Mood and Modality in English and a Japanese Picture

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0. Introduction

In most theories of grammar, mood is a formal grammatical category which is realized as verbal inflections in many European languages. It is typically observed in Latin and Classical Greek and their descendent languages. Jespersen (1924), among others, essentially following the tradition of Latin grammar, distinguishes between three types of mood in English: indicative, subjunctive and imperative.[1] Since the word 'mood' originates in 'mind' of Old English, we can naturally guess that mood is a category which expresses speaker-writer's way, manner or fashion of saying, writing, thinking, believing, or feeling. It is also said that this category is specialized for expressing speaker-writer's subjective attitude toward what is said in a text. Closely connected with mood is the semantic notion of modality, which covers various subjective meanings conveyed by various categories of words or phrases. Modality as well as mood plays a critically important role in this study.

Assuming this much, we carries out a linguistic analysis of a phoenix picture painted on the ceiling of a temple in a rural city by a famous Japanese painter, Hokusai Katsushika (葛飾北斎), who actively lived in the late Edo period. It is shown that we can forge a new interpretation of this picture by watching it from a perspective that involves the linguistic notions of mood, modality and possible world. We claim that this is because pictures constitute a type of texts which have basically the same functions as linguistic texts.[2]

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1   This does not mean that non-European languages do not have the category of mood. The Japanese language does have this category, but it is realized in a way different from the inflectional alternation on verbs.
2   Following O'Toole (1994), we assume that not only pictures but also sculptures and buildings form texts. As opposed with linguistic texts, these texts are called non-linguistic texts here.

1. Hokusai's Phoenix Picture on the Ceiling（北斎天井鳳凰図）

I have visited a beautiful small city several times that is located in a mountainous area of Nagano Prefecture（長野県）in Central Japan. This area is called Northern Shinano（北信濃）and the name of the city is Obuse（小布施）. During my first visit in the late autumn of 2001, I by chance went into a small old temple called Ganshoin（岩松院）, and found an enormous magnificent picture of a phoenix, a mythological sacred bird in Chinese-Japanese lore. I was stunned to learn that this picture was painted by Hokusai, who was invited to this city four times during the late Edo period by a wealthy merchant, Kozan Takai（鴻山高井（文化３年～明治16年））, who also was an excellent painter as well as calligrapher. Anyway the picture is given in the following:

The historical details of the temple and the phoenix picture are described in a booklet issued by the temple, but let me summarize here only some characteristics that attract tourists, outsiders or laymen rather than experts or researchers.

(1) Three Attractive Assets of Ganshoin（岩松院）
① It was built to ease the soul of Masanori Fukushima（福島正則の菩提寺）.
② It is close to the hometown of a famous haiku poet, Issa Kobayshi（小林一茶）and has a tablet with a well-known haiku inscribed on it, a frog's battle（蛙合戦）.

③ It owns the phoenix picture.

(2) Noticeable Characteristics of the Phoenix Picture
① a sharp right eye
② The glance from the sharp right eye appears to go out in all directions (八方睨み).
③ bright vivid colors
④ as large as the size of 21 tatami's
⑤ Phoenix is an imaginary animal.
⑥ painted on the ceiling[3]
⑦ nostalgic mountainous surroundings of the temple

Obuse is a nostalgic city that boasts delicious apples, buckwheat noodles and glutinous rice steamed with chestnuts (栗おこわ). These products are very attractive but they are not enough to attract a large number of tourists to the small rural city. Tourists visit it to admire its cultural properties, especially the phoenix picture.[4]

In subsequent sections, we investigate why the phoenix picture attracts so many people. Although this picture has many interesting features we should discuss, we first focus on its sharp right eye which seems to denote strong modality. Since modality is an interpersonal function in the sense of Halliday's systemic functional theory, our analysis will give a natural account for the fact that a great number of tourists are fascinated by the picture. Then we will turn to other characteristics of the picture that also express modality. The theoretical background of the present study is systemic functional grammar originally proposed by Halliday (1967a,b,c, 1994) and further developed by studies such as Berry (1977) and But et al. (2001). Furthermore, in analyzing the phoenix picture, this study is heavily dependent on the insightful study by O'Toole (1994) that expands Halliday's theory to analyze pictures, sculptures or buildings.

2. Mood, Modality and Grammaticalization

As in Jespersen (1924), mood has been used as a grammatical term to refer to verbal forms such as indicative, subjunctive and imperative.

(3) a. Indicative mood: *You did your work*.
    b. Imperative mood: *Do your work*.
    c. Subjunctive mood: *If he were to work here, he would have to learn to be punctual*.

It is also said that mood is a category that reflects the speaker's view concerning

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3   It is unknown what technique was used to draw the phoenix on the ceiling and we cannot see the seams between the ceiling panels.
4   Obuse is really a cultural city. There are many tiny but exciting museums, coffee shops and restaurants that feature master pieces of fine arts created by contemporary artists who were born here.

reality, likelihood, or urgency of an event. A noticeable characteristic of mood is that it is carried by a functional category that is most likely to be realized as an inflectional affix on verbs. Verbal morphology, especially tense affix, is a phonetic realization of functional category, and it might be interesting to note that an important meaning like the speaker's view is expressed by verbal morphology. Needless to say, the speaker's view is closely connected with modality. In subsequent sections, we will show that there is a robust connection between tense and mood, and actually tense is an essential part of mood.

It would be in order to note that if the phoenix picture has any bodily organ which expresses mood, it must be its sharp eye because we may say that all of the bodily organs eyes are the organs that have the strongest power to convey modality. In other words, eyes are organs specialized for mood, and we may use a metaphor in which the tense of a sentence is compared to the sharp eye of the phoenix picture. Metaphorically speaking, the sharp eyes are functionally specialized for mood.[5]

As discussed in Palmer (1986), modality, by contrast, is a semantic or notional category which is expressed in various ways, including verbal morphology. The table in (4) is a summary of English modal auxiliaries and semi-modal auxiliaries that have been frequently discussed in connection with modality.

(4) Modal Auxiliaries and Semi-modal Auxiliaries

Modality	modal auxiliaries	semi-modal auxiliaries
prediction	will/would/shall	be going to
obligation	shall/should/ought to	
necessity	must	have to/have got to
ability	can/could	be able to
imminent activity		be about to
scheduled activity	be to	
possibility	may/might	
achievement		get to
inevitability		be bound to

As discussed in Hopper and Traugott (2003), among others, modal auxiliaries in present-day English are grammaticalized forms of the preterit verbs in Old English. Given the definition of subjectification in (5), the development of modal auxiliaries from the preterit verbs will be one of the clearest cases of subjectification.

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5   Here we might use the term 'grammaticalized' instead of 'specialized.' The idea is that just as tense is a grammaticalized linguistic category for modality as discussed below, the sharp eye is also a grammaticalized organ for modality in pictures. For the notion of grammaticalization, the reader is referred to Meillet (1912).

(5) Subjectification

It is a gradient phenomenon, whereby forms and constructions that at first express primarily concrete, lexical objective meanings come through repeated use in local syntactic contexts to serve increasingly abstract, pragmatic, interpersonal and speaker-based functions. (Traugott 1995: 32)

Clearly subjectification is a process whereby constituents with objective meanings gradually obtain modality which is a typically subjective semantic category, and it is said that this process is driving many other cases of grammaticalization, including that of modal auxiliaries.

In addition to these, a class of sentential adverbs, called attitudinal disjuncts by Greenbaum (1969), is also a major means to express modality in English and probably in other languages.

(6) Attitudinal disjunct
    a. Clearly, he is behaving badly.
    b. Interestingly, he is behaving badly.
① apparently, certainly, clearly, conceivably, decidedly, definitely, evidently, outwardly, possibly, presumably, seemingly, superficially, surely, undoubtedly, etc.
② annoyingly, astonishingly, foolishly, fortunately, interestingly, luckily, naturally, oddly, regrettably, significantly, surprisingly, unbelievably, unhappily, unluckily, wisely, etc.

Attitudinal disjuncts are called so because they express speaker-writer's attitude toward the proposition conveyed by a sentence uttered, and since their meanings involve modality, they are also called modal adverbs.

In this connection, it might be relevant to point out the existence of parenthetical clauses in English, which have frequently been discussed in the literature as a reflection of subjectification.

(7) a. I think that the coup was planned by the CIA.
    b. Do you think that the coup was planned by the CIA?
(Thompson and Mulac 1991: 322)

(8) a. I think Commander Dalgeish writes poetry.
    b. Commander Dalgeish writes poetry, I think. (Ibid.)

While *think* is the main verb in the two examples of (7), it serves as a parenthetical verb in those of (8), qualifying the main assertions expressed by the rests of the sentences. The distribution of parenthetical clauses is rather flexible, if not totally

free, as indicated in (9), strongly suggesting the adverbial nature of them.[6]

(9) a.   That stuff, you can't deny, is quite poisonous in these amounts.
     b.   That stuff is, you can't deny, quite poisonous in these amounts.
     c.   That stuff is quite poisonous, you can't deny, in these amounts.

(Downing 1973)

But their adverbial status does not mean that they are functional, since adverbials form an open class. Anyway it suffices here to note that there are several means to express modality in English, and sometimes modality is associated with grammaticalization as in the case of modal auxiliaries.

A point we make here is that while the sharp eye of the phoenix picture is metaphorically grammaticalized for mood, the hypothetical bird has ungrammaticalized properties as well that provide viewers with a high level of modality. It is argued below that its vivid colors, huge size, curious feathers, etc., if not grammaticalized, all in concert enhance the level of modality, an interpersonal function in Halliday's systemic functional theory. Meanwhile, O'Toole (1994) revises Halliday's theory so that it applies to pictures in a more appropriate way, and thus he has developed a new system of terminology that is given in the chart in (10).

(10) The Terminology Developed by O'Toole[7]

Units / Functions	Representational	Engagement	Compositional
Whole work	Scene Action Portrayal	Framing Light Gaze	Geometry Parallelism Texture
Episode	Local setting Specific action Portrayal	Scale to whole Relative prominence Rhythm	Alignment Local frames Verticals & Horizontals
Figure	Stance Gesture Character	Gesture Characterization Contrasts	Parallelism Separateness Centrality in episode
Membefr	Parts of body Objects Natural forms	Prominence Stylisation Irony	Shape repetitions Rhythm Contrasts in texture

Here representational function, engagement function and compositional function corresponds to Halliday's ideational function, interpersonal function and textual

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6   Parenthetical clauses are also often treated as results of grammaticalization motivated by subjectification, but it is unclear in what sense they are grammaticalized. The reader is referred to Amano (forthcoming) in which it is argued that parentheticals are created by degrammaticalization rather than grammaticalization. Thus subjectification does not necessarily lead to grammaticalization.
7   This is a simplified version of O'Toole's original chart that was used by himself in a series of global COE lectures at Nagoya University in 2008.

function, respectively. We do not enter into a detailed discussion on all the terms in (10), but it seems that his revision of terminology is convincing. Given this, we can claim that viewers are attracted to the phoenix picture because of its extraordinarily strong engagement function. Needless to say, its sharp right eye is not the only characteristic that raises the level of engagement function; its other characteristics mentioned just above also are contributing to the elevation of the function.

There are many functional categories in language, such as tense, determiner, conjunction, preposition, and so on, and at least some of them have come to exist in language as the results of the historical process of grammaticalization. As for paintings, however, historical process may have nothing to do with the grammaticalization of a particular part of a natural object, including a human body, or the whole object. It is the painter who drives the process of grammaticalization and he or she can choose any part of an object for grammaticalization. In the case of the phoenix picture, Hokusai, as its creator, chose its right eye. Animal eyes may be ideal parts to perform the engagement function, since gazing is one of the most meaningful actions for the hypothetical bird can do.[8]

In the next section, we examine the semantic functions of the grammatical category of tense in English and then it is argued that the phoenix's sharp right eye is comparable to tense because it has certain semantic functions that are denoted by tense in language. Before entering into this discussion, we outline the analysis of tense by Reichenbach (1947) that may be one of the major analyses of tense found in the literature.

3. Tense

For a systematic analysis of tense and aspect, Reichenbach (1947), the most influential study on them, distinguishes between three types of time: the event time, speech time and reference time. These three times are roughly characterized as in (11).[9]

(11) a. Event time: the time when an event actually takes place
   b. Speech time: the time when an utterance takes place
   c. Reference time: the time when speaker-writer regards that an event takes place

An event can take place in one of the three times: the past, present and future times. Thus the event time is necessarily one of the three. Since any speaker can only utter a sentence at the time when he or she is alive, and thus it is always present. To make clear the notion of reference time, we should carefully separate the real world from so-called possible worlds that the speaker can imagine. While the event time is the

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8   The index finger of a human hand also may be chosen by a painter as a part to be grammaticalized, since it is usable to express some meanings in communication by the action of pointing.
9   The characterizations in (11) were adapted from Kearns (2000).

time when an event actually happens in the real world, the reference time is the time which exists in one of the possible worlds that the speaker envisages. As such it is an imaginary time from which the speaker views an event, so that it is associated with speaker's temporal point of view. This is why the reference time is also called point-of-view time. It is said that the reference time, rather than the event time, coincides with the time that is indicated by the morphological tense on the finite verb contained in a sentence uttered. Thus the morphological tense refers to a time that exists in the mind of the speaker, suggesting that there is a robust relation between mood and tense.

With this much in mind, let us turn to Reichenbach's definitions of basic tenses in English. In the schematic definitions below, E, R and S stand for event time, reference time and speech time, respectively, and each tense form is characterized by how they are aligned on the timeline that flows from past to future. In addition, RW stands for real world, so the timelines indicate temporal flows in the real world. I have added this notation to the definitions to make it clear that relevant events are taking place in the real world rather than possible worlds, though it is not originally used by Reichenbach. Now essentially following Reichenbach's conceptualizations of tense and aspect, and adopting the notations developed by Kearns (2000), we represent the simple past tense, simple future tense, present perfect and past perfect as in (12), (13), (14) and (15), respectively.
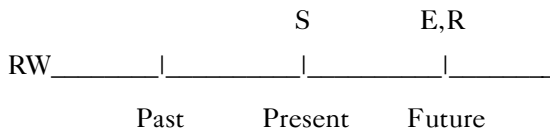
(12) Simple past tense
     John left.

                E,R   S
     RW_____|_____|_____|_____

                Past   Present   Future
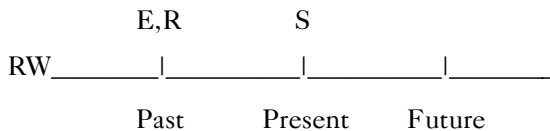
                                    (Speaker's viewpoint is in the past.)

(13) Simple future tense
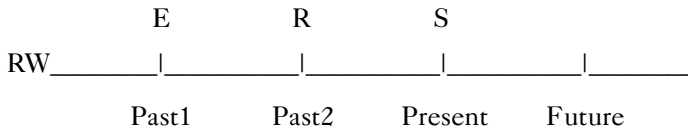   John will leave

                        S   E,R
     RW_____|_____|_____|_____

                Past   Present   Future

                                    (Speaker's viewpoint is in the future.)

(14) Present perfect
John has right.

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                E            S,R
RW_____|_____|_____|_____
            Past        Present     Future
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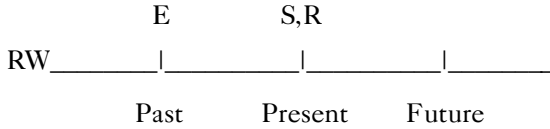
(Speaker's viewpoint is in the present.)

(15) Past perfect
John had right.

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                E            R            S
RW_____|_____|_____|_____|_____
            Past1        Past2        Present      Future
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(Speaker's viewpoint is in a past more recent than another past.)

In these cases, it is not difficult to determine the reference times since the situations to be considered are not very complicated. Let us now turn to the simple present tense in which the event time as well as the reference time is rather difficult to locate on the timeline.

Typical examples of the simple present tense are found in sports commentaries and TV cooking shows.

(16) Simple present tense
Pitama passes to Haggerdoorn, Haggerdoorn to Jones, and he nearly misses...
Now I just add a few drops of water and beat the eggs...

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                E,S,R
RW_____|_____|_____|_____
            Past        Present     Future
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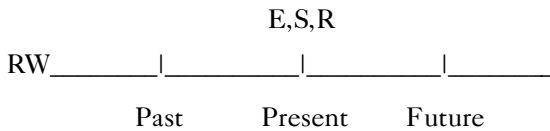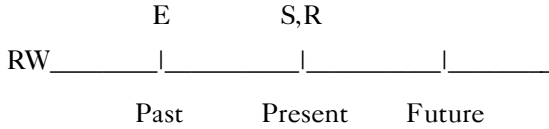
(Speaker's viewpoint is in the present.)

It might appear natural to assume that all the three times are located in the present in present tense sentences, but there are at least three cases of the simple present tense that require even deeper considerations. The first case is the historic present, the second is the predetermined event and the third is the permanent truth.[10]

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10 The present simple tense is often called all-inclusive tense. This is simply because it can refer to any event at any time point, present, past or future. As discussed below, however, if we adopt an analysis based on the notion of possible world, this tense form does not have to be all inclusive; it represents only the present time in a possible world in which the relevant event is taking place.

(17) Historic present

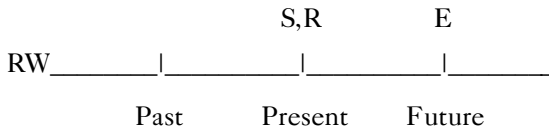So just last week I'm going down Cashel St and this guy comes up to me...

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                 E            S,R
RW_____|_____|_____|_____
                Past        Present      Future
```

(Speaker's viewpoint is in the present.)

(18) Predetermined event

The sun sets tomorrow at 6.03.
I leave for Wellington this afternoon.

```
                          S,R          E
RW_____|_____|_____|_____
                Past        Present      Future
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(Speaker's viewpoint is in the present.)

(19) Permanent truth

Gases expand when heated.

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          E    E        E,S,R        E    E
RW_____|_____|_____|_____
                Past        Present      Future
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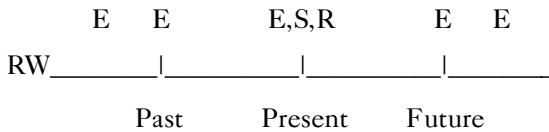
(Speaker's viewpoint is in the present.)

(20) Habitual deed

She visits her parents every day.

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          E    E        E,S,R        E    E
RW_____|_____|_____|_____
                Past        Present      Future
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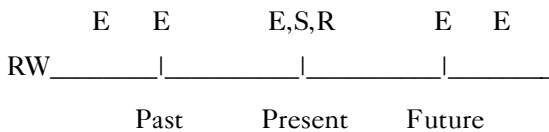
(Speaker's viewpoint is in the present.)

We might regard the permanent truth and the habitual deed as identical cases, so that we do not have to treat them separately. Thus I said that there are three cases, rather than four, of the simple present tense to be considered.

Although it is possible to treat all the cases of the simple present tense in terms of the three sorts of time, there seems to be something wrong with this treatment; it is quite unnatural that there are huge discrepancies between the event time and reference. In addition, why can the speaker shift the event time freely on the timeline

from past to future? If the event time is fixed on a particular time, it will probably be a preferable analysis. A similar point is made by Langacker (2001), who claims that the present tense means coincidence with the time of speaking and proposes an interesting analysis within the framework of cognitive semantics. To develop such an analysis on the basis traditional semantics, let us suppose that the speaker is dealing with more than one world. In the case of the historical present, the speaker is envisaging a possible world in which a past event is taking place at the present time, meaning that the reference time and event time are both present. However, speaking must take place in the real world, so the speech time is in the present of the real world. In the case of the predetermined event, the speaker is envisaging a possible world in which a future event is taking place at the present time, again meaning that the reference time and event time are both present. In the cases of the permanent truth and the habitual deed, the speaker is imagining an infinite number of possible worlds and in every of them the same event is taking place at the present time, and thus there is no discrepancy between the event time and the reference time.

It might be possible to extend the analysis proposed just above to all the cases of tense beyond the simple present tense; the speaker's reference time is always in a possible world that he or she can imagine, and thus all events in the real world are viewed from a possible world in which the speaker's reference time exists. In the case of the simple past tense, the speaker imagines a possible world in which he or she is in the past and viewing the past event in the real world from the possible world. Likewise, in the case of the simple future tense, the speaker imagines a possible world in which he or she is in the future and viewing the future event in the real world from the possible world. Turning to the present perfect, we assume that the speaker forges a possible world in which he or she is in the present and viewing the resultant effects of a past event remaining in the real world from the possible world. In parallel, in the case of the past perfect, the speaker figures out a possible world in which he or she is in the past and viewing the resultant effects of a more remote past event remaining in the real world from the possible world. In this way, we can account for all the tenses uniformly in terms of the notion of possible world.

In the next section, we apply the possible world analysis to sentences with the subjunctive mood and try to verify its feasibility.


4. Subjunctive Mood

Possible worlds are hypothetical worlds human beings can imagine. As such, worlds described in novels, poems, comics, science fictions and so on are all good examples of possible world, and impossible situations in the real world are possible in some of these possible worlds. For example you can be a bird in a possible world, which is totally impossible in the real world. Thus the possible world analysis might be one of the best analyses applicable to the subjunctive mood, and in the analyses below possible world is given as PW, as opposed with RW which stands for real world. With this much in hand, let us here consider how the subjunctive past and subjunctive past

perfect are accounted for under the possible world analysis.

(21) Subjunctive past
　　I were you, I would learn English.

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                        E,R
PW_____ _____|_____|_____

  |                   S
RW_____|_____|_____|_____
         Past      Present     Future
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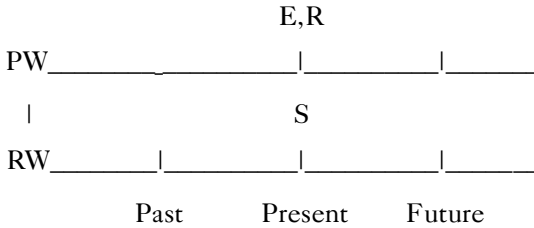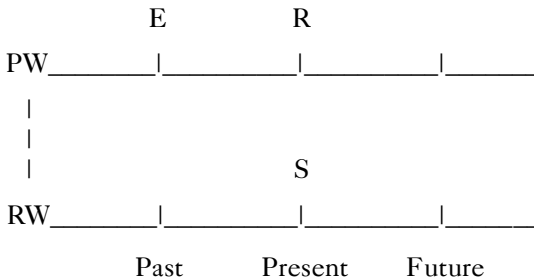
As in the case of the simple present tense, the speaker is dealing with the real world and a possible world simultaneously. While the speech time is the present time of the real world, the event time and reference time are in the possible world, because the event is taking place in the possible world and the speaker is viewing it at the present time of the possible world.[11] Then a question that arises here is why this sentence has a past tense form. Following the traditional idea of English grammar, we assume that it represents a conceptual distance between the real world and the possible world and the distance is rather small in the case of the subjunctive past.

　　Turning to the subjunctive past perfect, let us consider the following analysis in which the possible world imagined by the speaker is a world psychologically much remoter than that imagined in the case of the subjunctive past.

(22) Subjunctive past perfect
　　I wish you had told me the truth.

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              E           R
PW_____|_____|_____|_____

  |
  |
  |                   S
RW_____|_____|_____|_____
         Past      Present     Future
```

Here again, the reference time is present in the relevant possible world, whereas the

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11 We cannot exclude the possibility that the reference time of the subjunctive past is at some time of the real world; the speaker is viewing the event in a possible world from the real world. If we adopt this analysis, however, it is quite difficult to see at what temporal point of the real world the reference time should be located. It might be clear that it should not be in the past of the real world, because the speaker is not viewing the event from a past time.

event time is past.[12] The greater distance between the real world and the possible world is an indication that the event described is very unlikely to happen in the real world, suggesting that the speaker is doubtful about the truth of the proposition conveyed by the sentence.

It seems that the possible world analysis will be a very plausible means for analyzing English tenses. In the next section, we conduct a possible world analysis of the phoenix picture painted on the ceiling of Ganshoin in Obuse City, and arrive at the conclusion that it works well for non-linguistic texts like a picture.

5. Possible World Analysis of the Phoenix Picture

Before conducting the analysis of the phoenix picture, it will be in order here to reconsider its noticeable characteristics discussed in section 2, which are repeated in the following.

(2) Noticeable Characteristics of the Phoenix Picture
① a sharp right eye
② The glance from the sharp right eye appears to go out in all directions (八方睨み).
③ bright vivid colors
④ as large as the size of 21 tatami's
⑤ Phoenix is an imaginary animal.
⑥ painted on the ceiling
⑦ nostalgic mountainous surroundings of the temple

First of all, we should pay attention to the two characteristics in ① and ②. Since a high level of modality is conveyed by the sharp right eye, it might not be implausible to compare it to the tense of a sentence in language, which is closely associated with mood.[13] The level of modality is raised by the second characteristic: the glance from the sharp eye appears to go out in all directions. If the eye is watching you wherever you are, you will feel that you cannot escape from it and there is a strong interpersonal relation between you and the bird. Thus the modality expressed by the eye has both sharp strength and broad scope.

Secondly, the characteristics in ③ and ④ are comparable to linguistic means other than tense that convey modality. In section 3, we mentioned that semi-modal auxiliaries, attitudinal disjuncts, and parenthetical clauses as well as modal auxiliaries are vital means to express modality.[14] It should be noticed that there are differences

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12 It might be objected that the reference time should be past in the possible world in this example. This might be true, but if the past perfect is reflected in the greater distance between the real world and the possible world, we can maintain the claim above that the reference time is always present. Of course, this problem should be left open for a future study.

13 Notice that mood is the centerpiece of modality which can be expressed in various ways, as discussed in section 2.

14 Since modal auxiliaries are always tensed, they should be classified as a type of tense categories.

between linguistic texts and non-linguistic ones: rather, the bright vivid colors and huge size of a picture can be much more efficient than sharp eyes in conveying modality, because viewers are very likely to be deeply impressed by these characteristics. Thus the two characteristics in ③ and ④ are also vital factors that enhance the level of modality.

Thirdly, the characteristics in ⑤ and ⑥ have meanings of special importance here. We can compare the ceiling to a possible world in which the hypothetical bird is living, suggesting that the possible world analysis is applicable to this picture in a perfect way. Thus an imaginary huge bird is looking at viewers with a sharp right eye from a possible world wherever they are in the room. The viewers are experiencing the real world and the possible world at the same time. If the sharp eye represents a tense, it will be a sort of the subjunctive past rather than the subjunctive past perfect, because the ceiling is not far away from the tatami floor, though it is a rather high one, and the bird is gazing at you right now whenever you enter the room. It might be relevant to note that in Japanese 'tenjo' (ceiling) and 'tenjo' (haven) have exactly the same pronunciation, so at least some Japanese viewers might feel that the bird is gazing on them from the haven. In this way, a great number of tourists, who are attracted by the phoenix picture, are headed for the small mountainous city of Obuse. If the picture is painted on a wall, for instance, the city can still expect many tourists, since Hokusai is world famous, but the number of tourists will be significantly decreased.

Lastly, we should pay a greater attention to the characteristic in ⑦, though it is an external one. As mentioned above, Obuse is in a mountainous area and the temple stands at the foot of a mountain. These nostalgic surroundings make visitors gradually prepared to worship the phoenix even before entering the temple. A picture might help to see the point.[15]

15   The temple is not in the city center of Obuse, though a walking distance from there. You have to walk through rice fields to arrive at the main gate of the temple and there is a mountain at the back of the temple.

There are many huge spectacular temples or shrines in large Japanese cities such as Kyoto, Tokyo or Nagoya, but this temple is very small and old, though a very decent one. Visitors are more deeply impressed because this small temple owns such a magnificent phoenix picture.

Before concluding this section, it will not be irrelevant to point out that all the key characteristics of the picture have something to do with the process of subjectification discussed in section 2. As noted there, this process raises the level of modality. Notice that all the characteristics, especially the sharp eye, bright colors, and huge size, have various interpersonal meanings that seem to be strengthened by subjectification. The picture clearly has interpersonal meanings, but what is its ideational meaning? A few answers suggest themselves. But it is not easy to answer this question. Thus it might be said that the painter applied an extremely high level of subjectification in drawing this picture, so that its ideational meaning was almost lost, and his methodology was very successful.

6. Conclusion

We have analyzed the phoenix picture painted by Hokusai on the ceiling of Ganshoin in Obuse City, and arrived at the conclusion that the possible world analysis works well for non-linguistic texts like a picture. It was also shown that it works very well for analyses of various tense forms in English. Of course, there are differences between linguistic texts and non-linguistic texts, but if both are recognized as a type of texts, there should be something common to both of them. As noted above, O'toole (1994) argues that pictures have three functions that correspond to the three functions performed by linguistic texts, as in the following chart.

(23) Functional Correspondences Between Pictures and Languages

pictures	Languages
Representational function	Ideational function
Engagement function	Interpersonal function
Compositional function	Textual function

Given that his argument is basically correct, we may proceed to carry out the possible world analysis of the phoenix picture. Modality is also a critical factor that makes this picture attractive, and since an imaginary world is a world full of modality, the close connection between them will be obvious. The key characteristics of the picture indicate that the painter adopted every method and skill to increase its modality, or engagement function if we use the terminology by O'Toole. It was also pointed out that he applied robust subjectification to his picture and, consciously or unconsciously, made its ideational meaning almost empty. Thus it might be said that the painter made it very attractive by extremely emphasizing its engagement function.

In this paper, we did not discuss the textual or compositional function of the

picture. What I noticed when I first saw it was that bird's head was very small compared with its huge body; the head appeared to be almost embedded in the whole feathery body. But this unbalance makes the sharp right eye even sharper. Then the whole composition is making a great contribution to the high level of modality.

References

Amano, Masachiyo (forthcoming) "A Broader and Sharpar Characterization of Grammaticalization," *Proceedings of SHELL 2007*, Peter Lang, Hamburg.

Berry, Margaret (1977) *Introduction to Systemic Linguistics: 2 Levels and Links*. B.T. Batsford, London.

Butt, David, Rhondda Fahey, Susan Feez, Sue Sinks and Colin Yallop (2001) *Using Functional Grammar: An Explorer's Guide*. National Centre for English Language Teaching and Research, Mcquarie University.

Downing, Bruce T. (1973) "Parenthesization Rules and Obligatory Phrases," *Papers in Linguistics 12*, 1–47.

Greenbaum, Sidney (1969) *Studies in English Adverbial Usage*, Longman, London.

Halliday, M.A.K. (1967a) "Notes on Transitivity and Theme in English, Part 1," *Journal of Linguistics* 3, 37–81.

Halliday, M.A.K. (1967b) "Notes on Transitivity and Theme in English, Part 2," *Journal of Linguistics* 3, 199–244.

Halliday, M.A.K. (1967c) "Notes on Transitivity and Theme in English, Part 3," *Journal of Linguistics* 4, 179–215.

Halliday, M.A.K. (1978) *Language as Social Semiotic: The Social Interpretation of Language and Meaning*. Edward Arnold, London.

Halliday, M.A.K. (1994) *An Introduction to Functional Grammar*, 2nd ed. Arnold, London. O'Halloran, Kay (2005) *Mathematical Discourse: Language, Symbolism and Visual Images*. Continuum, London.

Hopper, Paul J. and Elizabeth C. Traugott (2003) *Grammaticalization*, Cambridge University Press, Cambridge.

Jespersen, Otto (1924) *The Philosophy of Grammar*, Allen and Unwin, London.

Kearns, Kate (2000) *Semantics*, St. Martin's Press, New York.

Langacker, Ronald (2001) "The English Present Tense," *English Language and Linguisitics* 5, 251–72.

Meillet, Antoine (1912) "L'evolution des Formes Grammaticals," *Scientia* 12, No.26, 6. Reprinted in Antoine Meillet (1958) *Linguistique Historique at Linguistique Générale*, 130–48, Champion, Paris.

O'toole, Michael (1994) *The Language of Displayed Art*. Leicester University Press, London.

Palmer, Frank Robert (1986) *mood and Modality*, Cambridge University Press, Cambridge.

Reichenbach, H. (1947) *Elements of Symbolic Logic*, The Free Press, New York.

Traugott, Elizabeth Closs (1995) "Subjectification in Grammaticalization," in Dieter Stein and Susan Wright, eds., *Subjectivity and Subjectivisation in Language*, 31–54. Cambridge University Press, Cambridge.