌──────────┴──────────┐
                                            +activity   +accomplishment

First, the verbs are classified into two major groups according to whether a certain
verb admit continuous tenses or not. Verbs that admit continuous tenses are again
subdivided into two classes: verbs of activity and those of accomplishment. Verbs that
have a set terminal point and proceed toward the terminus which is logically necessary
to their being what they are are verbs of accomplishment. Those that do not have such
a terminal point are verbs of activity.

The main difference between the two classes of verbs is that the concept of activities
calls for periods of time that are not unique or definite. But verbs of accomplishment
require the notion of unique and definite time periods. Specifically, Vendler uses the
following two questions to distinguish verbs of activity from those of accomplishment.

(39) How long did you ____ ?

(40) How long did it take ___ ?

Verbs of activity can fill the blank in (39) and the question can be meaningful. But
when they appear in (40) the question becomes odd. Observe the following:

(41) How long did you run?

(42) ?How long did it take to run?

On the other hand, verbs of accomplishment, appearing in (39), will produce an odd
question, but appearing in (40) they will produce a meaningful question. Observe:

(43) ?How long did you run a mile?

(44) How long did it take him to run a mile?

Vendler's classification as well as his criteria for the classification is very insightful
and interesting. But his use of the term *verb* is rather confusing. With the term he
refers to the verb alone sometimes, but some other times he refers to the verb with its
complements. The verb *to run,* for instance, is classified either as an activity verb or as
an accomplishment, as can be seen below.

(45) He *ran* for two hours. (activity)

(46) He *ran* a mile in two hours. (accomplishment)

2.7. Verkuyl (1972)

Verkuyl recognizes two aspects in Dutch and presents the following two aspectual schemata.

(47) Nondurative: ((VERB) (SPECIFIED QUANTITY OF X)$_{NP}$)$_{VP}$

(48) Durative: ((VERB)(UNSPECIFIED QUANTITY OF X)$_{NP}$)$_{VP}$

VERB in the schemata above is not a real verb but is a semantic primitive such as TAKE, ADD TO, PERFORM, etc. The semantic primitive TAKE stands for verbs such as *to drink, to eat, to take*, etc. When an NP following the ʻVERB is quantitatively specified or limited the whole VP construction is nondurative, as in (49). On the other hand, when the NP following theʲ verb is unspecified the whole VP construction is durative, as in (50).

(49) He knitted a sweater. (nondurative)

(50) He knitted sweaters. (durative)

Verkuyl also tests the durative-nondurative distinction using the duration time adverbials such as *for* X and *in* X (where X stands for a period of time). Look at the following sentences.

(51) He knitted a sweater in ten days.

(52) ?He knitted sweaters in ten days.

Verb phrases of durative aspect cannot occur with the time adverbial *in* X, whereas verb phrases of nondurative aspect cannot occur with the time adverbial *for* X.

2.8. Summary

We have reviewed some studies on aspect. The following pairs of terms are introduced. They are:

(53) a. conclusive vs. nonconclusive verbs   (Jespersen, Sandmann)

     b. telic vs. atelic verbs   (Garey)

     c. bounded vs. nonbounded predications   (Allen)

     d. performance vs. activity verbs   (Kenny)

     e. accomplishment vs. activity verbs   (Vendler)

Jespersen and Sandmann regarded the conclusive and nonconclusive nature as a matter of verbs alone. But it is obviously incorrect. Vendler and Kenny use the term *verb*, but from their discussion we can see that they do not refer to the verb alone but also to their complements. Garey treats the telic or atelic nature as belonging not only to the verb but to its complements. But a verb can take many different kinds of complement and he fails to specify the kind of complement that imposes the telic nature.

Allen also recognizes that whether a construction is bounded or nonbounded depends upon the nature of a whole predication. Basically he is correct in saying that the bounded or nonbounded nature is a property of a whole predication. But he fails to point out

that the bounded nominals do not always make a predication telic (or bounded). A. similar criticism can be made to Verkuyl's approach. He was correct in saying that aspect is of composite nature which must take into consideration the natures of the verb and a noun phrase. But his aspectual schemata have loopholes. For example, unless the relation of a certain noun phrase to a verb is made specific, the specifiedness of a noun phrase cannot guarantee the nondurative aspect. Observe the following sentences.

(54) He walked the dog.

(55) He walked a mile.

(56) He walked along the beach.

(57) He walked to the beach.

The noun phrases following the verb in (54-55) are quantitatively specified. But the verb phrase in (54) is durative whereas it is nondurative in (55). This shows that the specifiedness of a noun phrase is not sufficient to make a verb phrase nondurative. Only a specified noun phrase of a certain relation to a verb makes the verb phrase nondurative. The noun phrase *the dog* in (54) has the OBJ underlying case relation to the verb, and the noun phrase *a mile* in (55) has the LOC(ative) case relation to the verb. In (56-57) the verbs are followed by prepositional phrases whose noun phrases are specified. But in one case (57) the verb phrase is nondurative, but in another case (56) it is durative. This shows that not only noun phrases but also prepositional phrases of certain relations to the verbs impose telic nature on verb phrases.
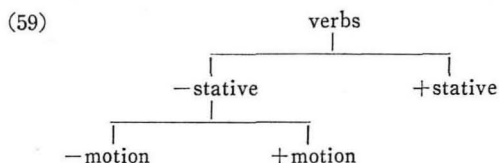
3. A New Proposal (an approximation)

In seclion 1 we observed that some data from Kusaiean, English and Korean show a need for a concept to distinguish verbs into two classes. When the two types of verbs are defined we can easily state certain cooccurrence restrictions and account for certain ambiguity. As we have seen in section 2, many definitions concerning the two kinds of verbs have been made. But most of them are notional and they barely meet the descriptive adequacy in that they cannot account for the unobserved data. In other words, their analyses lack predictability which is one of the most important aspect of linguistic theory or any other theory.

A new definition will be attempted in this section, to refine the definitions we have examined in section 2. The new definition will be made in the lexicon. Chomsky's lexicon consists of lexical items, redundancy rules and derivational rules. Telic and atelic concepts and certain cooccurrence restrictions will be made in terms of redundancy rules. Redundancy rules are those that predict certain features which are predictable on the basis of features already given. Given the feature of a noun [+human], it is predictable that the noun will also have the feature [+animate]. This can be represented in the following way:
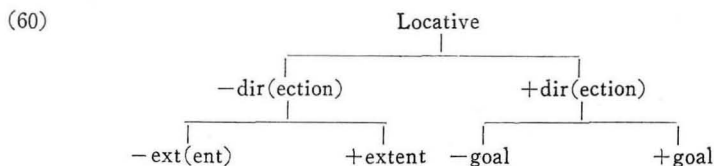
(58) [+human]→[+animate]

In formulating redundancy rules predicting telicity, the following three points are

taken into consideration: (1) the nature of verbs such as [±stative], [±motion]; (2) the nature of noun phrases in terms of boundedness; and (3) the relation of a noun phrase to a verb, which will be represented in terms of underlying case relations.

Using the two sets of features [±stative] and [±motion], the verbs are classified in the following way.

(59)
```
                        verbs
                          |
          |---------------------------------|
      −stative                          +stative
          |
   |-------------|
−motion       +motion
```

The verbs are classified into stative and nonstative verbs. Nonstative verbs are again subclassified into motion and nonmotion verbs. Motion verbs are those that denote changes in location of objects.

One of the most important natures of noun phrases, as far as aspect is concerned, is specifiedness of noun phrases in terms of quantity. Noun phrases will be grouped into two classes. When a noun phrase denotes or refers something which quantitatively limited (or bounded), it will be characterized as [+specified]. Otherwise, it will be characterized as [−specified].

The relation of a noun phrase to a verb in a sentence will be represented in terms of underlying case relations posited by Fillmore(1968: 24). They are: Agentive, Instrumental, Dative, Factive, Locative, Objective. However, the following changes have been found necessary: another underlying case relation Time is added, and some subclasses of the Locative and Time case relations are postulated.

The locative case relation is one that identifies the location or spatial orientations of the state or action identified by the verbs. The locative case has the following subtypes.

(60)
```
                          Locative
                             |
          |---------------------------------------|
      −dir(ection)                          +dir(ection)
          |                                      |
   |-------------|                      |----------------|
−ext(ent)    +extent                −goal          +goal
```

The locative case with the features [+dir, −goal] is one that denotes a starting point and the one with the features [+dir, +goal] is one that denotes an ending point. The locative case with the features [−dir, +ext] is one that denotes distance, space or area, and the one with the features[−dir, −ext] is one that denotes a point.The underlined actants in the following sentences are illustrative of the different subtypes of the locative case.

(61) John came *from France*.
                [−goal]
(62) John came *to Honolulu* yesterday.

[+goal]
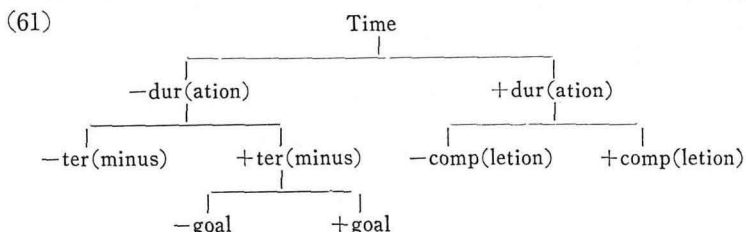(63) John runs *four miles* everyday.
            [+extent]
(64) John works *in Honolulu*.
              [−extent]

The time case relation is one that identifies the time or temporal orientation of the state or action identified by the verb. The time case relation is subclassified in the following way.

(61)

The time case relation with the features [+dur, +comp] denotes a duration of time and also implies a change of state, or an achievement of goal. On the other hand, the time case relation with the features [+dur, −comp] is one that denotes only a duration of time. The underlined actants below are illustrative of the two subtypes of the [+dur] time case relation.

(62) John read the book *in two hours*.
                    [+completion]
(63) John read the book *for two hours*.
                    [−completion]

The time case with the feature [−dur] denotes a point of time. A point of time can denote either the starting or ending point, or simply a point in time with no reference to the starting or ending point. The underlined actants below are illustrative of the subtypes of the [−dur] time case relation.

(64) John read the book *yesterday*.
                [−terminus]
(65) John read the novel *from one o'clock until three*.
            [−goal]   [+goal]

In what follows, a few redundancy rules will be presented. The rules are formulated using the following features: [±stative], [±motion], [±specified], and the case relations such as Agentive (AGT), Instrumental (INS), Objective (OBJ), Locative (LOC), Time (TIM), and others.

RR-1 : [+stative]→[−telic]

RR-1 states that stative verbs (including adjectives) are atelic. Stative verbs denote state, which does not have any set terminal point. In the following sentences statives are used and they cannot cooccur with durational time adverbials that denote completion.

(66) *I thought that he was right in two hours.

(67) *The flower was red in three minutes.

(68) *Ku mul- un twusikan man- e malk- ass- ta.

the water-SM 2 hr -in   clear-past-DS

'The water was clear in two hours.'

$$\text{RR-2}: \begin{bmatrix} +V \\ +\text{motion} \\ +[+\text{NM}/+\text{AC}, (+\text{OBJ}), +\text{specified}] \\ +[+\text{LOC}, +\text{goal}/+\text{extent}] \end{bmatrix} \rightarrow +[\text{telic}]$$

RR-2 states that motion verbs are telic when they are used with the locative actants with the feature [+goal], or [+extent]. The OBJ actant must be specified quantitatively, but it can appear either as subject (+NM) or object (+AC). The parentheses around the OBJ actant denote that the OBJ actant is optional. Consequently RR-2 is an abbreviation of two rules. The following sentences are illustrative of RR-2.

(69) John ran a mile.

[+extent]

(70) John ran to the post-office.

[+goal]

The verb *to run* in (69) is used with a locative actant with the feature [+extent], and in (70) it is used with a locative actant with the feature [+goal]. In each case the verb is telic. In (71-72) the verb *to run* is used with locative actants without the feature [+extent] or [+goal], and the verb is atelic.

(71) John ran along the bank of the river.

[−goal]

(72) John ran toward the post-office.

[−goal]

We can observe the same result with the transitive motion verbs. The verbs *to push* is used in the following sentences.

(73) a. John pushed the cart to the station.

[+goal]

b. John pushed the cart a mile.

[+extent]

(74) a. John pushed the cart along the bank of the river.

[−goal]

b. John pushed the cart toward the station.

[−goal]

The verb *to push* in (73) is used with the locative actant with the feature [+goal] and [+extent], and the verb is telic. But in (74) the verb is used with the locative actants that do not impose any terminal point and the verb is atelic.

In Korean, motion verbs can be classified into two classes. One denotes locomotion and another denotes manners or types of locomotion. Verbs such as *kata* 'to go' and *ota*

'to come' denote locomotion. Verbs such as *ttwita* 'to jump', *ketta* 'to walk' *nalta* 'to fly'
denote manners of locomotion. There are compound motion verbs which are made up of
verbs of locomotion followed by verbs denoting manners of motion such as *nal-a kata*
'to go flying'. These classees of motion verbs in Korean have the following cooccurrence
restriction: (1) a [+goal] locative actant cannot cooccur with the verbs denoting
manners of locomotion, as can be seen in (75); and a [−extent] locative, cannot cooccur
with verbs of locomotion.

    (75) *ku-nun hakkyo-e ttwi-ess-ta.
          he-TM school-to run-past-DS
          'He ran to the school.'

    (76) *Ku-nun *hakkyo-eyse* ka-ass-ta.
          he-TM school-from go-past-DS
          'He went *from* the school.'

The actant *hakkyo-eyse* can be interpreted as a [−extent] locative. when used with
verbs of manners of locomotion. But with verbs of locomotion it is interpreted as a
locative actant denoting a starting point.

The telicity of motion verbs in Korean, whether they denote locomotion or manner of
locomotion, depends upon the types of the locative actants, as in English. When motion
verbs are used with the locative actants with the feature [+extent] or [+goal], telicity
is imposed upon them. This can be tested with duration time adverbials, as in the
following. Telic motion verbs in the past tense form cannot cooccur with the duration
time adverbial *X tongan*.

    (77) *ku- nun hansikan tongan sipli- lul kel- ess- ta.
          he- TM one-hr-during 10*li*- OM walk- past-DS
          'He walked ten *li*s for one hour.'

    (78) *ku- nun hansikan tongan kakkyo-ey ka-ass-ta.
          he-TM one-hr-during school-to go-past-DS
          'He went to school for one hour.'

$$\text{RR-3}: \begin{bmatrix} +V \\ -\text{motion} \\ + \ +AC, \ +INS \end{bmatrix} \rightarrow [-\text{telic}]$$

RR-3 states that verbs with the INS actant which appears in the accusative form
(+AC) are atelic. It does not matter whether the INS actant is quantitatively specified
or not. Look at the following sentences.

    (79) John played *the piano*.
    (80) John used *the knife*.
    (81) John played *football*.

The italicized actants in (79-81) stand in the INS case relation to the verbs, and
the verbs are atelic.

We can observe the same phenomena in Korean. In (82-83) the italicized actants

stand in the INS case relation and the verbs are atelic.

(82) Con-un ku *kitha*-lul khi-ess-ta.

John-TM the guitar-OM play-past-DS

'John played the guitar.'

(83) Con-un nay *khal*-ul ssu-ess-ta.

John-TM my knife-OM use-past-DS

'John used my knife.'

When we add time adverbials denoting duration as well as completion to the above sentences, they denote intervals between two events, but not a period of time required for a completion of a process. Observe the following.

(84) Con-un hansikan man-ey ku kitha-lul khi-ess-ta.

John- TM one hr -in the guitar-OM play-past-DS

'John played the guitar one hour afterwards.'

(85) Con-un hansikan man-ey nay khal-ul ssu-ess-ta.

John-TM one hour -in my knife-OM use-past-DS

'John used my knife one hour afterwards.'

PR-4 :
$$\begin{bmatrix} +V \\ -\text{motion} \\ +[+NM, +AGT/+INS] \\ +[+AC, +OBJ/+FAC, \alpha\text{specified}] \end{bmatrix} \rightarrow [\alpha\text{telic}]$$

PR-4 states that a transitive verb can be telic or atelic depending upon the specifiedness of the underlying Factive or Objective actant. When the actant is [+specified], the verb is telic. Otherwise, it is atelic. Observe the following sentences.

(86) He knit *a sweater* in two hours.

(87) *He knit *sweaters* in two hours.

The underlined actants in (86-87) stand in the Factive case relation to the verb *to knit*. The Factive actant in (86) is specified and the whole construction is telic. On the other hand, the Factive actant in (87) is unspecified and the whole construction is atelic. We can observe the same phenomena with the Objective case relation, as can be seen below.

(88) He peeled *the apple* in one minute.

(89) *He peeled apples in one minutes.

To summarize, a few redundancy rules predicting telicity of verbs have been formulated. But these rules are not exhaustive. What I have tried to show is that in determining telic and atelic natures of verbs, we must take into consideration the natures of verbs as well as that of noun phrases and the relation of a certain noun phrase to the verb with which it is used in a sentence.

REFERENCES

Allen, Robert L. 1966. The Verb System of Present-Day American English. The Hague: Mouton.

Chomsky, Noam. 1965. Aspects of the Theory of Syntax. Mass.: The M.I.T. Press.

_____. 1972. Studies on Semantics in Generative Grammar. The Hague: Mouton.

Fillmore, Charles J. 1968. The case for case. In Bach and Harms, eds. Universals in Linguistic Theory, 1-88.

Forsyth, James. 1970. A Grammar of Aspect: Usage and Meaning in Russian Verbs. London: Cambridge University Press.

Garey, Howard B. 1955. Verbal aspect in French. Language 33.91-110.

Jespersen, Otto. 1924. The Philosophy of Grammar. New York: W.W. Norton and Co.

_____. 1933. Essentials of English Grammar. London: George Allen and Unwin Ltd.

Kenny, Anthony. 1963. Action, Emotion and Will. London: Routledge and Kegan Paul.

Lee, Kee-dong. 1975. A Kusaiean Reference Grammar. Honolulu: University Press of Hawaii.

Sandmann, Manfred. 1954. Subject and Predicate: A Contribution to the Theory of Syntax. Edinburgh: The University Press.

Vendler, Zeno. 1967. Linguistics in Philosophy. New York: Cornell University Press.

Verkuyl, H. J. 1972. On the Compositional Nature of the Aspects. Dordrecht: D. Reidell.