

CHAPTER I

INTRODUCTION

1.1 Background of the Study

In our daily communication, language user expresses their thoughts in many different ways. They combined different clauses in order to make meanings. In the conversation, the language users may be using the metaphor of modality. The metaphor of modality is important to see the perspective of the language users towards something they say in the interaction. It is related to the three functions of language proposed by Halliday: the interpersonal metafunction. Interpersonal metafunction stresses the speech action, including the personality of the speaker and the feelings in the communication (Lipson, 2007). However, when communicating with others, the language users may get misunderstood. Misunderstanding occurs if the people do not know the meaning and the intention of the statement contains the metaphor of modality. In order to avoid misunderstanding in the communication because of the lack of knowledge about the metaphor of modality, the language users should know about the metaphor of modality.

Language users sometimes struggle to understand written text, such as novels, short stories, and especially autobiography books. In an autobiography book, the author conveys their experience through written text. In this research, the author focuses on the written text form of language. The written text chosen by the author is an autobiography book *Into the Magic Shop: A Neurosurgeon's Quest to Discover the*

Mysteries of the Brain and the Secrets of the Heart by James R. Doty, M D. The book is the famous work written by the author James R. Doty, M D. The book contains thirteen chapters. In the autobiography book, the author describes his experience interacting with different people and his journey to find his most genuine desire. This book is not an ordinary autobiography book. It also contains a self-relaxation that the reader could try themselves. This book is also a self-improvement book that captivates the reader with mindfulness, compassion, and empathy.

The metaphor of modality is one of the language phenomena that is important to discuss to avoid misunderstanding in the language environment. Moreover, when expressing their ideas in written language, the author would be applying different styles and choices of words. The styles and choices of word could be in the form of ideas, opinions, and proposals. Metaphors of modality realize in the form of projection clause that contains a proposition or a word that indicates certainty, belief, possibility, or others as long it is express a judgment or opinion. The metaphor of modality shows other variations in the expression of meanings. Through this research, the author is interested in analyzing the metaphors of modality in the book *Into the Magic Shop...* written by James R. Doty, M D to see how the author use the language which is the metaphor of modality in expressing his opinions and judgment related to the writer's personal experience. The author also wants to show the reader of this research related to the degree of certainty in the expression of metaphors of modality used by the writer throughout his journey in the book.

Not only that, the author found this topic rarely discussed by English department students at Andalas University. In conducting this research, the author hopes it will

attract more people and students to understand the metaphors of modality. This research is also expected to provide explanations related to the metaphor of modality, including which elements of expression of the metaphor of modality are used in the autobiography book. Furthermore, this research aims to investigate the types and value of modality metaphors in the book *Into the Magic Shop...* by James R. Doty, M D.

1.2 Theoretical Framework

In this section, the author discusses several theories that are used to analyze the data. These theories come from the basic concepts of systemic functional linguistics, which covers the branch of metaphors of modality.

1.2.1 Systemic Functional Linguistics

Systemic functional linguistics, or SFL, is proposed first by Halliday. According to Halliday (1994), systemic functional linguistics is a system network theory about language as a resource for making meaning. It means that the structure of a language constructs the meaning. In the systemic functional linguistic theory, the text results from ongoing selection in an extensive system network. Systemic theory's nature is that a language's grammar is represented in the form language system networks, not as an inventory of structure (Halliday & Matthiessen, 2014). The purpose of this theory is to focus on the function of language. It means that the theory is concerned with how the meaning is constructed by the structure of a language and

also describes the use of language in a text based on its context. Then, Eggins (2004) also stated that systemic functional linguistics is a functional-semantic approach to a language. The approach concerns how people use language in a different context and how the language is structured for use as a semiotic system (Eggins, 2004, p. 20-21).

In systemic functional linguistics, each system in the network, which is the language network, represents a choice. The choice is a set of possible alternatives such as statement or question, singular or plural, falling tone, level tone, or rising tone. The choice chosen by the language users may be in the form of semantic, lexico-grammatical, or phonological (Halliday, 1994).

The functional grammar constructed by Halliday is concerned with the usage of language, how the language is constructed for a specific purpose and function, and how the language is used to organize to make meaning. Functional grammar is different from formal grammar, where it describes the language as a system of rules that give authorization to specific sentence structures (Lipson, 2004). Functional grammar focuses on how meaning is constructed, construes the language in its use, and concentrates on texts and their contexts. Halliday's approach to grammar studies the linguistic items' roles in particular texts related to their function of constructing meaning. Halliday and Matthiessen (2014) proposed the function of language in three metafunctions. The three metafunctions, ideational, interpersonal, and textual, have their scope in the language system.

To summarize, systemic functional linguistics is the study of language which is concerned with the system of how language constructs meaning. The theory allows us

to examine the purpose and function of language. Systemic functional linguistics also focuses on the function of the language and how it was organized to produce meaning.

1.2.2 Interpersonal Metafunction

In systemic functional linguistics, Halliday interprets the function of language in three metafunctions. One of them is interpersonal linguistics. Interpersonal linguistics is a linguistic system that focuses on language as an action. It is concerned with interpersonal relations and language experiences. The author focuses on interpersonal metafunctions in this study because they relate to the interpersonal metaphor.

Interpersonal metafunction is concerned with the exchange of meaning by language users. The interpretation of the language by interpersonal metafunctions is that language has a function as an exchanger. Not only that, the language in interpersonal metafunctions is able to function as a language that focuses on the action of the language. Furthermore, interpersonal metafunctions concern the social role, the speaker's personality, and feelings in the form of interactions in a communication environment (Lipson, 2009)

At the grammatical level, interpersonal metafunction has a role in clause exchange. The exchange clause of the interpersonal meaning has the ability to represent the role of the speaker relationship. The system of mood realizes by the speech-role relationship. The basic knowledge of the speech role is the term giving and demanding. The language exchange gives us proposition and proposal in the interaction. The proposition has a speech role as statements and questions, while the proposal has a speech role as an offer and command (Lipson, 2009).

The interpersonal metafunction is realized through the system of mood and modality. The mood system is concerned with the form of clauses, which are declarative, interrogative, and imperative. On the other hand, the system of modality refers to the form of degree commitment of the language used towards the expression they deliver.

1.2.3 Interpersonal Metaphor

Interpersonal metafunction is the bases of the interpersonal metaphor. Interpersonal metaphor is concerned with clause action. It studies the site of the clause exchange and its function. Interpersonal metaphor examines how the kind of exchange occurs, the participant, and the roles. The interpersonal metaphor has the ability to represent the role of the speaker's relationship. The basic knowledge of the speech role is the term giving and demanding.

The interpersonal metaphor is another kind of grammatical metaphor category. Interpersonal metaphors comprise of the system of mood and modality. The mood system construes a discourse semantic speech function through an incongruent mood option. In the spoken language it is usual to found mood metaphors. The other kind of interpersonal metaphor is the metaphor of modality. Metaphors of modality represent the modality explicitly. This type of interpersonal metaphor is connected to the semantic projection (Halliday, 1994).

1.2.4 Metaphors of Modality

According to Halliday (1994), The variety of the expression of meanings is called metaphor. Halliday said that there are two terms connected to the metaphor. The term refers to the metaphorical and non-metaphorical meanings that are incongruent and congruent. Incongruent terms refer to the metaphorical meaning, while congruent refers to the literal meaning. (Lipson, 2007). It means that the metaphors of modality are the grammatical variation in the level of meaning that is connected with the systems of modality.

Table 1.1 Congruent and Metaphorical Realizations of Modality (Martin, Matthiessen and Painter, 1997, p.70)

Type of Modality	Congruent Realizations			Metaphorical Realizations	
	Finite implicitly subjective	Adjunct (mood) implicitly objective	Predicator implicitly objective	mental clause explicitly subjective	attributive clause explicitly objective
Probability	can/ could, may/ might,	possibly, probably, certainly ...		[cognitive:] I guess, I think, I know	it is possible... it is probable... it is certain...
Usuality	will/ would, should,	sometimes, usually, always ...		—	It is unusual (for him to leave)
Obligation	ought to, must	necessarily ...	be allowed to, be supposed to, be obliged to	[affective:] I'm willing for... I expect... I want... (him to leave)	it is permitted it is expected it is necessary (... for him to leave)
Readiness: inclination		willingly, eagerly ...	be willing to, be keen to, be determined to	[verbal group complex:] I'd like to leave I want to leave	it'd be lovely to leave
Readiness: ability	can/ could		be able to	—	it is possible for him to leave

The metaphor of modality the type of interpersonal metaphor. The semantic relationship of projection is the bases of the metaphor of modality. In this kind of

interpersonal metaphor, the opinion of the speakers related to the probability, means that their observation is valid. It is not expressed as a modal element within the clause, which would be a congruent realization of modality. However, it is separated from the projecting clause in a hypotactic clause complex (Halliday, 1994). A metaphor in which the attitude is experientialized is called the explicit subjective modality. It means the modality is expressed in a separate clause that frames the proposition modalized (Thompson, 2014). The realization of the metaphor of modality is in the form of a projection clause that contains a proposition or a word that indicates certainty, belief, possibility, or others as long as it is connected with modality. The proposition is the statement or expression that expresses the opinion or judgment. The projection clause could be mental or attributive.

An example of the metaphor of modality is the sentence: *'I don't believe that pudding ever will be cooked'*. Based on this sentence, it showed that the sentence *'I don't believe'* has a function as form of modality, and it can be seen by the tag, which *would be, will it? not do I* (Halliday & Matthiessen, 2004: 613). This sentence is an incongruent form of modality and another variation of expressing the opinion. The sentence *I don't believe* is a realization of metaphors of modality probability. The probability of metaphorical utterance of modality is realized by a mental clause *as if*. The clause serves not only as the projecting part of a clause nexus of projection but also as a mood adjunct, just as it probably does (Halliday & Matthiessen, 2004, p. 614).

According to Halliday, sometimes we may not possible say what exactly it is, whether it is the realizations of metaphorical of modality or not. Additionally, The speaker has various ways of expressing their opinions, examples are:

1. It is obvious that
2. Everyone admits that
3. It stands to reason that
4. It would be foolish to deny that
5. The conclusion can hardly be avoided that
6. The conclusion can hardly be avoided that
7. No sane person would pretend that ... not
8. Commonsense determines that
9. All authorities on the subject are agreed that
10. You can't seriously doubt that

(Halliday, 1994, p. 355)

All the examples above mean '*I believe*'. Furthermore, the use of modality depends on some variables. Based on Halliday, there are three variable systems in modality. Those systems are a system of type, a system of orientation, and a system of value. These systems of modality will be applied in analyzing the metaphors of modality in the book *Into the Magic Shop...* by James R. Doty, M D. Specifically, the system of type and the system of value of metaphors of modality.

1.2.5 Types of Metaphors of Modality

Metaphors of modality refer to the meaning that lies between yes and no or the middle ground between positive and negative polarity. Particularly, it depends on the underlying speech function of the clause. (a) If the clause is an 'information' clause (a proposition, congruently realized as indicative), this means either (i) 'either yes or no,' i.e., 'maybe'; or (ii) 'both yes and no,' i.e., 'sometimes': in other words, some degrees of probability or usuality. (b) If the clause is a 'goods-&-services' clause (a proposal that has no real congruent form in the grammar, but by default, we can characterize it as imperative), it means either (i) 'is wanted to,' related to a command, or (ii) 'wants to,' related to an offer: in other words, some degree of obligation or inclination (Halliday & Matthiessen, 2014, p.691).

The first system of modality is the type of modality. There are four different sub-types of modality, these are probability, usuality, obligation, and inclination. Those sub-types of modality belongs to the modalization and modulation.

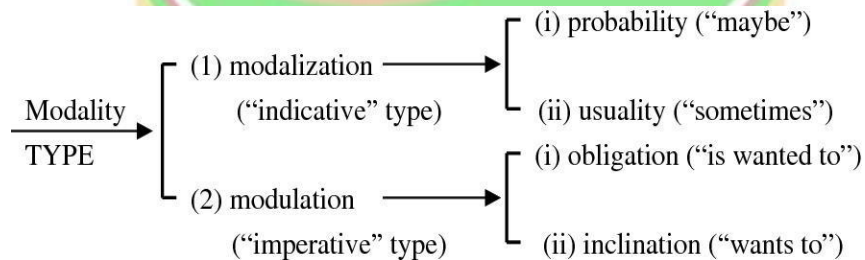


Figure 1.1 Types of Modality (Halliday and Matthiessen, 2014, p.691)

1) Modalization

Modalization is the category of modality where the clause exchanges its information. The speaker makes a statement or question about the

information from the listener. The speaker's statement is in the form of an opinion, and the question from the speaker is in the form of a request for the listener's information. Modalization divided into *probability* and *usuality* would be explained as follow:

1. Probability

The probability types of modality indicate either yes or no utterances and show the degree or the judgments of how the speaker is likely to do or have something. The metaphorical realizations of modality is realized in the form of projection clause. The example (1a) of the probability can be seen above:

(1a) I think Mrs. Taylor would like a drink.

(Thompson, 2014, p.249)

The expression above is an example of the expression of the metaphor of modality. In the example, the expression '*I think*' represents the meaning of the degree of probability. The expression of the metaphor of modality is projected in the underlined clause. It is a realization of metaphors of modality through explicit subjective forms of modality.

2. Usuality

The usuality types of modality signify the utterances in both yes or no, and also shows the degree of oftenness from the speaker. The speaker exchanges his judgment with the reader about how often something is to happen (Halliday & Matthiessen, 2014). The degrees of usuality may be represented in the range of *sometimes*, *usually*, and *always*. Those expression has similar meaning to 'either yes or no', i.e. maybe yes, maybe no, with

different degrees attached (Halliday, 1994, p.89). The example (2a) shows the types of modality which is usuality in the utterance.

(2a) it's usual for Fred to sit quite.

(Halliday, 1994, p.358)

The underlined word is the expression of metaphor of modality in the form of an explicit objective clause. It is an expression of modality in the types of usuality. The utterance is the process of exchanging information between the speaker and the hearer. The speaker shows his judgment in the utterance. The clause in the example represents the meaning of the degree of oftenness from the speaker.

2) Modulation

The modulation is the next part of the types of modality. Modulation concerns the meaning of a proposal in the area between positive and negative of prescribing and proscribing: positive 'do it,' negative 'don't do it.' Referring to the speech function, whether command or offer, there are two kinds of intermediate possibilities. The intermediate points that represent the degrees of *obligation* are in the area of command, while in the area of an offer, they represent degrees of *inclination*.

1. Obligation

The type of obligation is a sub-type of modulation. It is used in a command which lies between yes and no. Obligation indicates the utterance in the form of a command from the speaker to the hearer, and also it attaches to

the degree of obligation from the speaker. The form of a command from the speaker range from allowed to, supposed to, and required to (Halliday. 1994, p.89). Example (3a) shows the utterances that include the obligation of the metaphor of modality.

(3a) it's expected that John goes.

(Halliday, 1994, p.358)

In this example, the obligation is expressed from the underlined word. The expression above exchanging 'good-&-service' between the speaker and the hearer. Based on the example, the speaker request the hearer to do something. This is an expression of obligation that means command or request. The underlined word is a passive verb that represent the intermediate degree between 'yes' or 'no' and the degree of obligation.

2. Inclination

The type of inclination of modality concerns the form of an offer from the speaker to the hearer, and also attaches to the degree of inclination from the speaker. Inclination lies between positive and negative polar. In offer, the degrees of inclination range from willing to, anxious to, and determined to. The inclination can be expressed in either two ways, by the finite modal operator, adjunct by an expansion of the predicator, i.e. adjective verb (Halliday, 1994, p.89). In the other hand, metaphor of modality realize explicitly by mental clause and attributive clause. Example (4a) shows the inclination types of modality.

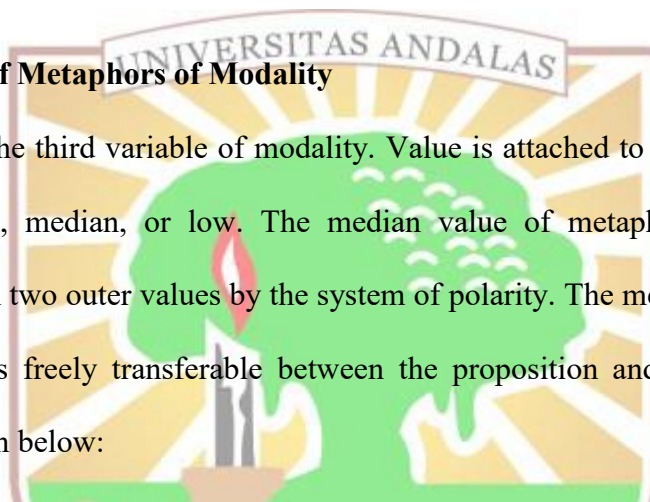
(4a) I want to leave.

(Martin et al., 1997, p.70)

The underlined word is the expression of inclination by the mental clause. The clause *I want* indicating the expression of metaphor of modality explicitly. The example above is the process of exchanging ‘good-&-service’ between the speaker and the hearer. The utterances represents the degree of inclination where the mental clause lies between ‘yes’ or ‘no’ degree.

1.2.6 Values of Metaphors of Modality

Value is the third variable of modality. Value is attached to the modal judgment which is high, median, or low. The median value of metaphors of modality is separated from two outer values by the system of polarity. The median value in which the negative is freely transferable between the proposition and the modality. The example shown below:



	direct negative	transferred negative
(prob.)	it's likely Mary doesn't know	it isn't likely Mary knows
(usu.)	Fred usually doesn't stay	Fred doesn't usually stay
(obl.)	John's supposed not to go	John's not supposed to go
(incl.)	Jane's keen not to take part	Jane's not keen to take part

(Halliday and Matthiessen, 2004, p.620)

The other outer values if the negative is transferred the value switches. Either from high to low, or from low to high. Furthermore, it is explained by the example below

direct negative

- (p: high) it's certain Mary doesn't know
- (p: low) it's possible Mary doesn't know
- (u: high) Fred always doesn't stay
- [Fred never stays
- (u: low) Fred sometimes doesn't stay
- (o: high) John's required not to go
- (o: low) John's allowed not to go
- (i: high) Jane's determined not to take part
- (i: low) Jane's willing not to take part

transferred negative

- it isn't possible Mary knows
- it isn't certain Mary knows
- Fred doesn't sometimes stay
- Fred doesn't ever stay]
- Fred doesn't always stay
- John isn't allowed to go
- John isn't required to go
- Jane isn't willing to take part
- Jane isn't determined to take part

(Halliday and Matthiessen, 2004, p.620-621)

The values of modality are summarized in the following table.

Table 1.2 The Values of Modality (Halliday and Matthiessen, 2014, p.694)

	Probability	Usuality	Obligation	Inclination
High	Certain	Always	Required	Determined
Median	Probable	Usually	Supposed	Keen
Low	Possible	Sometimes	Allowed	Wiling

Halliday (1994), Proposed finite modal operators into two forms negative and positive. The finite modal operators whose imply low value, which are ‘can’, ‘may’, ‘could’, and ‘might’ categorized as positive forms of finite modal operators. While in the negative form, these expressions become high-value finite modal operators. On the other hand, finite modal operators ‘must’ and ‘ought to’ are high-value finite modal operators, whether they are positive or negative. Finite modal operators ‘will’, ‘would’, and ‘should’ are the medium value whether they are positive or negative. All

four types of modal operators can occur in modality types but with more restrictions in the inclination and usuality.

Table 1.3 Finite Modal Operator (Halliday, 1994, p.76)

Finite Modal Operator			
Form	Low	Median	High
Positive	Can, may, could, might (dare)	Will, would, should, is/was to	Must, ought to, need, has/had to
Negative	Needn't, doesn't/didn't + need to, have to	Won't, wouldn't, shouldn't, (isn't/wasn't to)	Mustn't, oughtn't, can't, couldn't, (mayn't, mightn't, hasn't, hadn't to)

1.2.7 Experiential Metafunction

Halliday interprets language in three metafunctions, which consist of ideational metafunction, interpersonal metafunction, and textual metafunction. Each of the metafunctions has its role in the language system of a network. However, because the three metafunctions are a network system, all the language's metafunctions work together to create the meaning based on the context. (Bloor and Bloor, 2004). In this research, the ideational metafunction or experiential metafunction is essential to discuss to help analyzing the expressions of the metaphor of modality found in the text. The experiential metafunction is part of ideational metafunction. Bloor and Bloor (2004) proposed that the definition of the ideational metafunction is that

language is used to organize, understand, and express our perceptions of the world and our consciousness. (Bloor and Bloor, 2004, p.10).

The ideational metafunction is divided into two, which are experiential and logical. This research only focuses on experiential metafunction. According to Thompson (2013), experiential metafunction sees language as a set of resources for referring to the world's entities and how they act or relate to each other. In short, the experiential metafunction concerns how the language considers the world's view based on our perspective consisting of 'goings-on' or verbs involving things or nouns, attributes or adjectives, and the details of place, time, etc, and manner or adverbials. (Thompson, 2013). Not only that but the experiential metafunction is also concerned with the content or ideas.

In addition, Webster (2015) explains that in the experiential metafunction, the meaning is constructed by finding out the experience by arranging the process, participant(s), and circumstance(s) in the transitivity analysis. The participant is the same as the subject, usually realized by a nominal group. (Thompson, 2013). Meanwhile, the circumstances are what happened in the clause. It is commonly realized by adverbial groups or prepositional phrases. It concludes that the experiential metafunction focuses on the experience or what is going on in the clause through the terms process, including the participants in particular circumstances and analysis in the transitivity analysis.

1.2.7.1 Transitivity of Mental Process

In the experiential metafunction, there is a system of transitivity that concerns the language user's experience through the clause in some process. According to Thompson (2013), transitivity is the term used to distinguish verbs based on the object they have or not. *Transitivity* is also defined as a system that describes the whole clause and how the participants label it. In the transitivity system, there are some processes involving the representation of experience, in this research will be focused on the mental process, which is related to the expression of the metaphor of modality that contains the mental verb.

a. Mental Process

Based on Bloor and Bloor (2004), the mental process is the process that does not involve material action, but it is described as a psychological event or state of mind. The mental process practically realizes through mental verbs, such as think, know, see, want, like, please, etc. The process of thinking, imagining, sensing, liking, and wanting involves the participants in the mental process. (Bloor and Bloor, 2004).

The participants in the mental process consist of senser and phenomena. The subject in the mental process is labeled as a senser. Senser is someone who experiences the process. Then the experience here is labeled as a phenomenon. The senser should be a human with the consciousness to think, feel, and perceive. However, it can be inanimate objects that may give human characteristics (Lipson. 2004). Meanwhile, the phenomenon is the inactive participants, which

is the experience experienced by the sensor. Mental processes divide into some sub-categories. The categories are perceptive (seeing, hearing, etc), emotive (the process of feeling), cognitive (deciding, knowing, understanding, etc), and desiderative (wanting). (Thompson, 2013, p.99).

Following example is the mental process:

She	Seemed to be puzzled	By this news.
He	Was never worried	By his lack of self-
She	Was horrified	esteem By the realization
Sensor	Process: Mental	Phenomenon

(Thompson, 2013, p.100)

1.2.8 Clause Combination

A clause is an essential element in constructing the meaning. Not only that, the language user combines various clauses to make meaning. Based on Thompson (2013), the ability to produce and combine two or more clauses is stated as logical metafunction. In relation to the metaphor of modality, which is separated from the projecting clause in a hypotactic clause, clause combination has a role in defining the projection clause and hypotactic clause. The interdependency shown by clear signals such as conjunctions and combining two or more clauses to a larger unit is called clause complex. (Thompson, 2013).

There are various ways of combining clauses. Two of them are parataxis and hypotaxis clause combinations. *Parataxis* is the equal element linking phenomenon in combining the clause. It means that parataxis is the relationship of two identical elements, where one has a role in starting and the other continuing. (Halliday and Matthiessen, 2004). The linked clause here is called a paratactic clause. On the other hand, hypotaxis or unequal status is defined as the relationship between a dependent element and its dominant, where the element is dependent. (Halliday and Matthiessen, 2004). This clause combines the lower status clause connected with the other dominant or dependent clause relation. The clause in this combination is called a hypotactic clause.

Below is the example of parataxis and hypotaxis clause:

a. Parataxis Example:

In pain, Kukul pulled out the arrow *and headed for the river to wash his wound.*

Initiating (1)

Continuing (2)

b. Hypotaxis Example

In pain, Kukul pulled out the arrow *and headed for the river* **to wash his wound.**

α

β

	Primary	Secondary
Parataxis	1 (initiating)	2 (continuing)
Hypotaxis	α (dominant)	β (dependent)

(Halliday and Matthiessen, 2004, p.442)

1		In pain, Kukul pulled out the arrow
2	α	and headed for the river
	β	to wash his wound

(Halliday and Matthiessen, 2004, p.442)

1.3 Review of Previous Studies

This section contains some reviews related to the metaphors of modality analysis conducted by some researchers. The reviews are from five journal articles research. These research articles are different from each other in terms of the objective of the research, source of data, etc.

The first study is from Syuhada Mutia (2018), with the title of the research "*Metaphor of Modality in Eighty Days Yellow Novel by Vina Jackson.*" The author of this journal article research applies descriptive qualitative design in conducting the research. Analyzing the types of metaphor of modality is the aims of this research. Not only that, this research also discuss the realization of metaphor of modality, and the context of the metaphor of modality found in the novel. The author uses Halliday's perspective in analyzing the data. Then, the data of this study was taken in the form of a sentence from the novel. The data resource is from the novel "*Eighty Days Yellow*" by Vina Jackson. The author used documentation as the research design. It means that the textual analysis is performed to describe the expression of the metaphor of modality in the novel.

The researcher found there are 3 types of metaphors of modality used in the novel. The three types are probability, with 109 occurrences and 50, 65 % in percentage, usuality with 84 occurrences and 31, 10% in percentage; and last obligation, with 70 occurrences and 18, 25% in percentage. In the novel, the metaphor of modality realize in the expression of 'think', 'will', 'probably', 'usually', 'want', 'should', 'expected', 'usual', and 'supposed'. Not only that, but the author also said the social context is the context of the metaphor of modality. The reason for this statement is that in our life, we are interacting with others in the context social. This research uses the same theory, which is systemic functional linguistics, by Halliday. However, they have different aims for conducting the research. The current research purpose is to find the types and values of the metaphor of modality in an autobiography book; however, this research by Syuhada Mutia investigate to found the types of the metaphor of modality, describing the realization of the metaphor of modality, and also discuss the context of the metaphor of modality in the novel.

The following article research was conducted by Sufang Duan, Lei Yue, and Yi Zhang (2019). The research title is "*Modality Metaphor in German and American Political Discourse.*" In this study, it purposed to analyze the opening remarks of the foreign ministers of Germany and the United States on the anti-terrorism based on the modality metaphor theory. This study mainly focus to analyze the types of modality, the orientation of modality, and the value of modality in the subject. This research simultaneously tries to find the similarities and differences by comparing the modality metaphor used in two languages. The subject of this research is the speeches of foreign ministers. The author of this research selected a public speech of the

foreign minister from the United States and Germany official website. The words of the speech were limited to 1000 and 1500. The author of this study also desire to find the frequency of the modality metaphor in two languages in the degree of orientation and value. Not only that, but this study also aims to find the similarities and differences between the modality metaphor in two languages and the function of the modality metaphor in political discourse.

The result of this journal article is that there are eight total frequencies of modality metaphors in English text and 12 total frequencies of modality metaphors in German text. Then the next finding is the distribution of value in English text which is relatively balanced in three degrees, where high has 2 in total, the median has 3, and low has 3. Meanwhile, in the German text, the modality value concentrated on the high degree with the amount of 11. Moreover, the result shows that the modality metaphor expression in English primarily focuses on indicating the explicit subjective, which shows obligation. In German, it is more likely to use explicit subjective and explicit objective attitudes. Comparing this journal with the author's research, this journal has different research aims. This journal focuses on comparing and finding the metaphor of modality in English and German political discourse text; meanwhile, the study aims to find types and values of the metaphor of modality in an autobiography book.

The third study is a journal article titled *"An Analysis of Explicit Subjective Modality Metaphors in Discussion Section of Linguistics Research Articles"* by Yue Bao and Yi Zhang (2021). This research discusses the distribution feature and interpersonal meanings of modality metaphors in the discussion section of the

linguistics research article called RAs. The discussion section of the selected linguistics research article (RAs) is the 60 RAs in Applied Linguistics (2016-2020). The research procedures by selecting the object of the research, which is the discussion section of 60 RAs from Applied Linguistics (2016-2020), is limited to a total of 95,665 words. Furthermore, the research author identifies the metaphor of modality in the corpus. They identified the corpus based on the theory elaborated by Halliday and other scholars. This research uses SPSS in conducting the quantitative analysis to show the distribution features of explicit subjective modality metaphor. After that, the author analyzes the interpersonal meaning of modality metaphors to answer the reason for different distributions.

The result of the journal article shows that there are 48 different variations of explicit subjective modality metaphors with a total frequency of 171 in the corpus. The author also found 84.8% of epistemic modalities more than other types. Then, boulomaic, evaluative, and evidential modality metaphors. The author said epistemic modality metaphors has a contribution to pursuing the scientific objectivity of academic discourse. Moreover, this journal research article shows a different perspective of modality metaphor than the current research. This article focuses on the explicit subjective modality metaphor, and the corpus data of the research is limited to scientific texts. It contrasts with the current research, which discusses the metaphor of modality in the autobiography book.

The next study is "*A Systemic Functional Analysis of Metaphors of Modality in Selected Scientific Texts*" by Zeydan Khalaf Omar and Noor Hameed Mchayet Fayyadh (2018). This study analyzes the metaphors of modality in selected scientific

texts. There are two texts analyzed by the author, which are Text No. 1, a textbook that is entitled "*A Universe From Nothing*", and Text No. 2, a journal entitled "*Biomedical Journal*" (2017). This study is based on the theory of systemic functional linguistics in analyzing metaphors of modality in the scientific text chosen by the researcher. Metaphors of modality are expressed by the explicitly subjective and explicitly objective forms of modality. The author of this study analyzes the metaphors of modality by applying the theory of Halliday (1985/1994), Martin, Matthiessen and Painter (1997), Eggins (2004), Thompson (2014), and Halliday and Matthiessen (2004). This study aims to identify and describe the interpersonal grammatical metaphors of modality in scientific text and explore their functions in these texts accordingly. The author took the data from the selected part of a book titled "*A Universe From Nothing*" and a journal entitled "*Biomedical Journal*".

The author of this study came up with the result that the grammatical metaphor of modality occurred in the scientific texts. The metaphorical of modality are realized through the explicit subjective and objective forms of modality. This study only focuses on finding the types and orientations of metaphors of modality in scientific texts. This study has different types of objects from the current study. This study analyzes scientific texts, while the current study analyzes an autobiography text. However, this study uses the same theory by Halliday in analyzing the metaphors of modality in the chosen scientific texts.

The next is the study from Yurike Suhertian Poyungi, M.R. Nababan, and Riyadi Santosa (2021). The title of this research is "*Translation Techniques of Modality Metaphor in Novel Anne of Green Gables.*" This research analyzes the types of

modality metaphors and the techniques of translation in the novel *"Anne of Green Gables"*. This article is translational research using the systemic functional linguistic approach to analyzing the data. In this research, the data was collected by content analysis and focus group discussion. When analyzing the data, the researcher used Spradley's data analysis method. The researcher said the content analysis was used to analyze the types of modality metaphors based on Halliday and Matthiessen's perspectives. The translation technique is analyzed based on Molina and Albir's classification, and a focused group discussion finishes it.

From this study, the researcher found two types of modality metaphors in the novel *"Anne of Green Gables."* The types of modality metaphors are probability and obligation. The total modality metaphor data found according to the research are 215 total data. Then the following finding is the techniques used to translate modality metaphors in the novel. The researcher found that the techniques in translating the text applied in order to translate the metaphor of modality are established equivalence, paraphrase, compensation, modulation, deletion, discursive creation, and implication. The researcher concludes that using various techniques in translating modality metaphors shows the translator's creativity in translating the text.

Furthermore, this study has a different aspect from the current study. This study focuses on finding the types of the metaphor of modality in the novel *"Anne of Green Gables"* and examines the translation techniques used in translating the modality metaphor. However, both of the studies use the same theory in analyzing the type of modality metaphor, Halliday's theory.

The last study is from Xue Xiao in 2020, with the title of the research is "Exploring The Interpersonal Meaning Reflected by *Epistemic Modality in Business emails: A Corpus-Based Study*." In this research, the researcher investigates the interpersonal meaning expressed through epistemic modality, both congruent and metaphorical expression in authentic business emails. The researcher applied the systemic functional linguistics by Halliday in analyzing the data found in the business email. Through this journal article research, the researcher wants to show the functions of epistemic modality in business emails. The data of this research consist of 400 English-written business emails. These emails were collected from a foreign trade corporation in China that has 1.6-1.8 billion RMB in annual sales. Then, both the congruent and metaphorical expression of epistemic modality were taken by Antonc and examined using a concordance line. In the following step then, the interpersonal meaning of the epistemic modality expression was analyzed according to the values and orientations of modality.

This research shows that the modal items were used 61 times. It consists of the expressions 'would', 'might', 'can', 'could', 'may', and more than listed. The researcher stated that the epistemic modal found in the business emails contains auxiliaries and adverbs. This result was based on the concordance that showed the practitioners only using modal auxiliaries without using modal adverbs in expressing the probability and also preferring subjectively express the probability. Conversely, the interpersonal meaning of metaphorical epistemic modality found in the business emails was explicit and objective. The researcher found that explicit subjective metaphors of epistemic modality shown by the cognitive mental clauses, such as 'I think', 'I believe',

'I suppose'. Then, the researcher only found one of the explicit objective metaphors of modality in the corpus. The data is presented as the relational clauses ' it is not possible'. Based on the analysis, the researcher concludes that in business emails, the epistemic modality has politeness and negotiation functions. Not only that, it also has role in enlightening foreign trade practitioners to achieve various communicative intentions by selectively using the expression of epistemic modality. Comparing this journal article research with the current research, there are some similarities and also difference in some aspects. Both studies apply systemic functional linguistics in analyzing the data found in the text. Beside its similarity, the research by Xue Xiao has different sources of data and methods in analyzing the data. The current research analyzing metaphors of modality found in the autobiography book; meanwhile the research by Xue Xiao in 2020 investigate epistemic modality found in the corpus of business emails.

Based on the review of the related studies above, all of the articles apply systemic functional linguistic theory proposed by M.A.K Halliday in analyzing the data. It is similar to the current research that uses the same theory in analyzing the data found in the book. Some of the research also aimed to find the types of metaphorical expression of modality in the text, but there are still no research article analyze the types and values of metaphor of modality. However, there are some differences in the stage of source of the data between the previous studies with the current study. All the previous studies analyze different types of text, which are novel, scientific text, and also research article, but none of them has analyzed an autobiography text. In choosing an autobiography book titled *Into the Magic Shop: A*

Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart by James R. Doty, M D, will shows the reader that the modality metaphor can be found and appears in the various form of text. Not only that, the current study and the previous studies also use different methods in analyzing the data, for example, Yurike Suhertian Poyungi, M.R. Nababan, and Riyadi Santosa (2021), they combined translation analysis with systemic functional linguistics theory and used the content analysis and focus group discussion in collecting the data. Then analyzing the data used Spradley's data analysis method. Meanwhile, the current research applying theory form Miles, Huberman and Saldana in analyzing the data.

1.4 Research Questions

In this study, there are two research questions based on the background of the study. The two questions are formulated as follows:

1. What are the types of metaphors of modality found in the book *Into the Magic Shop: A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart* by James R. Doty, M D?
2. What are the values of metaphors of modality found in the book *Into the Magic Shop: A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart* by James R. Doty, M D?

1.5 Objectives

Based on the research questions of this study, this research aims to figure out the answer of those questions. The aims of this research stated as follows:

1. To describe the types of metaphors of modality in the book *Into the Magic Shop: A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart* by James R. Doty, M D.
2. To describe the values of metaphors of modality in the book *Into the Magic Shop: A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart* by James R. Doty, M D.

1.6 Scope

The scope of the study is important to make the research to be focused and specific. The research is conducted based on Halliday theory of systemic functional linguistics, specifically the metaphors of modality. This research focuses on the metaphors of modality present in the book *Into the Magic Shop...* by James R. Doty, M D. This study is limited to only analyzing the types and values of metaphors of modality in the book *Into the Magic Shop...* by James R. Doty, M D.

