# Epistemic Modality and Non-Epistemic Modality in Modal Auxiliaries

## Yasuhiro ISHIWATARI

#### Introduction

When one tries to communicate with other people, one usually conveys one's intention, thought or sentiments to someone with any purpose. Cruse (2011) suggests that one's communication is made up of nine factors linguistically as the follows;

- (i) The speaker normally has a purpose in communicating.
- (ii)The speaker constructs a message to be communicated.
- (iii)The speaker constructs an utterance with which to convey the message.
- (iv)The speaker transforms the utterance into a physical signal.
- (v)The speaker transmits the signal.
- (vi)The addressee receives the signal.
- (vii) The addressee decodes the signal to recover the utterance.
- (viii) The addressee reconstructs the message from the utterance.
- (ix) The addressee infers the purpose of the communication.

These are basic factors on which one communicates with other people by language. In addition to them, Cruse (2011)<sup>2</sup> still mentions that "Communication is a social act and presupposes an audience. While the purpose of the communication is the fulfilment of a desire or achievement of an aim, the means of achieving this is via the effect of the communicative act on the audience." Cruse's suggestion shows us that one's communication often produces implications by which an audience is influenced, such as requirement, proposal, or order in the particular situations. However, in almost cases, one cannot convey one's intention in that it is often too direct and it sometimes offends the hearer. Therefore, one tries to avoid the expressions that are too direct by one's-self. One of the means which is used in linguistic activity is modal auxiliaries. Of course, there are other means that this is satisfied: For in-

<sup>&</sup>lt;sup>1</sup> Cruse, A. Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford: Oxford University Press, 2011, p.5.

<sup>&</sup>lt;sup>2</sup> Cruse, A. Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford: Oxford University Press, 2011, pp.5-6.

stance, modal adverbs, mood, intonations, speech act and so on. In this paper, we especially focus on modal auxiliaries and how they produce the effects in the sentences or in the discourse.

### Some definitions of modality

One of the significant concepts on considering the meaning of modal auxiliaries is modality. Since, according to Palmer (2001)<sup>3</sup>, "modality is the status of the proposition that describes the event," and Ouirk et al. (1985) suggests that "Modality may be defined as the manner in which the meaning of a clause is qualified so as to reflect the speaker's judgment of the likelihood of the proposition it expresses being true." Moreover, Cruse (2011)<sup>5</sup> mentions modality by using modal expressions is that "Modal expressions are those which signal a particular attitude or opinion on the part of the speaker to the proposition expressed or the situation described." Though these suggestions have differences as to how they classify modality into the some cases, for example, deontic, dynamic and epistemic (Palmer, 2001<sup>6</sup>, Cruse, 2011<sup>7</sup>), or extrinsic and intrinsic (Quirk et al., 1985<sup>8</sup>), these ideas show us the important thing in which the meaning of modality determines whether the speaker's thought intervenes in the propositional content or the particular situations. In this paper, we try to classify modality into epistemic and non-epistemic because the former is concerned with the speaker's judgment for the propositional content, and the latter is not concerned with the speaker's judgement in that non-epistemic modality is what expresses ability, obligation and so on.

#### Epistemic modality and non-epistemic modality

Let us look at the following examples:

(1) While setting up your device, you *can* start over at any point by pressing the Home button. (iPhone Support)

<sup>&</sup>lt;sup>3</sup> Palmer, F. R. Mood and Modality. Cambridge: Cambridge University Press, 2001, p.1.

<sup>4</sup> Quirk Randolph, Sidney Greenbaum, Geoffrey Leech, Jan Svartvik. A Comprehensive Grammar of the English Language. London: Longman, 1985, p.219.

<sup>&</sup>lt;sup>5</sup> Cruse, A. Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford: Oxford University Press, 2011, p.307.

<sup>6</sup> Palmer, F. R. Mood and Modality. Cambridge: Cambridge University Press, 2001.

<sup>&</sup>lt;sup>7</sup> Cruse, A. Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford: Oxford University Press, 2011, pp.307-308.

<sup>8</sup> Quirk Randolph, Sidney Greenbaum, Geoffrey Leech, Jan Svartvik. A Comprehensive Grammar of the English Language. London: Longman, 1985, p.219.

- (2) The awards are open to overseas students undertaking a research degree and *may* be held in any field of study. (Sources of Funding for Graduate Students, UCL Graduate School)
- (3) Candidates *must* be aged 35 or under, have excellent spoken and written English, be of outstanding academic ability and have obtained the equivalent of a UK first-class Honours degree. (Sources of Funding for Graduate Students, UCL Graduate School)

These three examples express non-epistemic modality. (1), (2), and (3) can be paraphrased as following (4), (5), and (6);

- (4) [...], you are allowed to start over at any point by pressing the Home button.
- (5) The award are open to overseas students undertaking a research degree and *are* permitted to be held in any field of study.
  - (6) Candidates are required to be aged 35 or under, [...].

These paraphrases give us the interpretations in which the agents do any action for the propositional content. For example, in (1), this sentence means while setting up your device, you are allowed to start over at any point by pressing the Home button. As a result, you can perform the propositional content. In (2), this sentence means the awards to overseas students undertaking a research degree are open and are permitted to be held. Therefore, the object of action is the awards, and moreover, in (3), this sentence means candidates are required to be aged 35 or under, have excellent spoken and written English, be of outstanding academic ability and have obtained the equivalent of a UK first-class Honours degree, and the agent is candidates in this sentence. These three examples give us an assumption that non-epistemic modality is concerned with agent or subject(what is called subject-oriented). Now, let us examine the examples of epistemic modality.

(7) The driver chose his words carefully: "It's just that you' re about to do something out of the ordinary. Am I right? People do not ordinary climb down the emergency stairs of the Metropolitan Expressway in the middle of the day—especially women."

"I suppose you' re right."

"Right. And after you do something like that, the everyday look of things *might* seem to change a little. Things *may* look different to you than they did before. I've had that experience myself. But don't let appearances fool you. There's always only one reality." (Murakami, Haruki. 1Q84, translated from the Japanese by Rubin, Jay, and Gabriel, Philip, 2013: 11)

In these contexts, it is not natural for the speaker(in this case, *the driver*) to climb down the emergency stairs of the Metropolitan Expressway in the middle of the day. When the speaker imagined the propositional content in which it is not possible to bring up, the speaker had

a vague cognition in which the driver wondered that the situation should be observed. Therefore, *might* which followed conditional *and* indicates less probability of the speaker for the propositional content, and when the speaker rephrase what the speaker said, the speaker's cognition is gained more clearly than before as referred to *may*. Let us look at the following example:

(8) "What in your heart has changed?" Julius Jones, an organizer with the group's Worcester, Mass., [...], asked the presidential candidate and former Secretary of State. "How *could* those mistakes that you made be lessons for all of America?" ('Where Black Lives Matter goes from here', by Alex Altman, TIME, 2015)

This is a part of an article in which Julius Jones, a leader of the group of demonstrating against discrimination of black people, asked the question of the presidential candidate and former Secretary of State. The speaker, Julius Jones in this sentence, tries to point out the mistakes for which American people and government dealt with black people with cruelty. In these contexts, *could* expesses the speaker's firm belief that white Americans have their own problems in the way they see black people, and it indicates the tentativeness of the speaker's utterance at the same time.

(9) At first the job offered little excitement: on a typical night this spring one or two boatfuls of migrants, mostly fleeing the civil war in Syria, would need to be rescued from the flimsy rubber crafts they use to reach the Greek islands from the western coast of Turkey. But by the end of August, the coast guard had become overwhelmed. "One night I looked at the radar and saw eight of their boats coming toward us in a line," recalls border guard Dimitrios Argyropoulos. "I thought to myself, This can' t be happening." ('IN SEARCH OF REFUGE', by Simon Shuster, TIME, 2015)

This is a part of an article about refugees in boats which is becoming an international topic. In these contexts, the border guard of the Republic of Turkey is observing that the number of boats descending on them suddenly increased. In this situation that the coast guard had become overwhelmed, we can recognize the speaker's cognition which he tries to deny himself what he saw. As we have seen, in (7), (8) and (9), we have something in common with these examples in that epistemic modality is concerned with the speaker's intention or judgement because the speaker observe the whole of the situation expressed by the propositional content(what is called speaker-oriented). However, this classification such as epistemic or non-epistemic modality gives us a suspicion. Let us look at the following example:

(10) Fukushima was not just an epic natural disaster in a nation long conditioned to frequent betrayals by land and sea. It was also a manmade crisis, born of political hubris, corporate dereliction and an instinct to obscure Japan's ugliest elements that remains un-

changed to this day. The Japanese, as a people, *may* bow before the temple of precision, fetishizing detail and safety. But Fukushima proved that no matter how many cool innovations Japanese companies churn out, a lack of oversight and emergency initiative can be deadly. (*'Three and a half years on, the Fukushima disaster has yet to change Japanese society'*, by Hannah Beech, *TIME*, 2014)

This is from a story about the nuclear problems in Fukushima of which the author thinks. Fukushima had a serious damage caused by the earthquake. The author thinks that this crisis is a problem not only for people in Fukushima but also for people all around Japan. The author also thinks that the problem is related to a national trait of the Japanese. And in addition, the author mentions if Japanese people think what are the most significant things, they are detail and safety, it is possible for them to notice what true precision is. However, judging from these contexts, especially before but, we can interpret this may in two ways. An interpretation is non-epistemic modality which means the Japanese is allowed to bow before the temple of precision, fetishizing detail and safety. And another interpretation is epistemic modality which means it is probable that the Japanese bow before the temple of precision, fetishizing detail and safety. However, judging from the whole of these contexts, it is natural for this may to be interpreted as an example of epistemic modality because the author mentions his own judgement, no matter what skills of Japan improve, an instinct to obscure Japan's ugliest elements would be unchanged. This example shows us an assumption that the meaning of modality of what the modal auxiliaries express is difficult to determine, even though the contexts are explained.

#### Conclusion

We argued the meaning of modality in modal auxiliaries based on the words, epistemic modality and non-epistemic modality. The former is speaker-oriented because it is concerned with the speaker's judgment for the propositional content, and the latter is subject-oriented in that it is not concerned with the speaker's judgment. However, this classification is often not appropriate seen from (10). This indicates that though the meaning of modality depends on the contexts, it is not possible to definitely know what is meant. We would have to consider the speaker's position or personal relationships to understand its meaning.

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