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Imperfective Aspect and Event Participants in English, Chinese, Korean and Japanese
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# Imperfective Aspect and Event Participants in English, Chinese, Korean and Japanese[1]

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## 1.    Introduction

In this paper, we will investigate the effect of event participants in the imperfective aspect systems in English, Chinese, Korean and Japanese. Specifically, we will focus on how different imperfective interpretations denoted by six aspect markers in these languages can be accounted for in terms of the nature of the participants in the event. There are three types of imperfective meanings that can arise from these markers. They are the preliminary, internal stage progressive and resultant state readings. We will show that the availability of a particular imperfective reading is, at least, partially correlated with the nature of the event participants.

The structure of the paper is as follows: First, basic facts about the imperfective systems in the four languages will be introduced. This is followed by a brief discussion of some previous studies on the imperfective systems of these languages. We will show that these studies can only provide a partial picture of what's going on. The important question of why variations exist across languages is not addressed. The present paper is our attempt to address this issue. We propose that the imperfective readings are triggered by the agent / theme-orientedness of these markers. Based on our proposal, we will analyze the imperfective systems of four languages in Sections 3 and 4. Finally, we will conclude our discussion by raising some theoretical implications of this analysis.

## 2.    The Imperfective Systems of English, Chinese, Japanese and Korean – the basic facts

Before we describe the basic facts about the imperfective systems of four languages, it is necessary for us to provide our assumptions on the concept of imperfectivity. According to Smith (1991), as opposing to perfective viewpoints, imperfective aspects are the viewpoints that focus on the stages excluding the initial and final endpoints of the event. Under this definition, three imperfective viewpoints can arise. They are the imperfectives with (a) preliminary stage focus

(preliminary), with (b) internal stage focus (progressive) and with (c) the resultant state focus (resultative). They are illustrated in the temporal schema (1) below:

(1) **Three types of imperfective viewpoint (I: Initial point; F: Final endpoint)**

/ / / / / / / / / / / /  **I**  / / / / / / / / / /  **F**  / / / / / / / / /
(a) Preliminary    (b) On-going    (c) Resultative
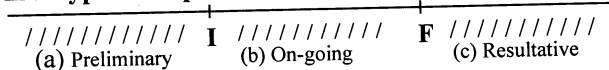
In the following section, we will illustrate these three types of imperfective viewpoints denoted by six aspect morphemes. We will start with the more familiar case of English -*ing* form.
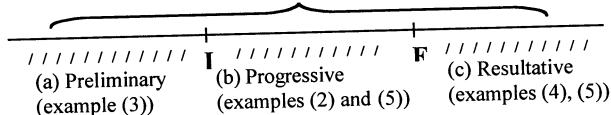
## 2.1. English - -*ing*

The main English imperfective is denoted by the morpheme -*ing* (Smith 1991), which is usually called the progressive form. With the -*ing* form, all three possible imperfective readings, that is, preliminary, progressive and resultative, can arise. (2) to (5) below illustrate these three possible readings.

| | | |
|---|---|---|
| (2) | Peter was reading a book. | **(internal stage progressive)** |
| (3) | Peter was reaching the top of the hill. | **(preliminary reading)** |
| (4) | Peter was sitting on the chair. | **(resultative)** |
| (5) | Peter was wearing an overcoat. | **(ambiguous: progressive / resultative)** |

Depending on the verb type[2], -*ing* attached to a verb may give rise to certain imperfective interpretation. As is clear from the example, (2) denotes progressive reading. (3) means "Peter was going toward the top of the hill." He was almost at the top but was not yet there. This is the preliminary reading of -*ing*. In (4) and (5), -*ing* denotes resultative meaning. (5) is ambiguous between progressive and resultative. The temporal schema of the English imperfective -*ing* form is shown in (6) below:

(6) **Possible imperfective interpretations of English -*ing***

-*ing*

/ / / / / / / / / / / /  **I**  / / / / / / / / / /  **F**  / / / / / / / / /
(a) Preliminary    (b) Progressive    (c) Resultative
(example (3))    (examples (2) and (5))    (examples (4), (5))

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[2] The availability of a particular imperfective reading depends largely on the verb type (e.g. achievement verbs favor preliminary reading and accomplishment verbs favor internal stage progressive reading with -*ing*). The present paper mainly concentrates on the effect of event participants on the imperfective interpretation. We will not discuss this issue in full length. For further details, please refer to Du (2000).

## 2.2.  Chinese - *zai* and *zhe*

There are two imperfective markers in Mandarin Chinese, namely, *zai* and *zhe*. In the following sections, we will discuss the progressive reading denoted by *zai* and the resultative one denoted by *zhe*.

### 2.2.1.  Internal stage progressive *zai*

*Zai* is a typical progressive marker which focuses on the internal stage of an event. Consider the following example for illustration:

(7)   ta       *zai*   xie    xin
      3sg.    PROG  write   letter
      'He is writing a letter.'                **(internal stage progressive)**

Unlike the English imperfective *-ing*, neither preliminary nor resultant state focus is possible with *zai*. Consider the following examples:

(8)   *ta      *zai*   dao    le
      3sg.    PROG  reach   PFV        **(preliminary reading <u>not</u>**
      * 'He is arriving.'                       **possible cf. Eng example (3))**
(9)   *ta      *zai*   zuo    zai     yi      shang
      3sg.    PROG  sit     at      chair   on    **(resultative <u>not</u> possible cf.**
      * 'He is sitting on the chair.'           **English example (4))**

(8) and (9) are ill-formed. Resultative and preliminary readings are not available with *zai* with which only the internal stage focus is possible. Consider the following example for further illustration:

(10)  ta       *zai*   chuan  da      yi
      3sg.    PROG  wear    big     coat
      * 'He is wearing an overcoat.'
      'He is putting on an overcoat.'          **(<u>only</u> progressive reading)**

The only available reading in (10) is a progressive one. This is different from the corresponding English example in (5) in which the sentence is ambiguous between progressive and resultative.

### 2.2.2.  Resultative *zhe*

The Chinese imperfective aspect marker *zhe* generally denotes a resultant state of the event. This is shown in (11) and (12) below:

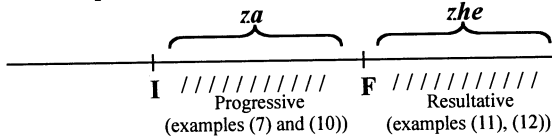(11)  ta       zuo    *zhe*   zai     zhuo    shang
      3sg.    sit     **RES**   at      table   on
      'He is sitting on the table.'            **(resultative reading)**
(12)  ta       chuan  *zhe*   da      yi
      3sg.    wear    **RES**   big     coat    **(resultative reading)**
      'He is wearing the overcoat. (The coat is on his body).'

Comparing using the progressive marker *zai* in (9) and (10) and the marker *zhe* in (11) and (12), we can note that *zhe* denotes resultative meaning. Neither progressive[3] nor preliminary reading is available with *zhe*. Consider the following examples for illustration:

(15)  *ta      da      *zhe*      qiu
       3sg.    hit     RES      ball
       * 'He is playing ball.'            **(internal stage focus <u>not</u> available)**

(16)  *ta      dao     *zhe*      nar
       3sg.    reach   RES      there
       * 'He is arriving there.'          **(preliminary reading <u>not</u> available)**

The following temporal schema summarizes the behavior of the two Chinese imperfective markers *zai* and *zhe*.

(17)    Possible interpretations of the Chinese imperfective *zai* and *zhe*



         I  / / / / / / / / / /    F  / / / / / / / / / /
                Progressive                Resultative
            (examples (7) and (10))    (examples (11), (12))

## 2.3.    Korean - *ko-iss* and *e-iss*
Korean has two temporally unbounded imperfective markers *ko-iss* and *e-iss*[4]. *Ko-iss* is a more general imperfective which can focus on three temporal portions of the event. *E-iss*, on the other hand, is a resultative aspect marker.

### 2.3.1.  General imperfective *ko-iss*
With *ko-iss*, three possible imperfective interpretations (preliminary, progressive and resultative) can arise. These meanings are illustrated in the following examples:

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[3] In fact, under certain marked environment, the marker *zhe,* combined with an eventive verb, can denote a progressive meaning. For example,

(13)  ta     pao     *zhe*          *ne*
      3sg.   run     RES/PROG       SFP
      'He is actually running.'

(14)  ta     pai     *zhe*          shou    chang    ge
      3sg.   clap    RES/PROG       hand    sing     song
      'He was clapping hands while singing.'

We suspect this particular progressive reading triggered by *zhe* is due to the stative nature of the marker. Since this progressive reading only occurs under very restricted environments (namely, when the sentence is ended by the particle *ne* and when it is in some kind of subordinate construction), we will leave the issue to future research studies.

[4] Korean has several temporally bounded imperfective markers such as *nun*.

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(18)  John-i          cip-ul        cis-***ko-iss***-ta
      John-NOM     house-ACC    build-IMPF-Decl
      'John is building a house.'                    **(progressive)**
(19)  kicha-ka        tochakha-***ko-iss***-ess-ta
      train-Nom      arrive-IMPF-Ant-Decl
      'A train was arriving.'                  **(preliminary reading)**
(20)  Mary-ka        cham  yeyppun      os-ul       ip-***ko-iss***-ta
      Mary-NOM    very    pretty        clothes-ACC  put-on-IMPF-Decl
      'Mary is wearing very pretty clothes.'  **(progressive /  resultative)**

As shown in the above examples, we can note that *ko-iss* behaves very similarly with the English *–ing* which can denote three imperfective readings. Special attention should be paid to the resultative reading of this marker. This kind of reading can only arise with a particular verb type, namely, the resultative accomplishment (Ahn 1995). This verb class includes verbs of posture and location. The resultative reading that is related to the English *–ing* also occurs with a similar set of verbs.

## 2.3.2.  Resultative *e-iss*

The Korean *e-iss* focuses on the resultant state of intransitive, telic events. Preliminary and internal stage progressive readings are not possible with this marker. The behavior of *e-iss* is illustrated in (21) and (22) below.

(21)  kicha-ka          tochakha-***e-iss***-ta
      train-NOM      arrive-RES-Decl
      'The train is in the state of having arrived.'      **(resultative)**
(22)  * John-i          cip-ul        ci(s)-***e-iss***-ta
      John-NOM     house-ACC    build-RES-Decl
      * 'John is building a house / has built a house.'

The behavior of *e-iss* is in fact very similar to that of the Chinese *zhe* except that *zhe* can also occur with certain transitive verbs to denote resultative meaning whereas *e-iss* cannot.

    The possible interpretations of Korean *ko-iss* and *e-iss* are shown in the temporal schema (23) below.

(23) Possible interpretations of Korean imperfective *ko-iss* and *e-iss*
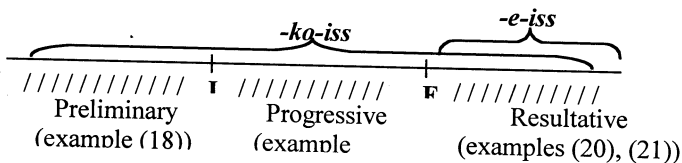
## 2.4. Japanese - *te-iru*

The Japanese imperfective marker *te-iru* can focus on the internal stage or the resultant state. Preliminary reading is not available. Consider the following examples for illustration.

(24) Ani-wa       kuroi  yoohuko-o    ki-***te-iru***
     brother-TOP  black  suit-ACC     put-on-IMPF **(ambiguous:**
     'My brother is wearing a black suit.'        **progressive / resultative)**

(25) Taroo  wa    shin-***de-iru***
     Taroo  TOP   die-IMPF                    **(resultative, preliminary**
     'Taroo is dead.'                         **reading <u>not</u> available)**

(26) densen       ga            kire***te-iru***
     power-line   NOM           $cut_{intr}$-IMPF
     'The power line is cut.'                 **(resultative)**

(27) Taroo  wa    densen o      kit***te-iru***
     Taroo  TOP   power-line-ACC cut-IMPF
     'Taroo is cutting the power line.'       **(progressive)**

In example (24), the sentence can denote either progressive or resultative meaning. (25) illustrates that, with *te-iru*, the resultative interpretation is available with the achievement verb. Sometimes, transitivity plays a role in the imperfective interpretation of *te-iru*. (26) and (27) show that, with *te-iru*, the intransitive version of the verb *kireru* 'to cut' in (26) can only allow for resultative reading whereas the transitive version of the verb *kiru* 'to cut' most naturally allows for progressive interpretation[5]. The temporal schema of the Japanese imperfective *te-iru* is given in (28).

(28)    Possible interpretations of Japanese imperfective *te-iru*



I    / / / / / / / / /    F / / / / / / / / /
         Progressive          Resultative
(examples (26) and (29)) (examples (27), (28))
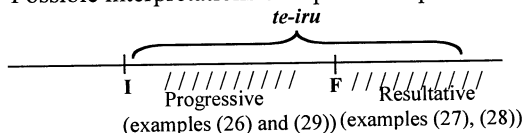
## 2.4. Summary

The imperfective viewpoints of six morphemes in the four languages are summarized in the following temporal schema.

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[5] Many of the Japanese verbs have transitive and intransitive counterparts. For example, the verb for 'to cut' has two forms: kireru 'to $cut_{intr}$' (in example (26)) and *kiru* (in example (27)) 'to $cut_{tr}$' which are intransitive and transitive respectively.

(29)     Summary of imperfective viewpoints of English,
         Chinese, Korean and Japanese on a temporal schema
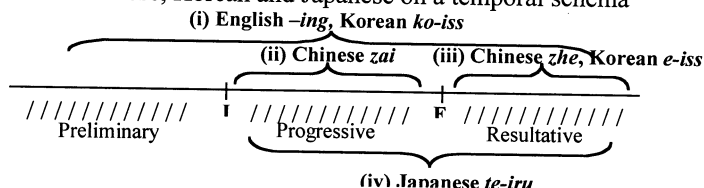


Given a particular event: (i) English *–ing* and Korean *–ko-iss* can focus on one of the three imperfective viewpoints; (ii) Chinese *zai* can only focus on the internal stage to denote progressive reading; (iii) Korean *e-iss* and Chinese *zhe* can focus on the resultant state to denote resultative meaning; (iv) Japanese *te-iru* can focus on either the internal stage or the resultant state.

Merely studying the imperfective systems of the four languages from the above temporal schema is not enough. There are some more intricate co-occurring restrictions and properties that are more note-worthy. The following table summarizes, in more details, the imperfective systems of four languages under discussion.

(30)     Summary table of the possible imperfective interpretations of six aspect markers in four languages

| | | Preliminary | Progressive | Resultative |
|---|---|---|---|---|
| **English *–ing*** | | √ (with achievements) | √ | √ (with verbs of location and posture (e.g. *to sit*)) |
| **Chinese** | *zai* | × | √ | × |
| | *zhe* | × | × | √ (mostly with verbs of posture and location and some psyche verbs such as *ai* 'love') |
| **Korean** | *ko-iss* | √ (with achievements) | √ | √ (restrictions same as English) |
| | *e-iss* | × | × | √ (only with intransitive verbs) |
| **Japanese *te-iru*** | | × | √ (commonly with transitives) | √ (commonly with intransitives) |

A very important preliminary conclusion that can be drawn from the above discussions is that despite the common imperfective quality of these markers, each of them exhibits its own set of imperfective reading(s). They all denote

imperfective viewpoints but the foci of their viewpoints vary from marker to marker and from language to language.

Further questions that will be addressed in this paper are: Why is there a variation among languages? Are there any other correlations / generalizations that can be drawn other than the temporal (or aspectual) one? Are there any more fundamental differences underlying these variations.

## 3.     Previous Studies

Before we propose our solution, we will briefly discuss some of the previous studies that attempt to address some of the observations that we made above.

There are many studies that investigate the aspectual systems of different languages. For example, Dahl (1985) studies tense and aspectual systems of more than 60 languages. He extensively classifies aspects into different categories. His study provides very useful information about the types of aspectual categories that can be present in languages. His work, however, does not clearly provide how and why languages vary in particular ways.

Smith's (1991) study, on which the present study heavily based,  on the aspectual systems is one of the most important studies which addresses the cross-linguistic issue of the aspectual systems. She proposes that aspectual viewpoint is a "parameter" in the Universal Grammar and languages vary with respect to how a particular viewpoint is interpreted. Following Smith's work, Ahn (1995) and Shirai (1999) work on the imperfective systems of Korean and Japanese and they make a similar claim that languages do vary with respect to which part of the temporal framework a particular imperfective marker focuses. For example, Shirai claims that Korean *ko-iss* focuses on the preliminary stage of an event while Japanese *te-iru* focuses on the resultant state, Ahn claims *e-iss* is compatible only with intransitive verbs while *ko-iss* is compatible with transitive. These seem to be adequate generalizations. However, we may still want to know how and why the foci of these imperfective markers vary. What other generalizations about the language one can make with such kind of cross-linguistic variation? From our discussions of the imperfective systems so far, we may note that the concept of transitivity may play a role in the imperfective viewpoint interpretation. Smith's Two-component theory on aspect does not take concepts such as transitivity into account. In the remaining portion of the paper, we will attempt to give a partial answer to the questions we raised here.

In the next section, we will begin with our proposal which attempts to look into the imperfective phenomenon from a 'non-temporal' perspective: the event participants. We will argue that the six imperfective morphemes have different degrees of agent- / theme- orientedness which play a crucial role in the aspectual interpretation of a situation.

## 4. .    Our Proposal – Event Participants and Agent- / Theme-orientedness

Let us reiterate our present task: we would like to account for the cross-linguistic variations of the imperfective systems in terms of the nature of the events and the involving event participants. We will start from what we have so far: the temporal schema which illustrates three imperfective viewpoints. From the temporal schema, we can imagine a possible interaction among event participants at

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different stages of the event. For a typical event which involves participants such as an agent and/or a theme[6], some event participant may become more prominent than the other at a particular stage. Consider the following figure:

(31)    The possible focused participants at different stages of the event
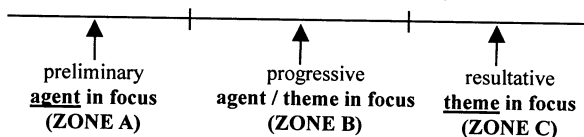


As shown in the above figure (32), the event can be divided into three zones: Zones A, B and C. In Zone A in which the preliminary aspectual reading is possible, the agent is the most prominent participant in the situation (in focus). This is intuitively sound especially for achievement verbs in which one entity imposes some action such that a change of state of the other entity occurs. Before the change of state occurs, the agent is the most dynamic and thus prominent.

At the intermediate stage, that is Zone B, the agent has already started to impose some effect with respect to the event and the theme is undergoing a corresponding change due to the action. At this stage, both the agent and the theme can be in focus because both participants are in a 'changing stage'.

At the stage after the final endpoint of the event, that is, Zone C in the given figure, the event has come to an end. The theme has finished undergoing the corresponding change. Naturally, the agent would be out of the picture at this point. The theme, in which the resultant state is held, is thus in focus.

This is how the participants are involved in the event on the one side. The imperfective markers, on the other side, are also affected by the event participants. We propose that the imperfective aspect markers in different languages vary with respect to their affinity to particular event participants. We call it the agent- / theme-orientedness of the markers. A particular imperfective marker may be an agent-oriented one and allows for a viewpoint with which the agent is in focus. Due to the limited length of this paper, we will very briefly analyze six morphemes below.

## 5.    The analysis – imperfective morphemes with different degrees of agent- / theme-orientedness

According to our proposal, imperfective markers have different degrees of agent- / theme-orientedness. In this section, we will discuss each imperfective markers in terms of this criterion. We start from the simplest case. Korean *e-iss* and Chinese *zhe*, which allows for only resultative reading, is <u>a theme-only-oriented</u> marker. The marker enables <u>only</u> the affected entity, that is, the theme, to be visible in a

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[6] In this paper, the concepts of agent and patient are loosely defined. Our present study is on event participants is based on a  most typical eventive situation in which an entity which we call 'the agent' is imposing some action or change to another entity which we call 'the theme'. Due to the limited length of the paper and in order to avoid unnecessary controversy, we will leave a more precise definition to future studies.

given situation. The resultant state after the final endpoint, Zone C, in which the theme would be in focus, is the only possible interpretation. The theme-orientedness of the markers is supported by the fact that volitional or intentional agent is generally not compatible. Consider the following examples in Chinese for illustration.

(32)  *Peter gua  *zhe*  yi  zhang hua  zai  qiang shang
      Peter hang  RES  one  CLS   picture at  wall  on
      'Peter is hanging / has hanged a picture on the wall.'
(33)  Nei   zhang hua  gua  *zhe*  zai  qiang shang
      that  CLS   picture hang  IMPF  at   wall  on
      'That picture is hanging on the wall.'
(34)  Ta    zuo  *zhe*  zai  zhuo  shang
      3sg.  sit  RES   at   desk  on
      'He is sitting on the desk.'

(32) is ill-formed because, according to our proposal, *zhe* is an theme-only-oriented marker and it is incompatible with an agent. When an agent is absent, the sentence is perfect as shown in (33). There may be one possible exception. (34) is perfect despite the fact that the agent (the person who is in the sitting position) is visible. In fact, this exception is well explained under our framework. In such kind of situation as *zuo* 'to sit' and *chuan* 'to wear', the agent is actually identical to the theme, the affected entity. Thus, even though the agent is visible, the situation can well be interpreted as having the theme in focus.

For the Korean case, *e-iss* is incompatible with transitive predicates at all. It is reasonable to assume that in a transitive construction. An agent is thus generally present. Then, the incompatibility between *e-iss* and transitive verbs can also be accounted for in terms of the <u>theme-only-orientedness</u> of the marker.

Next, English *–ing* and Korean *ko-iss* which allow for all three imperfective readings, are <u>agent-oriented</u> markers. They have affinity to the agent in an event. With such markers, preliminary stage and internal stage progressive are the possible imperfective readings because the agent is in focus in these two portions of the temporal schema (Zones A and B in (31)). The so-called resultative reading that arises from these markers (cf. English examples (4), (5), Korean example (20)) is due to the fact that the agent in the given event (e.g. the event of 'sitting down') is also the affected entity (the theme). Jacobsen (1992) singles out this set of verbs and calls them 'reflexive verbs'.

Japanese *te-iru*, on the other hand, is a <u>theme-oriented</u> marker. It can thus focus on either the internal stage or resultant state. It is because in these two temporal zones (Zones B and C in (31)), the theme is visible. Recall that we just claimed Chinese *zhe* and Korean *e-iss* are <u>theme-only-oriented</u> markers. A question is raised: what is the difference between *te-iru* and these two markers? The main difference is: where *zhe* and *e-iss* have affinity to <u>only</u> the theme in the situation and thus triggers resultative interpretation, *te-iru* has affinity to the theme regardless the availability of an agent in the given sentence. Therefore, an agent can be present with *te-iru* and Zone B is also a possible portion where *te-iru*

can have an imperfective interpretation. Compare the following well formed Japanese example with the corresponding Chinese example (32) above:

(35)    piitaa-ga       kabe-ni       e-o           kaket-te-i-ru
        peter-NOM     wall-LOC      pic-ACC       hang$_{tr}$ IMPF
        'Peter is hanging the picture on the wall.'

The above example shows that *te-iru* is compatible with agent (i.e. 'Peter' in (35)). It is theme-oriented marker which does not exclude an agent in the situation.

Finally, Chinese *zai*, which allows only for progressive interpretation, is an agent-and-theme-oriented marker. It makes both the agent and the theme visible in the event, specifically.

The agent- / theme-orientedness of six imperfective markers are summarized in (36) below:

(36) Summary Table of the degrees of agent- / theme-orientedness of six markers

| | | Preliminary Stage<br>Agent in focus<br>←————————— I | Internal stage<br>Agent/theme in focus<br>—————————————————— F | Resultant Stage<br>Theme in focus<br>————————→ |
|---|---|---|---|---|
| (1) | | Agent-oriented imperfective:<br>English *–ing* and Korean *ko-iss* | | |
| (2) | | | Theme-oriented imperfective: Japanese *te-iru* | |
| (3) | | | Agent-and-theme-oriented<br>imperfective: Chinese *zai* | |
| (4) | | | | Theme-only-oriented<br>imperfective: Chinese<br>*zhe* and Korean *e-iss* |

## 6.    Conclusion and Remaining Issues

In this paper, we proposed that at different stages of the event, certain event participants (agent and/or patient) are more prominent than the rest. Imperfective markers, in a similar way, have a close relationship with event participants. We proposed that the different degrees of agent- / theme-orientedness of the markers constitute the cross-linguistic variations in the imperfective interpretations.

One important question we would like to address is: why do imperfectives, but not perfectives, have such a close relationship with the event participants? If our proposal is adequate, our answer would require us to go back to the basic concept of imperfectivity: imperfective viewpoints, unlike perfective, present part of the situation, with no information about its endpoints. Event endpoints are

invisible. The viewpoint focuses on the portion in between, before or after the endpoints. With both endpoints being invisible, what would be 'visible' in such viewpoint aspect? It seems that what remains visible are the event participants. We can imagine there a natural tendency for the imperfective viewpoint to provide some information on the only visible elements in the event: the participants. This may explain why the event participants play such a crucial role in the imperfective interpretation of the corresponding markers.

One final point we would like to address is that our present proposal focuses mainly on the effect of event participants on the imperfective interpretation. We definitely do not want to say that the event participants are the sole players. What we have shown is just the tip of the iceberg. We have so far simplified the phenomenon to a great extent in order to present this simple picture. The real phenomenon is far more complex. There is much more to explore with respect to the cross-linguistic issue of the imperfective systems. We will leave these many issues to future studies.

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