

**A PSYCHOPRAGMATIC ANALYSIS ON
COMMUNICATION IMPAIRMENTS AND ILLOCUTIONARY ACTS
IN ASPERGER SYNDROME CHARACTER'S CONVERSATION
PORTRAYED IN *MOZART AND THE WHALE* MOVIE**

A Thesis

**Presented as Partial Fulfillment of the Requirements for the Attainment
of the *Sarjana Sastra* Degree in English Language and Literature**



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A THESIS



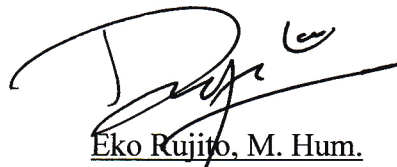
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A THESIS

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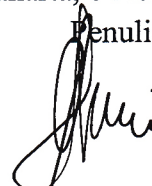
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PORTRAYED IN *MOZART AND THE WHALE*
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Apabila terbukti bahwa pernyataan ini tidak benar, hal itu sepenuhnya menjadi tanggung jawab saya.

Yogyakarta, 6 November 2012

Penulis,



Doni Wirandana

MOTTOS

Do your best, let God do the rest

Happiness depends on what you give, not what you get

DEDICATIONS

I dedicate this thesis to:

my beloved parents

for love, care, and pray

ACKNOWLEDGEMENTS

All beautiful words and praise go to Allah, The God of all mankind. His endless mercies and blessings always enlighten me. Therefore, I could finish this thesis. My sincere gratitude is also delivered to:

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Writing this thesis would have been impossible without their assistance. I do realize that my thesis has not been perfect yet. Thus, any suggestions and criticisms are indeed needed to improve my thesis.

Yogyakarta, 6 November 2013

A handwritten signature in black ink, appearing to read 'Doni Wirandana', written in a cursive style.

Doni Wirandana

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LIST OF ABBREVIATIONS

SL	:	Speech and language peculiarities
NC	:	Nonverbal communication problems
R	:	Representative
Dir	:	Directive
C	:	Commissive
E	:	Expressive
D	:	Declarative
Con	:	Conversation

**A PSYCHOLINGUISTIC ANALYSIS OF DYSLEXIA IN *BACKWARDS:*
*THE RIDDLE OF DYSLEXIA***

**Doni Wirandana
08211141017**

ABSTRACT

This study is under a psychopragmatics umbrella. The aim of this study is to analyze communication impairments phenomena of asperger syndrome suffered by Morton and its illocutionary acts, the main character in *Mozart and the Whale*. This study has two objectives: (1) to figure out the communication impairments experienced by the main character in *Mozart and the Whale*; and (2) to describe the illocutionary acts used by Morton in the movie.

This study employed a descriptive qualitative method since it gave an emphasis on describing the phenomena of asperger syndrome in *Mozart and the Whale*. Moreover, the findings were presented in narrative or textual description. However, number was also used to support the analysis of the data. Some steps in analyzing the data were: identifying the raw data, classifying each datum into the categorization, analyzing each datum, interpreting each datum based on its contexts, reporting the findings, and drawing the conclusion. Finally, the data findings were triangulated by two linguistics students who were keen on psycholinguistics and pragmatics.

This study reveals two findings. First, only seven types occur in *Mozart and the Whale*. There is a limited use of gestures, clumsy body language, inappropriate facial expression, limited facial expression, superficially perfect expressive language, impairments of comprehension including misinterpretation of literal or implied meaning and peculiar stiff gaze. Meanwhile, the absent types are odd prosody, peculiar voice characteristics, formal pedantic language, and delayed speech development. Last, types of illocutionary act which occur in the movie are representative and directive. Representative consists of informing and stating. Directive consists of ordering. The most occurrences go to informing, then stating and the last is ordering. Meanwhile, the three types that Morton unable to perform are expressive, commissive, and declarative. The ability to employ the two types provides evidences that Morton is able to state what he believes to be the case or not and is able to ask someone to do something. His inability to employ the other types proves that he is unable to express his psychological state, commit himself to an action, change the world of others and to perform speech act which has the function related to the activity of engaging social interaction with others, but he is able to perform the speech act which has the function related to his personal interest, in this case calculating numbers.

Key words: psychopragmatics, asperger syndrome, illocutionary acts, *Mozart and the Whale*

CHAPTER I

INTRODUCTION

A. Background of Study

In every day's life, it is impossible for human being to live independently, because they need to communicate with others in fulfilling their needs, solving their problems, making a business relation, or other purposes. Communication is a process of interaction by everyone with the others and environment. Two or more individuals interact and influence each other's ideas, beliefs and attitudes. They can exchange information through words, gestures, signs and symbols, expressions etc.

There are two types of communication that people use in communicating with others: verbal and nonverbal communication. Verbal communication is communication between two people or more by using words as tools of interaction, and it can be oral or written. Some common forms of verbal communication are conversations, speeches, letters, newspapers, magazines, tapes both audio and video, telephonic conversation etc. Meanwhile, Nonverbal communication is communication without words (DeVito, 2002: 134). It means that, when people smile to the others, stare at the girl or the man whom they like, or raise their voices' volume, they actually do a communication nonverbally. Moreover, pictures, images, models, gestures are also nonverbal means of communication. A simple nod of head can convey their 'yes' or 'no', with a wave

of hand they can show their interest. Eyes can transmit feelings like love, hate, anger, sorrow etc.

When people want to share their ideas, criticize the social situation and the government, show their feeling about something or someone, they can use music and movie as tools to communicate their ideas to many people. In music (songs), the songwriters communicate their ideas verbally to their listeners through the lyrics. However, their ideas cannot be communicated to the listeners nonverbally because music (songs) are in forms of audio, not visual. In other cases, the songwriters can make video clips to visualize their songs and through which they can communicate nonverbally to the listeners.

On the other hand, movies can automatically communicate with the audience using both verbal and nonverbal communication because they are made in the form of audiovisual. Movies communicate verbally to the audience through the conversation among actors and actresses, while it communicate nonverbally through actors and actresses' gestures, eye gazes, smile, body appearances, facial expression, raise of vocal volume and others.

Communication among the actors and actresses in the movie may also become a message or messages that the director wants to deliver to the audience. There are a lot of kinds of messages in the movie, such as love, society, caring the minority, and others. In this research, the researcher wants to analyze *Mozart and the Whale* movie which is about a person living with Asperger Syndrome. Moreover, the researcher wants to analyze about what Asperger Syndrome is, the communication impairments between person with Asperger Syndrome, and how

the illocutionary acts are employed by the Asperger Syndrome character as shown in the conversation.

Produced in 2005, *Mozart and The Whale* is a movie about Asperger's love story depicting a relationship of two Aspies (individuals with Asperger's Syndrome, a form of Autism) who fall in love at the first sight. Based on the problem above, the researcher wants to figure out the communication impairments of person with Asperger Syndrome as portrayed in the main character, and to analyze the illocutionary acts of the main character's conversation in the movie.

The reason for choosing *Mozart and the Whale* as the object of the research is because the movie is sufficiently representative in illustrating the life of people with Asperger and their communication impairments in communicating with others. The conversation of Donald Morton, the main character in *Mozart and the Whale* movie, is a perfect representative subject to be analyzed since he is a person with Asperger Syndrome. Many information about Asperger and how a person with Asperger communicate with others can be found by analyzing deeper the conversations found in the movie.

In conclusion, this research is expected to give information about how people with Asperger communicate (figuring out the communication impairments of people with Asperger Syndrome), and how illocutionary acts are employed by the Asperger in the conversation.

B. Research Focus

Based on the background of the study, this research concerns with the communication of people with Asperger Syndrome. They are different with normal people. They can not communicate with other people successfully, because people with Asperger Syndrome have some impairments in communicating with others.

To overcome the problem of communication of people with Asperger Syndrome, the researcher uses psychopragmatics study. Since the focus of the study are communication impairments of person with Asperger Syndrome, which is under psycholinguistics study, and illocutionary acts, which is under pragmatic study, this analysis is categorized as a psychopragmatic study. Moreover, this analysis is concerned not only with the utterances or words which is being talking about, but also with the meaning implied by the speaker in their words or utterances. The theory of pragmatics is very useful because it is used to analyze not only the utterances which are being said by Donald Morton (the main character) but also the illocutionary acts of the conversation. As the conclusion, those two approaches will help the researcher to dig further explanation and theories in analyzing Asperger Syndrome and Illocutionary Acts.

In relation to the research focus, this research will be limited only in analyzing the communication impairments of person with Asperger Syndrome and the illocutionary acts in the conversation of Donald Morton as the main character who has Asperger's Syndrome disease in the movie *Mozart and The Whale*.

C. Formulation of the Problem

Based on the limitation of the problem, the problems of the research are formulated as follows:

1. What communication impairments does person with Asperger Syndrome have in communicating with others as portrayed in Donald Morton's language and behavior?
2. What illocutionary acts are used by Donald Morton as portrayed in the movie?

D. Research Objectives

Based on the formulation of the problems, the objectives of this research are as follows:

1. to figure out the communication impairments of a Person with Asperger syndrome in communicating with others as portrayed in the main character's language and behavior.
2. to describe the illocutionary acts used by Donald Morton in conversation.

E. Significance of the Research

This research offers some benefits as follows:

1. Theoretically, the findings of the research will enrich the study in linguistics, especially in pragmatics and psycholinguistics fields. This research may also become a bibliographical source for future relevant type of research.
2. Practically, the findings may have some advantages in the following parties;
 - a. The students of English Language and Literature study program.

This research is expected to give some contributions to Psychopragmatics in general, and for Asperger and Illocutionary acts studies in particular.

b. The other researchers.

This research can be used as additional information to conduct other research in linguistics, predominantly concerning in Asperger and illocutionary acts studies.

CHAPTER II

LITERATURE REVIEW

A. Theoretical Background

1. Psycholinguistics

Psycholinguistics is a branch of study of which focuses on the psychology of language (Clark and Clark: 1977; Harley: 2005). Clark and Clark mentions that this branch of study concerns with language use as mental activities and relates to human mind. In line with Clark and Clark, Wisniewski (2007) states that psycholinguistics is a branch of study which combines the discipline of psychology and linguistics. It concerns the relationship between the human mind and the language as it examines the process that occur in brain while producing and perceiving both written and spoken discourse. What is more, it is interested in the ways of storing lexical items and syntactic rules in mind, as well as the process of meaning involved in perception and interpretation of texts.

According to Steinberg (1993: xi), there are three major parts of studying in psycholinguistics; first language acquisition, language and mind, and second language learning. First language acquisition concerns the acquisition process of children in the first language. Language and mind, concern everything which is connected to the relation of language and mind, how language is used, language structures and human brain. Meanwhile, second language learning concerns people in inquiring the second language.

In accordance with Steinberg, John Field (2004: xi) states that Psycholinguistics is a discipline that embraces *language processing, lexical storage and retrieval, special circumstance, and language and the brain*. *Language processing* discusses the language skills, like reading, writing, etc., which are played by memory in language. *Lexical storage and retrieval*, concerns with how people store and find words in their minds when they need them. *Special circumstance* discusses the effects upon language of deafness, blindness, dyslexia or aphasia (the loss of language after brain damage). Meanwhile, *brain and language* involves where language is located in the brain, how it is evolved and whether it is a capacity that is unique to human beings.

As a conclusion, psycholinguistics is a branch of study that combines the discipline of psychology and linguistics which embraces language processing, lexical storage and retrieval, special circumstance, and language and the brain.

a. Language and mind

Psycholinguistics concerns three factors; language acquisition, the connection between language and the brain, and the correlation of language and the mind. Those three points mainly suggest the process of how human produce and comprehend language. In relation to those points, Chomsky (in Steinberg, 1993: 138) says that human are born with Language Acquisition Device (LAD) in their minds. This LAD is said to be innate in all human beings, i.e. it is universal, and is as the basis on which human grammars are constructed. He states that it is through the help of these innate ideas that language acquisition is made so easy and rapid. However, the mental condition of the brain also takes part in

determining the language acquisition of a speaker, thus it can be assumed that everyone has different capacity to perform language (Steinberg,1993: 138).

Chomsky (in Clark and Clark, 1997: 6) says that there are two terms to describe how speakers produce and comprehend language : competence and performance. Competence is the capacity of someone to use language, while performance is the actual use of language in concrete situation. It is the application of the competence in speaking and listening or the activities of producing and comprehending language (Steinberg, 1993: 96).

Chomsky (in Clark and Clark, 1997) writes a hypothesis about the term competence, stating that the competence of a human who knows a language ideally well is described by the grammar of that language. In this case, a speaker is able to use mental grammar without being aware of implicit rules. Somehow, linguistic competence must be owned by every language user which begins when he learns language in his childhood.

In conclusion, Steinberg (1993) states that the relationship between competence and performance is that of part to whole, with competence being a part or component of the whole, performance. Competence is the knowledge that people have of their grammar, while performance involves the knowledge for using competence so that sentence production and understanding can be realized.

b. Language and the Brain

1). Human Brain

Human brain is a very significant organ possessed by human being since it controls human's behavior including language (Taylor, 1990: 262). Human brain

is located in the skull of human. From the top of the spine upwards the brain's part are the *medulla oblongata*, the *pons Varolii*, the *cerebellum*, and the *cerebral cortex* or cerebrum (Steinberg, 1993: 175). These four major parts of the brain form an integrated whole by means of connective tissue. The first three are concerned with essentially physical functions, including breathing, heartbeat, transmission and coordination of movement, involuntary reflexes, digestion, emotional arousal, etc. Meanwhile from the various parts of the brain, the cerebral cortex is the most heavily involved in language and other cognitive functions (Taylor, 1990: 363).

In addition, Steinberg (1993: 175-176) explains more about the parts of the brain. He says that the cerebral cortex is characterized by a division into halves, termed as *hemispheres*, which are connected by tissue called *corpus callosum*. The corpus callosum is not only a connector for the hemispheres, but also as the principle integrator of the mental processes carries out in the two hemispheres. The general appearance of the cerebral hemispheres as a whole is that of a walnut with the two adjoined parts, mirror images of one another. Each cerebral hemisphere is divided into four parts: the frontal, parietal, temporal, and occipital lobes. This is a convenient division of the brain into parts, loosely based on physical features. Function such as cognition occur in the frontal lobe, general somathetic sensing (in the arms, legs, face, etc.) in the parietal lobe, hearing in the temporal lobe and vision in the occipital lobe, some of these areas are also involved in the structure and function of language.

2). Language Disorders

Language disorders are communication disorders which are characterized by an impaired ability to understand and/ or use words in their proper context whether verbal or nonverbal (Tatman, 2005:1). Further, he adds that the features of language disorders can be characterized as follows:

- Sound substitutions in words
- Difficulty in processing sounds into syllables and words
- Improper use of words
- Confusion about their meaning
- Difficulty in expressing their ideas and thoughts
- Inappropriate use of limited vocab development and inability to follow directions
- Remember questions, numbers and letters in sequence.

Language disorders, according to Steinberg, Nagata, and Aline (2001: 332) are presumed to have as their cause some from of brain damage. Tatman (2005:4) adds that the causes of language disorders are classified into two: Development language disorders and Acquired language disorders.

a). Developmental language disorders

This kind of language disorders occur in children who do not develop functional language skills. Clinically they are diagnosed as language-delayed or language –disordered. Tatman (2005: 7) says that developmental language disorders have been associated with a wide variety of causes, such as hearing impairment, cognitive impairment, autism, or a physical handicap that prevents

the child from interacting normally with his environment, such as mental retardation, or a cleft or palate. Emotional or psychological problems may also be causes, and lack of intellectual simulation as well. Often, there is no identifiable cause for a developmental language disorders.

Developmental language disorders can have receptive language impairments, expressive language impairments or both. Receptive language impairments refer to a difficulty understanding language at the level of meaning. The vocabulary range is usually very limited. The purposes of simple grammatical constructions are also not properly understood. For example, that adding an “-s” to a noun makes it plural, or that “s” is a possessive form, or that a verb with an “-ed” ending means that the action occurred in the past. There is also difficulty in understanding nonverbal signals, such as body language, or in understanding sarcasm and irony, or indirect requests and sentences.

Expressive language impairments refer to the use of imperfect language patterns, for example using too few words in sentences, or the sentences may be reduced, or contain words that lack proper endings, or miss the verb “is” and “are”, limited or ambiguous vocabulary is also a feature. Affected individuals have difficulty in using language properly, and as a result, they often seem rude or dulled. There is also a distinct pattern of changing topics very abruptly.

b). Acquired language disorders

Acquired language disorders or known as aphasias are language impairments caused by damage to the areas of the brain responsible for language function (Steinberg, 1993: 186). Various aspects of language maybe affected

depending on the location and scope of the brain damage. Language function is believed to be associated with the left hemisphere of the brain and some aphasias/ aphasics accordingly classified with respect to the affected brain area. Acquired language disorders / aphasia resulting from brain damage can be caused by cerebral palsy, stroke, tumor, or head injury affecting the left hemisphere of the brain.

Steinberg (1993: 186) says that aphasia is classified into two groups, Broca's and Werneckie's aphasia. Broca's aphasia is an expressive aphasia and it is associated with damage to Broca's area, a region located in the frontal lobe of the left hemisphere of the brain. Broca's aphasia is characterized by an impaired ability to produce language. On the other hand, Werneckie's aphasia is a receptive aphasia, and it is associated with damage to Werneckie's area, a region located in the left temporal lobe of the brain. Werneckie's aphasia is characterized by an impaired ability to understand language.

2. Pragmatics

A Pragmatics approach is the study of utterances in which listeners can make inference about what is said in order to arrive at an interpretation of speaker's intended meaning (Yule, 1996:3). The statement shows that pragmatics focuses on a person's ability to derive meaning from specific kinds of speech situations. Pragmatics allows human into the analysis of language. The analysis concerns not only with the utterances or words which is being talking about, but also about the meaning of what the speaker implies in those words or utterances. In this research the theory of pragmatics is very useful in analyzing not only the

utterances which is said by Donald Morton (the main character) but also the illocutionary acts and the conversational implicature of the conversation. As the conclusion, those two approaches (Pragmatics and Psychopragmatics) will help the researcher to dig further explanation and theories in analyzing Asperger and conversation.

a. Context

Context is an important concept in Pragmatics analysis because Pragmatics focuses on the meaning of words in context or interaction and how the person involved in the interaction communicate more information than the words used. Nunan, (1993: 7-8) says that context refers to the situation giving rise to the discourse and within which the discourse is embedded. Moreover, there are two types of context, they are linguistics context and non-linguistics context. The linguistics context is the language that surround or accompanies the piece of discourse under analysis. Meanwhile, the non-linguistics context is within which the discourse took place (Nunan,1993: 8). The factors included to the non-linguistics context are the type of communicative event, the topic, the purpose of the event, the setting, the participants, and the background knowledge underlying the communicative event.

In the general pragmatics knowledge, the context involves setting of time, place, and the participants that are involved in a conversation. However contexts are not limited in those three factors. Hymes (in Wardaugh 2006: 247) proposes eight factors that may influence speakers in using their languages. These factors are also important to understand a certain purpose which wants to be

achieved by the speakers. They are known as **SPEAKING**, the word that Hymes uses to abbreviate them.

- a. **S** stands for the **setting and scene**. Setting refers to the time and place that are concrete physical circumstances in which speech takes place. Scene refers to the abstract psychological setting or the cultural definition of the occasion. For the example, when a friend of you holds a graduation party or birthday party, even the place is the first scene, the time is changing. There will be an exchange from the first scene when the graduation party begins that is usually more formal or serious (the genre is opening, speech, and etc.) to the informal (the genre is joking, gossiping, etc.).
- b. **P** stands for **participants that are involved in the communication or conversation**. These include various combination of speaker-listener, addressor-addressee, or sender-receiver. Hymes adds the participants generally fill certain socially specified roles. As the example above, the friend having party, when your friend greets the guests that are her or his friends to say grateful, your friend is an addressor and the guests are the addressees. Then the situation is changing when they having a conversation, they become speaker and hearer.
- c. **E** stand for **ends**. It refers to the conventionally recognized and expected outcomes of an exchange as well as to the personal goals that participants seek to accomplish on particular occasions. It is like participants in the party. A friend having party has his own goal so do his friends attending party.

- d. A** stands for **Act sequence**. It refers to the actual form and content of what is said. The precise words used, how they are used, and the relationship of what is said to the actual topic at hand.
- e. K** stands for the **key**. It refers to the tone, manner or spirit in which a particular message is conveyed: light-hearted, serious, precise, pedantic, mocking, sarcastic, pompous and so on. As example, when a friend says ‘Happy birthday’ in the same context above, it can be meant as a felicitation or a kind of teasing that may say ‘now, you are older than me’ or ‘you are running out of time, then go finish your study quickly!’. If he or she has not finished her or his study yet, it can be seen by the key what the speaker used such as gestures or facial expression.
- f. I** stand for **instrumentalities**. It refers to the choice of channel such as oral, written, or telegraphic, and to the actual forms of speech employed, such as the language, dialect, code or register that is chosen. The use of phrase ‘saya suka sate’ uttered by Barack Obama, the President of the United States of America, when he came to Indonesia to express his opinion about Indonesian foods that he just ate, gives deeper effect to the audiences than if he used his own language ‘ I like satay’.
- g. N** stands for **norms of interaction and interpretation**. It refers to the specific behaviors and proprieties that attach to speaking and also to how these may be viewed by someone who does not share them, such as loudness, silence, gaze return, and so on. The example is when some friends visiting their friend’s house. Even though they are close friends,

there are some norms that have to be kept, for example is do not speak loudly or laugh loudly as they usually do in other places.

- h. G** stands for **genre**. It refers to clearly demarcated types of utterances, such things as poems, proverbs, riddles, sermons, prayers, lectures, and editorials.

b. Speech Act

1). Definition

The term speech act was coined by the linguistic philosopher Austin 1962 and developed by another philosopher Searle 1979. They maintained that, when using language, people do not only make propositional statements about object, entities, states of affairs, and others, but they also fulfill functions such as requesting, introducing, denying, ordering, etc. After these philosophers, there are some linguists who are also interested in discussing speech act.

According to Yule, actions performed via utterances are generally called speech acts (Yule, 1996: 47). He states that there is a certain circumstance surrounding the utterance which will influence the utterance. People usually call this circumstance as speech event. It will determine the interpretation of an utterance as a particular speech act.

In accordance with Yule, Nunan states that speech acts are simply things people do through language, for examples, instructing, complaining, agreeing and warning (Nunan, 1993: 65). He also says that identifying the speech act being performed by a particular utterance can only be done if people know the context in which the utterance takes place.

Meanwhile, Mey states that many people think of human language is only about the relationship between sound and meaning; they disregarded that actually language is also an action (Mey, 1993: 110). Here Mey also wants to tell people that when they are saying something, unconsciously, they are also doing something which accompanies sound and meaning of what is said.

In conclusion, speech act is an action that the speakers do through utterances, for examples, ordering, apologizing, requesting, and others.

2). The classification of Speech Act

In analyzing speech acts, some linguists, including Austin, Searle, and Leech, propose the different classification of them.

a). Austin's Classification of Speech Act

Austin (1962: 108) identifies three distinct levels of action beyond the act of utterance itself; Locutionary, Illocutionary, and Perlocutionary Act

(1). Locutionary Act

Austin (1962: 108) states that locutionary act is roughly equivalent to uttering a certain sentence with certain sense and reference, which again is roughly equivalent to meaning in traditional sense. Locutionary act performs the acts of saying something. Leech (1996: 199) formulates the locutionary act as *s* says to *h* that *x*, in which *s* refers to speaker, *h* refers to hearer, and *x* refers to the certain words spoken with a certain sense and reference. According to Yule (1996: 48), the locutionary act is the basic act of the utterance of producing a meaningful linguistic expression. Yule proposes an example in the utterance "I've just made

some milk”. From the sentence above Yule tries to explain the locutionary act of the sentence is that the speaker utters that he/she just made some milk.

(2). Illocutionary Act

Illocutionary act refers to informing, ordering, warning, undertaking, and etc. Austin (1962: 108) means it as an utterance which has a certain (conventional) force. It can also be said that illocutionary act refers to what one does in saying something. The formulation of illocutionary act is in saying x , s asserts p (Leech: 1996: 199), by which p refers to proposition or basic meaning of an utterance. In Yule’s example “I’ve just made some milk”, in saying it the speaker means an offer or a statement.

(3). Perlocutionary act

Perlocutionary act is the effect of the utterance. It is what people bring about or achieve by saying something, such as convincing, persuading, deterring, and even say, surprising, misleading (Austin, 1962: 108). The formulation of perlocutionary act is by saying x , s convinces h that p (Leech, 1996: 199). For example, by saying “I’ve just made some milk”, the speaker performs perlocutionary act of causing the hearer to account for a wonderful smell, or to get the hearer to drink some milk.

Further, Austin (1950) distinguishes five more general classes of utterance, classified according to the illocutionary force. The explanation below are the classes proposed by Austin (1962: 150-151):

- **Verdictives**

Verdictives are typified by the giving of verdict, as the name implies, by a jury, arbitrator, or umpire. However, the need not be final; they may be, for example, an estimation, reckoning, or appraisal. It is essential to give a finding to something - fact or value – which is for different reasons hard to be certain about.

- **Exercitives**

Exercitives are exercise of power, right, or influence. The examples are appointing, voting, ordering, urging, advising, and warning.

- **Commissives**

Commissives are typified by promising or otherwise undertaking: they commit the hearer to do something, but include also declaration or announcements of intention, which is not promise, and also rather vague things which can be called espousal, as for example siding with.

- **Behabitives**

Behabitives are very miscellaneous group, and have to do with attitudes and social behavior. The examples are apologizing, congratulating, condoling, and challenging.

- **Expositives**

Expositives are clarifying reasons, argument, or communication. They make plain how utterances fit into the course of an argument, or conversation, how words are used, or in general are expository. The examples are: 'I reply', 'I illustrate', 'I assume' and 'I postulate'.

b). Leech's Classification of Speech Act

Another speech act's classification comes from Leech. Illocutionary functions are based on how utterances relate to the social goal of establishing and maintaining community (Leech, 1983: 104-105). According to him, speech acts are classified into following types:

(1). Competitive

The illocutionary goal competes with the social goal. The function of this type is for showing politeness in the form of negative parameter. The point is to reduce the discord implicit in the competition between what the speaker wants to achieve and what is 'good manner'. The examples are ordering, asking, begging, demanding, and requesting.

(2). Convivial

The illocutionary goal accepts with the social goal. On the contrary with the first category, this type of speech act is intrinsically polite. It means that politeness here is in the positive form of seeking opportunities for community. The examples are: greeting, offering, inviting, congratulating, and thanking.

(3). Collaborative

The illocutionary goal is different with the social goal. In this type, both politeness and impoliteness are relevant. It can be found in most of written discourse. The examples are: announcing, reporting, asserting, and instructing

(4). Conflictive

The illocutionary goal conflicts with the social goal. Similar to the previous function, politeness does need to be questioned for the terms in this

illocutionary functions are used to cause offence or hurt the feeling the hearer. The examples are: bullying, blaming, swearing, and reprimanding.

c). Searle's Classification of Speech Act

Searle starts with the notion that when a person speaks, he or she performs three different acts, i.e. utterance acts, propositional acts, and illocutionary acts. Utterance acts consist simply of uttering strings of words. Meanwhile, propositional acts and illocutionary acts consist characteristically of uttering words in sentences in certain context, under certain condition, and with certain intention. Searle said in (Leech, 1983: 105) that he classifies the illocutionary acts based on varied criteria as following types:

(1). Assertive or Representative

Assertive or representative refers to a speech act that describes states or events in the world, such as an assertion, a statement of fact, a claim, a conclusion and a report. Therefore, testing an assertive can be done by simply questioning whether it can be categorized as true or false. According to Yule (1996: 53), representative or assertive is a kind of speech act that states what the speaker believes to be the case or not. By performing an assertive or a representative, the speaker makes the words fit the world (belief). The examples:

- The name of British queen is Elizabeth
- The earth is flat

The two examples above represent the world's events as what the speaker believes. Example (i) implies the assertion that the British queen's name is

Elizabeth. In example (ii) the speaker asserts that he or she believes that's the earth is flat.

(2). Directive

Directive refers to a speech act that has the function of getting the listener to do something, such as commanding, requesting, forbidding, inviting and suggesting. Yule (1996: 54) states that directive is a kind of speech acts that speakers use to get someone to do something. It expresses what speakers want. By using a directive, the speaker attempts to make the world fits the words. Leech (1996: 106) defines directive as an intention to produce some effects through action by the hearer. The examples of directive are:

- You may ask
- Would you make me a cup of tea?
- Freeze!

In first example 1, is a suggestion that has a function to get the hearer to do something as what the speaker suggest, i.e. suggests someone to ask. Meanwhile, in the second example in saying an interrogative sentence, the speaker has an intention to perform a request that has a function to get the hearer to do something that the speaker wants, i.e. requests someone to make a cup of tea for him or her. The speaker does not expect the hearer to answer the question with 'yes' or 'no', but the action of making him or her a cup of tea. The last example is a command to get the hearer to act as what the speaker wants, i.e. commands someone to freeze something.

(3) Commissive

Commissive refers to speech act that commits the speaker to do something in the future such as promising, threatening, offering, refusing, and volunteering. Yule (1996: 54) and Leech (1996: 106) state that commissive commits the speaker to some future action. It expresses what the speaker intends. The examples are as follows:

- We'll be right back.
- I'm gonna love you till the end.

The content commissives has something to with future and possible action of the speaker. The modal will or (to be) going to (in certain rules, contexts, and situation) signifies a promise in which it is considered as commissive.

(4). Expressive

Expressive includes acts in which the words state what the speaker feels, such as praising, congratulating, apologizing, regretting, and criticizing. It refers to a speech act in which the speaker expresses his or her feeling and attitude about something.

Yule (1996: 53) says that expressive is a kind of speech acts that states what the speaker feels. It expresses psychological states and can be a statement of pain, pleasure, like, dislike, joy or sorrow. The examples are:

- (i) I'm terribly sorry
- (ii) Congratulation!
- (iii) We greatly appreciate what you did for us.

The first example is an expression to show sympathy. The second example is used to congratulate someone, and the last can be used to thank or appreciate someone.

(5). Declarative

According to Yule (1996: 53), declarative is a kind of speech act that the world via the word. The speaker has to have special institutional role, in a specific context, in order to perform a declarative appropriately. Leech (1996: 106) adds that declaratives are the illocution whose successful performance bring about the correspondence between propositional content and reality. Christening or baptizing, declaring war, resigning, abdicating, dismissing, naming and excommunicating are the examples of declaratives. Some examples of utterances classified as declaratives are as follow:

- Boss: "You're fired!"
- Referee: "Time out!"

Both of utterances above bring the change in reality and they're more than just statements. The first utterance can be used to perform the act of ending the employment and the last can be used to perform the ending of the game.

After explaining the classification of speech act by three different linguists, finally the researcher decides to use Searle's classification because it is actually a modification of Austin's general theory of speech act. Searle's classification is based on what the speaker wants to imply in his or her utterances. Moreover, this classification is more specific than the others.

3. Psychopragmatic Analysis

Pragmatics comes in many forms including Neuropragmatics, Sociopragmatics, Cognitive pragmatics, and Psychopragmatics (Kearns, 2001: 915). Psychopragmatics is built upon theories of pragmatics and cognition (Madrid, 2006: 176). Cognition itself means the process of acquiring knowledge and understanding through thought, experiences, and the senses (Hornby, 1995: 217).

Studying on cognition, Gorayska and Mey (2004: 57) said that psychopragmatics is the uses of language in mental activity. The theory proposed by Goraskya and Mey above has similarity to those proposed by Dascal. In his book *Pragmatics and the Philosophy of Mind* (1983: 45) he said that psychopragmatics is a study of mental language and it is different with sociopragmatics, which is concerned with the communicative use of language.

Dascal (1983) adds that the points of opinion above implies psychopragmatics as the study of mental process behind the language use, seeing language use in a communication merely as a result of the cognitive operation, excluding the external factors for manifestation or manipulation. The speaker's intention, psychopragmatically, is not affected by the external environment that causes the speaker to regulate appropriate linguistic output in a given situation. This is quite different with sociopragmatics, because it is a study that has something to do with the external pragmatic factor that includes the perception of linguistics input and interpretation, as well as the production of appropriate

linguistics output in a given situation. As a result, this kind of interpretation much deals with speaker's intention by sociological factors.

In the relation between pragmatics and psychological process, Levinson (1983: 375) gives an example of the cooperation between the two fields. He explains that the cognitive processes such as: pauses, hesitation, and other have become the concern of psycholinguistics, and it can be interpreted for interactional purpose. Therefore, pragmatics is also needed.

As the conclusion, psychopragmatics is a branch of pragmatics which does not deal with the social use of language but with the mental use of language. Therefore, psychopragmatically, the speaker's intention is not influenced by external factor, but it is influenced by the speaker's intention itself as a result of Cognitive Process.

4. Asperger Syndrome

a. Definition

Myles (2005) said that Asperger Syndrome is a complex developmental disability marked by impairments in socialization, communication, cognition, and sensation. Like classic autism, Asperger Syndrome is a neurological disorder that affects a person's ability to communicate and relate to others. It is a lifelong disorder that carries with it considerable and long-term behavior problems.

The diagnostic term Asperger's syndrome, based on the remarkably perceptive descriptions of Dr Hans Asperger, a Viennese paediatrician, who, in 1944, noticed that some of the children referred to his clinic had very similar personality characteristics and behaviour. By the mid-1940s, the psychological

study of childhood in Europe and America had become a recognized and growing area of science with significant advances in descriptions, theoretical models and assessment instruments, but Asperger could not find a description and explanation for the small group of similar and unusual children that he found intriguing. He suggested the term *Autistische Psychopathen im Kindesalter*. A modern translation of the original German psychological term ‘psychopathy’ into current English terminology would be personality disorder – that is, a description of someone’s personality rather than a mental illness such as schizophrenia.

Asperger is clearly entranced by children with autistic personality disorder and he wrote a remarkably perceptive description of the children’s difficulties and abilities (Asperger 1944). In Attwood (2007), Asperger says that the children’s social maturity and social reasoning are delayed and some aspects of their social abilities are quite unusual at any stage of development. The children have difficulty making friends and they are often teased by other children. There are impairments in verbal and non-verbal communication, especially the conversational aspects of language. The children’s use of language is pedantic, and some children have an unusual prosody that affected the tone, pitch and rhythm of speech. The grammar and vocabulary may have relatively advanced but, at the end of the conversation, one has the impression that there is something unusual about their abilities to have the typical conversation that will be expected with children of that age. People with Asperger also observes and describes conspicuous impairments in the communication and control of emotions, and a tendency to intellectualize feelings. Empathy is not as mature as one would

expect, considering the children's intellectual abilities. The children also have an egocentric preoccupation with a specific topic or interest that will dominate their thoughts and time. Some of the children have difficulty in maintaining attention in the class and have specific learning problems. People with Asperger note that they often need more assistance with self-help and organizational skills from their mothers than one will expect. He also describe conspicuous clumsiness in terms of gait and coordination.

Moreover, in Attwood (2007) Asperger considers that in characterizing Asperger Syndrome it can be identified in some children as young as two to three years, although for other children, the characteristics only become conspicuous some years later. He also notices that some of the parents, especially the fathers of such children, appear to share some of the personality characteristics of their children. He writes that the condition was probably due to genetic or neurological, rather than psychological or environmental, factors. In his initial and subsequent publications and a recent analysis of his patient records for children he sees over three decades, it is apparent that he considers autistic personality disorder as part of a natural continuum of abilities that merges into the normal range (Asperger 1944, 1952, 1979; Hippler and Klicpera 2004). He conceptualizes the disorder as a life-long and stable personality type, and does not observe the disintegration and fragmentation that occurs in schizophrenia. He also notes that some of the children have specific talents that could lead to successful employment and some could develop life-long relationships.

b. Asperger's Syndrome or High Functioning Autism

DeMyer, Hingtgen and Jackson first used the term High Functioning Autism in 1981, the same year in which the term Asperger's syndrome was first used by Lorna Wing (1981). The term High Functioning Autism (HFA) has been used in the past to describe children who had the classic signs of autism in early childhood but who, as they developed, were shown in formal testing of cognitive skills to have a greater degree of intellectual ability, with greater social and adaptive behaviour skills and communication skills, than is usual with children with autism (DeMyer *et al.* 1981). The child's clinical outcome was much better than expected. However, many people currently have no explicit diagnostic guidelines for the diagnosis of HFA.

The cognitive abilities of this group of children have been compared to the cognitive profile of children with Asperger's syndrome, who did not have a history of early cognitive or language delay. The results of the research have not established a distinct and consistent profile for each group. Ehlers *et al.* (1997) found that only a minority of each diagnostic group showed a characteristic cognitive profile. One group of researchers, based at Yale University in the United States, has suggested that the neuropsychological profiles of children with Asperger's syndrome is different with High Functioning Autism (Klin *et al.* 1995). However, other research examining diagnostic differentiation using neuropsychological testing has not identified a distinct profile that discriminates between the two groups (Manjiviona and Prior 1999; Miller and Ozonoff 2000; Ozonoff, South and Miller 2000). A recent study of the past and present

behavioural profiles of children with High Functioning Autism and Asperger's syndrome using the Autism Behaviour Checklist concluded that the two groups were indistinguishable in their current behavioural profiles (Dissanayake 2004).

A diagnosis of Asperger's syndrome is usually given if the person has an Intelligence Quotient within the average range. However, children and adults with the clinical features of Asperger's syndrome often have a profile of abilities on a standardized test of intelligence that is remarkably uneven. Some scores may be within the normal range or even superior range, but other scores, within the same profile, may be in the mildly retarded range. Asperger originally included children with some level of intellectual impairment within his description of autistic personality disorder, although mental retardation, according to the DSM-IV, would exclude a diagnosis of Asperger's syndrome.

A recent review of the research literature comparing the abilities of children with Asperger's syndrome with those with High Functioning Autism concluded that the number of studies that found a difference in cognitive, social, motor or neuropsychological tasks probably equal those indicating no difference (Howlin 2000). Clinicians in Europe and Australia are taking a dimensional or spectrum view of autism and Asperger's syndrome rather than a categorical approach (Leekham *et al.* 2000). At present, both terms (Asperger's syndrome and High Functioning Autism) can be used interchangeably in clinical practice. To date, there is no convincing argument or data that unequivocally confirm that High Functioning Autism and Asperger's syndrome are two separate and distinct disorders.

c. The Diagnostic Criteria for People with Asperger Syndrome

Based on Attwood (2007) there are two ways that can be used by us in diagnosing criteria for people with Asperger Syndrome. They are: the diagnostic criteria by Gillberg in (1989) and revised in 1991 and the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) by American Psychiatric Association.

Here are the diagnostic criteria for people with Asperger Syndrome by Gillberg (1991):

- a. Social Impairments (extreme egocentricity) (at least two of the following)
 - (1) Difficulties interacting with peers
 - (2) Indifference to peer contacts
 - (3) Difficulties interpreting social cues
 - (4) Socially and emotionally inappropriate behaviour
- b. Narrow interest (at least one of the following)
 - (1) Exclusion of other activities
 - (2) Repetitive adherence
 - (3) More rote than meaning
- c. Compulsive need for introducing routines and interests (at least one of the following)
 - (1) Which affect the individual's every aspect of everyday life
 - (2) Which affect others
- d. Speech and language peculiarities (communication impairment, at least three of the following)

- (1) Delayed speech development
 - (2) Superficially perfect expressive language
 - (3) Formal pedantic language
 - (4) Add prosody, peculiar voice characteristics
 - (5) Impairment of comprehension including misinterpretations of literal or implied meanings
- e. Non-verbal communication problems (communication impairment, at least one of the following)
- (1) Limited use of gestures
 - (2) Clumsy or gauche body language
 - (3) Limited facial expression
 - (4) Inappropriate facial expression
 - (5) Peculiar, stiff gaze
- f. Motor clumsiness
- (1) Poor performance in neurodevelopmental test

The last diagnostic criteria are coming from the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) by American Psychiatric Association (2000):

- a. Qualitative impairment in social interaction, as manifested by at least two of the following:
 - (1) Marked impairment in the use of multiple non-verbal behaviours such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction.

- (2) Failure to develop peer relationships appropriate to developmental level.
 - (3) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g. by lack of showing, bringing or pointing out objects of interest to other people)
 - (4) Lack of social or emotional reciprocity
- b. Restricted repetitive and stereotyped patterns of behaviour, interests, and activities, as manifested by at least one of the following:
 - (1) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
 - (2) Apparently inflexible adherence to specific, non-functional routines or rituals
 - (3) Stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)
 - (4) Persistent preoccupation with parts of objects.
- c. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.
- d. There is no clinically significant general delay in language (e.g. single words used by age two years, communicative phrases used by age three years).

- e. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behaviour (other than in social interaction), and curiosity about the environment in childhood.
- f. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.

As those diagnostic criteria have been presented, the diagnostic criteria by Gillberg (1989) revised in (1991) are most chosen by many clinicians especially in Europe and Australia because it represents more accurately the original descriptions of Asperger and the profile of abilities of children or adults referred for a diagnostic assessment for Asperger's syndrome. The researcher also uses Gillberg (1991) diagnostic criteria in doing the research.

d. Language of People with Asperger Syndrome

In Attwood (2007: 202) Hans Asperger described that people with Asperger Syndrome have difficulties in language sector includes problems with conversation skills, the 'melody' or flow of speech, and an unusual developmental history for language such as the early or late development of speech. He also described a tendency for some young children to talk like an adult with an advanced vocabulary and to use quite complex sentences. Asperger wrote that: 'if one listens carefully, one can invariably pick up these kinds of abnormalities in the language of autistic individuals, and their recognition is, therefore, of particular diagnostic importance' (Asperger [1944] 1991, p.70).

The diagnostic criteria of Christopher Gillberg acknowledge an unusual profile of language skills, with at least three of the following speech and language peculiarities being required for a diagnosis of Asperger's syndrome (Gillberg and Gillberg 1989):

- Delayed speech development
- Superficially perfect expressive language
- Formal pedantic language
- Odd prosody, peculiar voice characteristics
- Impairments of comprehension including misinterpretations of literal/implied meanings.

The diagnostic criteria of Peter Szatmari and colleagues also recognize odd speech characteristics and require at least two of the following (Szatmari *et al.* 1989b):

- Abnormalities in inflection
- Talking too much
- Talking too little
- Lack of cohesion to conversation
- Idiosyncratic use of words
- Repetitive patterns of speech.

These diagnostic criteria incorporate both the original descriptions of Hans Asperger and those characteristics in language ability recognized by clinicians

conducting a diagnostic assessment. The American Psychiatric Association's diagnostic criteria for Asperger's disorder in DSM-IV and the World Health Organization criteria in ICD-10 briefly refer to language abilities, but state that 'there is no clinically significant general delay in language' (APA 2002, p.84). Unfortunately, this may be interpreted as an absence of any unusual qualities in language skills. By the age of five years, the child with Asperger's syndrome does not have a general delay in language, but research studies, clinical experience and the descriptions of parents indicate that the child or adult is unusual with regard to specific and more subtle aspects of language.

The accompanying text to the diagnostic criteria in the DSM-IV refers to the way in which the language may be abnormal in terms of the individual's preoccupation with certain topics, verbosity and failure to appreciate and utilize conventional rules of conversation, and the fact that the child may have a vocabulary that would be typical of an adult. Unfortunately these characteristics are not included in the DSM diagnostic criteria. In my opinion, unusual language abilities are an essential characteristic of Asperger's syndrome and should be included in future revisions of the DSM criteria.

1). Language Qualities and Difficulties

The language of a child with Asperger's syndrome can include some areas of conspicuous ability. The child may develop an impressive vocabulary that includes technical terms (often related to a special interest) and expressions more often associated with the speech of an adult than a child. The child can sometimes speak like a 'little professor' and entrance someone with a well-practised

monologue on a favourite topic. However, when this characteristic occurs in an adolescent it can be a contributory factor for social exclusion. There can be a natural curiosity about the physical world and how things work, and a tendency to ask questions and provide fascinating facts. I enjoy the intellectual exchange of information when engaged in a conversation with someone with Asperger's syndrome, and have found that such individuals (especially adults), whose knowledge exceeds mine, can be remarkably patient in explaining particular concepts – extremely important when assisting me with a computer problem and preventing me from having an emotional 'meltdown'.

Some young children who subsequently have a diagnosis of Asperger's syndrome can be delayed in the development of speech but the first spoken words can be an utterance comprising several words or sentences. The child's articulation can be age appropriate but can be unusual in being almost over-precise. The word may be pronounced as it is written rather than spoken: the child learned language more by reading than from listening. There may be stress on specific syllables that changes the expected pronunciation. I have observed that for some young children with Asperger's syndrome, the development of language appears to rely less on conversation with family and peers and more on what is absorbed from television programmes and films. Often the young child with Asperger's syndrome pronounces the word with the accent of the person whom he or she heard first say the word. This explains the tendency for some young children with Asperger's syndrome in the United Kingdom and Australia to speak with an American accent. Their vocabulary and pronunciation of words was

developed by watching television rather than talking to people and especially by watching cartoons and films that use American actors and voices. This characteristic can be quite conspicuous when other family members have the local accent, but the child with Asperger's syndrome talks as though he or she is a foreigner.

In Attwood (2007: 205) Tantam; Volden and Lord say that the child with Asperger's syndrome may also create his or her own words or neologisms. One child created the word 'snook' to describe a flake of chocolate in an ice block, and the word 'clink' for a magnet. Another child was asked why he was not interested in his baby brother and replied, 'He can't walk, he can't talk – he's broken.' When making his bedroom untidy, with toys strewn all over the floor, another child explained he was 'tidying down' (the opposite of tidying up). My sister-in-law described her ankle as the 'wrist of my foot', and ice cubes as 'water bones'.

Sometimes the sound or meaning of a particular word provokes great laughter or giggling in the child. He or she may repeatedly say the word aloud and laugh, with no intention of sharing the enjoyment or explaining why the word is so fascinating or funny. The humour is idiosyncratic to the child and can be very puzzling to a teacher or parent. This ability to provide a novel perspective on language is fascinating, and one of the endearing and genuinely creative aspects of Asperger's syndrome. Perhaps the child could be given a creativity prize for the lateral thinking that produces such novel words, phrases or descriptions, and be encouraged to incorporate them in his or her writing.

Although there can be positive qualities in the profile of linguistic skills,

there are specific difficulties. The most conspicuous is the inability to modify language according to the social context. Typical school-age children can engage in a reciprocal or 'balanced' conversation, aware of the knowledge, interests and intentions of the other person and the social conventions that determine what to say, how to say it and how to listen attentively. Speech pathologists describe the modification and use of language in a social context as the *pragmatic aspects* of language, and a subsequent section of this chapter will describe the difficulties in this area of language in more detail and provide remedial strategies for parents and teachers.

The prosody and especially the vocal tone of speech can be unusual, with some children and adults with Asperger's syndrome having a 'flat' vocal tone that is perceived as monotonous. The speech characteristics can include problems with volume, being too loud or too quiet for the context. Speech that is too loud can be extremely irritating for family members and especially difficult for teachers who are trying to encourage less noise in the classroom. The person's speech may also be unusually high-pitched or have a 'nasal' quality that is quite distinct and distracting for the listener. The fluency or delivery of speech can sometimes be too rapid, particularly when the person is excited or talking about a special interest. In contrast, speech may be unusually ponderous when the person has to think what to say, especially if the reply requires understanding what someone is thinking or feeling during a social conversation.

Conversation with a person with Asperger's syndrome can include moments when there appears to be a breakdown in the communication

‘transmission’. The person is deep in thought, deciding what to say and, to ensure total concentration, avoids looking at the face of the other person. Unfortunately, the temporary loss of conversational momentum and eye contact can be confusing to the other person, who expects an immediate response and is unsure whether to interrupt the person with Asperger’s syndrome to re-establish the dialogue. You should wait patiently, knowing that some adults with Asperger’s syndrome prefer not to be interrupted as an interruption can cause the person to start the whole thinking process again. While someone with Asperger’s syndrome can dislike being interrupted, that same person may be notorious for interrupting or talking over the speech of other people. Teachers can complain that the child hates being interrupted when he or she is talking or working but seems oblivious to the signals of when not to interrupt other people. A frequent request to speech pathologists and psychologists is for advice on how to stop the child continually interrupting the teacher.

During a conversation, the person with Asperger’s syndrome may frequently change topics, unaware that the logical link between the topics is not obvious to the listener. Such conversations or monologues appear to be without structure and are perceived as a stream of thoughts and experience that lack coherence or relevance to the context. The person fails to acknowledge of the listener, who is trying to follow the logic and wondering what the ultimate point will be and also whether he or she will have an opportunity to contribute to the conversation. There can be a conspicuous lack of inclusive comments such as ‘What do you think of that suggestion?’ or ‘Have you had a similar experience?’

In Attwood (2007: 207), Hhippler and Klicpera say that another children and some adults with Asperger's syndrome is to vocalize their thoughts, commenting on their own actions or giving monologues without needing a listener. A characteristic of all young children is to vocalize their thoughts as play alone or with others. By the time they start school, however, they learned to keep their thoughts to themselves. Eventually, talking to oneself is considered by some members of the public as a sign of mental disturbance. Children with Asperger's syndrome may continue to vocalize their thoughts many years after one would expect them to internalize them. This often disrupts the attention of other children in the class, and may lead to their being teased when they talk to themselves while alone in the playground. The child may also fail to hear the instruction of the teacher because he or she is too engrossed in a personal 'conversation'.

There may be several reasons for this behavior. First, the child may be less influenced by peers to be quiet, or less concerned at appearing different. The vocalizations may also have a constructive purpose or be reassuring. For example, an adolescent with Asperger's syndrome described how 'talking to myself helps me figure out and practice how to express ideas well', while another explained that:

You know I like the sound of my own voice because it keeps me from feeling lonely. I think there is also a little fear that if I don't talk a lot I may lose my voice. I didn't talk until I was almost five, you know. (Dewey 1991, p.204)

Another reason may be that person is rehearsing possible conversations for the following day, or repeating previous conversations to try to understand them. Sometimes children and adults with Asperger's syndrome, who are prone to being

anxious, talk to themselves as a form of self-comfort and reassurance. The person is externalizing the reassuring comments that typical people keep to themselves.

It is important to find out why the person talks to him- or herself. It could simply be developmental delay, or means of organizing his or her thoughts, improving comprehension and providing comfort. Should this aspect of language become a problem, then encourage the child to whisper rather than speak, and try to 'think it, don't say it' when near other people. I have noticed that when some adults with Asperger's syndrome are deep in thought, their lips can move as though the person has difficulty disengaging mind and mouth.

There are secondary social consequences of having unusual profile of language skills associated with Asperger's syndrome. Other children may withdraw from playing or talking with the child due to his or her problems with conversation skills and the child could be prone to being teased and ridiculed for his or her strange accent. Hans Asperger said that the language was 'often like a caricature, which provokes ridicule in the naïve listener' (Asperger [1944] 1991, p.70). Thus therapy programs to improve language abilities are an essential component of services for children with Asperger's syndrome.

2). The Art of Conversation

When listening to the speech of a child with Asperger's syndrome, you can be impressed with the child's use of complex sentences and extensive vocabulary of technical terms. However, the overall impression of the conversation is that, in contrast to evidence of linguistic ability, there are specific errors in the ability to have a natural conversation.

The person with Asperger's syndrome may not follow the conventional conversational rules regarding how to initiate, maintain and end a conversation. He or she may start the interaction with a comment irrelevant to the situation, or by breaking the social or cultural codes. For example, the young child may approach a stranger in the supermarket and strike up a conversation by saying 'Do you have a cylinder mower?' and then proceed to give a monologue demonstrating an encyclopedic knowledge of garden machinery. Once the conversation has begun there seems to be no 'off switch', and it only ends when the child's predetermined and practiced 'script' is completed. Sometimes the parents can predict exactly what the child is going to say next in a well-practised conversational script.

The child with Asperger's syndrome usually appears unaware of the effect of the monologue in the listener, oblivious to signs of embarrassment, confusion or desire to end the interaction. One has the impression that the child is talking, but not listening, and is unaware of the subtle non-verbal signals that should regulate the flow of conversation. During the conversation there can be a lack of recognition or appreciation of the context, social hierarchy and conventions and little attempt to incorporate the other person's comments, feelings or knowledge in the conversation.

In contrast to engaging in a conversation 'monologue' there can be times when the person with Asperger's syndrome can be very reluctant to participate in a conversation at all. The person may be notorious for being verbose when interested in the topic, but reluctant to maintain a conversation when the subject

matter is of little personal interest or has been introduced by another person (Paul and Sutherland 2003). have the impression that many people with Asperger's syndrome consider a conversation to be primarily an opportunity to exchange information, to learn or inform, and if there is no practical information to exchange, why waste time talking?

Another example of impaired conversation skills is knowledge on how to repair a conversation. When a conversation becomes confusing, perhaps because the other person is imprecise or the reply is unclear, the natural reaction of most people is to seek clarification in order to maintain the topic of conversation. When in doubt as to what to say the person with Asperger's syndrome can lack the confidence to admit 'I'm not sure what you mean by that,' 'This is not easy to talk about' or 'I'm lost for words' can take a considerable length of time to think of his or her reply, or may suddenly change the conversation to a topic he or she is familiar with. Bishop and Frizer Norburi say in Attwood (2007: 209) that people with Asperger Syndrome sometimes have lack flexibility of themes and thought and there may be problems generating relevant ideas in their conversation. Thus, the conversation can include abrupt changes of topic and tangential responses (Adams *et al.* 2002; Fine *et al.* 1994). An unfortunate characteristic of some conversations with a person with Asperger's syndrome is that the conversation eventually reverts to the person's special interest, or is characterized by 'and now for something completely different'.

When the conversational partner is confused, the person with Asperger's syndrome often lacks the mental flexibility to provide an explanation using other

words, or to facilitate understanding by using gestures or metaphor. When a child with Asperger's syndrome is asked a question or is expected to reply to a comment, there can be a tendency to avoid responding or offering new or relevant information (Capps Kehres and Sigman 1998). This is not necessarily indifference or insolence but another example of a genuine difficulty repairing and maintaining a conversation.

Another unusual feature of conversations is a tendency to make what appear to be irrelevant comments. A statement or question can be made that is not obviously linked to the topic conversation. These utterances can be word associations, fragments of the dialogue of previous conversations or seemingly quite bizarre utterances. It appears that the child says the first thought that comes to mind, unaware how confusing this can be for the other person. The reason for this feature remains logical structure or sequence for the statement or description, and an inability to consider the perspective of the other person. When this occurs, you are unsure whether to respond to the irrelevant comment or continue the conversation as if it had not occurred. I tend to ignore such comments and focus on the central theme of the conversation.

There can also be a tendency for children and adults with Asperger's syndrome to interrupt or talk over the speech of others. Temple Grandin describes how:

During the last couple of years, I have become more aware of a kind of electricity that goes on between people. I have observed that when several people are together and having a good time, their

speech and laughter follow a rhythm. They will all laugh together and then talk quietly until the next laughing cycle. I have always had a hard time fitting in with rhythm, and I usually interrupt conversations without realizing my mistake. The problem is that I can't follow the rhythm. (Grandin 1995, pp.91-2)

Such interruptions can be infuriating and imply that the person with Asperger's syndrome is being very rude. The conversational partner needs to recognize that this is a characteristic of Asperger's syndrome and not due to a lack of respect.

During a typical conversation there is the expectation that the person listening will show clear signs of paying attention to the speaker, and communicate signs of listening by nodding the head and making sympathetic facial expressions, or vocalizations such as 'uh huh' or 'yes'. These behaviours confirm a sense of rapport and being 'in tune' with the speaker. There should also be a synchrony of gestures and movements, especially when there is a positive relationship between the two people. These signals can be less apparent when one of the conversational partners has Asperger's syndrome. Although signs of disagreement may be clear, signs of agreement, attentive listening and sympathy may not be as conspicuous as one would expect. The person with Asperger's syndrome is often perceived as a poor listener. This may not be too much of a problem for a casual acquaintance, but is of concern to a partner, close relative, friend or colleague.

Sometimes the person with Asperger's syndrome can be criticized for being tactless or socially naïve during a conversation, perhaps saying something that is true but would hurt someone's feelings, or is inappropriate for the context. From early childhood, typical children modify the topic of conversation according to whom they are talking to. Such modifications are based on an understanding of social hierarchies and conventions and the need to inhibit certain comments when taking into account the other person's thoughts and feelings.

Sometimes the problem is not what was said by the person with Asperger syndrome, but the way he or she said it. This can give the impression that the person is overly critical, grudging with compliments, abrasive, argumentative and impolite. Other people will know when to think rather than say something and how to avoid or subtly modify comments that could be perceived as offensive. Once again, it is important to recognize that there may be no malicious intent.

Impaired or delayed Theory of Mind skills can also explain another characteristic of impaired pragmatic aspects of language. That is, the person with Asperger's syndrome can be unsure what the other person knows, or wants to know. When the mother of a typical child asks 'What did you do today at school?' the child has some idea of what his or her mother would like to know. The child with Asperger's syndrome, however can be dumbfounded in that the questions not precise. Does she want to know who I talked to, what I learned, where I went, who I played with, whether I was happy, whether someone teased me, or what the teacher said and did? The response can be avoid answering altogether, or to

embark on a detailed description of the day in the hope that something that is said will provide the right answer.

When asked to describe an event (that is, provide a 'narrative discourse'), the child with Asperger's syndrome may have significant difficulty providing an organized and coherent framework for the story (Able and Grenier 2005). At about six years of age, a typical child can organize a story into a narrative structure that is easily understood by the listener. There is a clear framework and logical sequence with an emphasis on key events, thoughts and consequences (Landa 2000). When asked what he or she did over the weekend, the typical child will analyze all the available information in order to determine which aspects are relevant and would be interesting to the listener, and will give consideration both to the time needed to impart these facts and the amount of the time available to tell the story. The child (and some adults) with Asperger's syndrome can have significant developmental delay in the narrative discourse aspects of a conversation. There may be no clear beginning to the story, too much or too little information provided for the listener, an absence of key information, and a tendency to be side-tracked with irrelevant information. There can also be a difficulty summarizing and getting to the point, which can be boring or irritating to the listener who expects a shorter and more coherent story. The facts may be there, but logical structure and the thoughts and feelings of the participants are often missing. The errors in the pragmatic aspects of language can cause other people to assume that the person with Asperger's syndrome is being deliberately

obtuse and uncooperative, and thus may be a reluctance to engage in subsequent conversations.

3). Literal Interpretation

The person with Asperger's syndrome tends to make a literal interpretation of what the other person says, being greatly confused by idioms, irony, figures of speech, innuendo and sarcasm. An example of a relatively simple literal interpretation of what someone says was when a young man was asked by his father to make a pot of tea. Sometimes later his father was concerned that he had not received his refreshment and asked his son, 'Where's the tea?' His son replied, 'In the pot, of course.' His son was unaware that the original request implied not just the preparation of the tea, but the presentation of a cup of tea for each person. The person with Asperger's syndrome is not being deliberately lazy, obtuse or defiant, but responding to the literal, not the implied, meaning.

During a diagnostic assessment, someone asked a young girl with Asperger's syndrome 'Can you count to ten?' to which she replied 'Yes', and she silently continued with her play. There can also be a literal interpretation of pictures. A child with Asperger's syndrome was watching a 'Road Runner' cartoon, where the coyote fell from a cliff and suddenly produced an umbrella to substitute for a parachute. The confused child commented, 'Why would he do that if it wasn't raining?'

The person is not being deliberately annoying, or stupid. Rather, he or she is less aware of the hidden, implied or multiple meanings. This characteristic also

affects the understanding of common English phrases, idioms or metaphors such as:

- Has the cat got your tongue?
- You're pulling my leg.
- A flat battery.
- I caught his eye.
- Looks can kill.
- Your voice is breaking.
- Keep your eye on the ball.
- Pull yourself together.
- I've changed my mind.

In Attwood (2007: 216) he said that he observed that each of these comments has caused some confusion for children with Asperger's syndrome, and you have to explain precisely the meaning of many figures of speech. Fortunately, the problem of making a literal interpretation has been recognized by parents and psychologists, and two books, one for children and the other for adults, provide an illustrated guide to understanding metaphors and everyday expressions (Stuart-Hamilton 2004; Welton and Telford 2004).

Social Stories™ can also be applied to help understand figures of speech, such as idioms. Carol Gray used the following example of a Social Story™ to explain one of the above phrases:

Sometimes a person says, 'I've changed my mind.'

This means they had one idea, but now they have a new idea.

I will try to stay calm when someone changes their mind.

When someone says, 'I've changed my mind', I can think of someone writing something down, rubbing it out and writing something new.

(Quoted in Attwood 1998, p.77)

Children can nominate a phrase they have found confusing such as 'chill out' or 'catch you later', and guess the meaning of the statement. A story can be composed to explain its meaning and describe those situations when the phrase may be used.

People with Asperger's syndrome are often very confused by teasing, irony and sarcasm. Based on Kerbel and Grunwell's statement in 1998, Attwood (2007: 217) says that the understanding of idioms is less advanced than one would expect considering the child's intellectual and linguistic abilities. Other children, and sometimes teachers, can have great fun exploiting this naïvety. Ironic remarks are more likely to cause the person with Asperger's syndrome to assume the person is lying (Martin and McDonald 2004). The hidden meaning is elusive. The person with Asperger's syndrome may also not have the flexibility of thought to understand an alternative meaning, and relies on logic rather than symbolism, and the assumption that the other person is saying exactly what he or she means. Figures of speech are perceived as illogical and yet another example of how typical people fail to make their intentions clear.

Making a literal interpretation can also lead to the assumption of behaviour or conduct problems. For example Donna Williams, in her autobiography, refers to how:

The significance of what people said to me, when it sank in as more than just words, was always taken to apply only to that particular moment or situation. Thus, when I once received a serious lecture about writing graffiti on Parliament House during an excursion, I agreed that I'd never do this again and then, ten minutes later, was caught outside writing different graffiti on the school wall. To me, I was not ignoring what they said, nor was I trying to be funny: I had not done *exactly* the same thing as I had done before. (Williams 1998, p.64)

Parents, teachers and family members need to be aware of the child's propensity to make a literal interpretation, and to stop and think how the comment or instruction could be misinterpreted or cause confusion. Whenever a literal interpretation occurs, it is important always to explain the hidden intention or full meaning.

4). Prosody

When listening to the speech of a person with Asperger's syndrome, you can become aware of unusual aspects of pitch, stress and rhythm, i.e. the prosody or melody of speech (Fine *et al.* 1991; Paul *et al.* 2005; Shriberg *et al.* 2001). There can be a lack of vocal modulation such that speech has a monotonous or flat quality, an unusual stress pattern, or over-precise diction with stress on almost every syllable.

Attwood (2007: 218) categorizes the three levels of prosodic function: grammatical, pragmatic and affective. The *grammatical* function is to communicate aspects such as whether the utterance was a question (with a rising pitch), or a statement (with a falling pitch), or whether the word used is intended

as a noun or a verb. This aspect of prosody appears to be the least affected in children and adults with Asperger's syndrome. The *pragmatic* function is to provide social information for the listener, using emphatic or contrastive stress to communicate thoughts, opinions and intentions, or to draw the listener's attention to information that is new to the conversation. This is the vocal equivalent of using a highlighter pen when reading.

Affective prosody functions as a means of communicating feelings and attitudes. For example, the simple request 'Come here' could be said with a tone of voice that would indicate the person has found something interesting and is happy; is anxious and needs reassurance; or is perhaps angry and about to administer an expected consequence (Pyles 2002). Research has confirmed the impressions of parents and clinicians, that the prosody of children and adults with Asperger's syndrome can be unusual, especially with regard to pragmatic and affective prosody (Shriberg *et al.* 2001). The person's speech may not convey the amount of social and emotional information that one would expect.

The prosody for some children and adults with Asperger's syndrome can also be perceived as dysfluent in terms of the frequency of word repetitions, fewer pauses than would occur with a typical speaker of that age, and distortion or unusual pronunciation of a word. There can also be problems with the volume, which is often overly loud, and there is sometimes a nasal and/or high-pitched quality that was first described by Hans Asperger and confirmed by subsequent studies of prosody (Shriberg *et al.* 2001).

The child or adult with Asperger's syndrome may also have difficulty understanding the relevance of the change in tone, inflection or emphasis on certain words when listening to the speech of the other person (Koning and Magill-Evans 2001). These subtle cues are extremely important in identifying the different intentions, thoughts and emotions. The following example is taken from Andrew Matthews' book *Making Friends*, and illustrates how the meaning changes when the emphasis is put on a different word (Matthews 1990, p.129).

I didn't say she stole the money
 I didn't say she *stole* my money [but she did *something* with it].
 I didn't say she stole *my* money [she stole *someone else's*].
 I didn't say she stole my *money* [she stole *something else*].
 I didn't say she stole my money [but *someone* said it].
 I *DIDN'T* say she stole my money [I *definitely* didn't say it].
 I didn't *say* she stole my money [but I *implied* it].
 I didn't say *she* stole my money [but *someone* stole it].

There are seven different meanings achieved simply by changing the emphasis of each word in the sentence. The person with Asperger's syndrome who has problems with prosody, in terms of both production and perception, will require guidance in understanding the messages conveyed by prosody. Role-plays, listening to audio recordings, and drama activities can be used to explain how and why the emphasis changes. Stress on a particular word can be conceptualized as similar to using a highlighter pen, with consideration as to which words need to be highlighted to convey thoughts, feelings and information that are important to the listener. A game of 'Spot the hidden message' can be used to identify the

speaker's thoughts and feelings when listening to an audio recording. This can be used to identify feelings and as a model to practise expressing a particular emotion. Some of the emotion communication activities can be used to improve the understanding and use of the prosodic aspects of language.

It is also important that children with Asperger's syndrome understand how their volume, speed of speech, intonation and so on affect the listener's ability to understand what they are saying. An audio recording can provide valuable insight, and strategies can be used to encourage comprehension of their speech, such as 'Your train of thought is going too fast for me to jump on board.'

5). Pedantic Speech

The speech of children and adults with Asperger's syndrome can be perceived as being pedantic, overly formal and pretentious (Ghaziuddin and Gerstein 1996; Ghaziuddin *et al.* 2000; Kerbeshian *et al.* 1990). The characteristics include providing too much information, an emphasis on rules and minor details, a tendency to correct errors in the previous utterance of the other person, the use of overly formal sentence structures, and making a rigid interpretation of what someone says that could be perceived as being argumentative rather than corrective. The person with Asperger's syndrome is often characterized as being a pedant, a comment which is not intended as a compliment.

The choice of words for children with Asperger's syndrome can be overly formal, as in the example of a five-year-old girl who, when collected from school by her older sister, asked, 'Is my mother home?' The older sister's reply was 'No,

Mum's not home yet.' Clearly, the family used the word 'Mum', but the girl with Asperger's syndrome used an unusually formal way of referring to her mother. People may be addressed by their full name and title; instead of saying 'Hello, Mary', the child may say 'Hello, Mrs Mary Smith.'

Sometimes the child's choice of words and phrases would be more appropriate for an adult than a child. The child's language style has been absorbed and imitated from listening to and preferring to interact with adults rather than peers. Adults, rather than other children, may be the more important influence in the developing speech patterns of school-age children with Asperger's syndrome. Baron-Cohen and Staunton say in Attwood (2007: 220) that there is a possibility the child's accent may not be consistent with local children, perhaps maintaining his or her mother's accent. We usually expect a typical school-age child's accent to change to that of his or her peer group at school, which is noticeable when the family has moved to an area with a different accent. The child with Asperger's syndrome is less likely to change his or her accent to that of other local children. Once the child with Asperger's syndrome has heard a particular word or phrase, the original enunciation will be continued such that the experienced listener may be able to identify whose accent is being echoed.

Another characteristic of being pedantic is that during a conversation with someone with Asperger's syndrome, the conversational partner soon recognizes that abstractions and a lack of precision are rarely tolerated. Family members have learned to avoid comments or replies using words such as 'maybe', 'perhaps', 'sometimes' or 'later'. For example, Therese Jolliffe explains how:

Life is such a struggle; indecision over things that other people refer to as trivial results in an awful lot of inner distress. For instance, if somebody at home says, 'We may go shopping tomorrow', or if somebody says, 'We will see what happens', they do not seem to realise that the uncertainty causes a lot of inner distress, and that I constantly labour, in a cognitive sense, over what may or may not occur. The indecision over events extends to indecision over other things, such as where objects are to be put or found and over what people are expecting from me. (Jolliffe *et al.* 1992, p.16)

When anxious, the person with Asperger's syndrome can become increasingly pedantic. Sometimes a child with Asperger's syndrome will incessantly bombard a parent with questions seeking reassurance about when an event will occur. To avoid ambiguity and reduce anxiety, the parent may become as pedantic as the child.

6). Auditory Perception and Distortion

Several autobiographies of people with Asperger's syndrome have included reference to problems with focusing on one person's voice when several people are talking, or distorted perceptions of other people's speech. For example, in Attwood (2007: 221) he explains his clinical experience towards a girl with Asperger Syndrome, he remembers a child with Asperger's syndrome who was in an open-plan classroom that comprised two classes. The teacher of his class was reading out a maths test while the teacher in the other class was reading out a spelling test. When his teacher marked his test paper, she noted he had written the answers to both tests.

Candy described how 'many voices make speech difficult to understand', and the child can be very confused when too many people are talking at the same

time, especially if they are all talking about the same topic, as occurs in the background chatter in a classroom. We now have research evidence to confirm significant problems for children and adults with Asperger's syndrome in their ability to understand what someone says when there is background speech or noise (Alcantara *et al.* 2004) and perceive, discriminate and process auditory information (Jansson Verkasalo *et al.* 2005).

Most people use moments when the background noise briefly subsides to work out the gist of the conversation, i.e. to 'fill in the gaps' in order to understand what someone is saying. People with Asperger's syndrome are not very good at this ability. This is invaluable information for parents and especially teachers. To help auditory perception and understanding, it is important to minimize background noise and chatter. The child should be positioned as close to the teacher as possible, so that he or she can hear the teacher more clearly, and may have the confidence to say whether or not an instruction was audible. The problem is one of auditory perception, not necessarily inattention.

The distortion of someone's speech is explained by Darren White:

I was sometimes able to hear a word or two at the start and understand it and then the next lot of words sort of merged into one another and I could not make head or tail of it. (White and White 1987, p.224)

I was often lazy at school because sometimes my ears distorted the teacher's instructions or my eyes blurred to stop me seeing the blackboard properly and the teachers would say 'On with your work, Darren.' (White and White 1987, p.225)

Donna Williams describes how:

Anything I took in had to be deciphered as though it had to pass through some sort of complicated checkpoint procedure. Sometimes people would have to repeat a particular sentence several times for me as I would hear it in bits and the way in which my mind had segmented their sentence into

words left me with a strange and sometimes unintelligible message. It was a bit like when someone plays around with the volume switch on the TV. (Williams 1998, p.64)

Temple Grandin also refers to how:

Even now, I still have problems with tuning out. I will be listening to my favourite song on the radio and then notice that I missed half of it. My hearing shuts off unexpectedly. In college I had to constantly keep taking notes to prevent myself from tuning out. (Grandin 1990, p.61)

Should such problems become apparent, perhaps appearing as ‘selective deafness’, then it is important for a speech pathologist or audiologist to assess the child’s skills with the cortical processing of auditory information. This is not strictly a hearing problem but a problem with how the brain processes someone’s speech.

The child should be encouraged to ask the person to repeat what he or she said, simplify the comment or instruction or put it into other words. Unfortunately, children with Asperger’s syndrome can be reluctant to seek help because of a fear of being considered stupid or annoying the adult. A strategy to be sure the child perceived and understood the instruction is to ask the child to repeat aloud what you said, or ask ‘Can you tell me what you’ve got to do?’

It may also help to pause between each sentence to allow the person time to process what you have said, and to use written instructions. The advantages of these techniques are explained by Therese Jolliffe in the following quotation:

But when somebody talks to me I have to really try and listen carefully, if I am going to stand any chance of working out what the words are. At school and during my first degree I was helped by the fact that I could read up topics in advance, things were also written down on the blackboard, the work tended to follow a logical progression and because new material was being put across to students, teachers could not talk too fast, rather they seemed to leave gaps of a second or two between each sentence which enabled me to guess more accurately what I had heard. When I read books

the problem of deciphering what the words actually are does not exist because I can see immediately what they are meant to be. (Jolliffe *et al.* 1992, p.14)

Thus, the person with Asperger's syndrome is more likely to understand if he or she has to focus on only one voice, there is a brief silence between each instruction and the instructions can also be read. An example of the value of reading rather than listening to understand what to do is a young adult with Asperger's syndrome who was successful in his job, as his line manager would provide a written summary of what to do, as well as spoken instructions. When a new line manager was appointed, he refused to spend time writing his instructions for the employee with Asperger's syndrome. This young man then had considerable difficulty following the complex spoken instructions on the factory floor, and became extremely anxious that he did not know exactly what to do, and, indeed, his work performance deteriorated. Eventually the new line manager acknowledged the wisdom of writing instructions for this particular employee.

Some children with Asperger's syndrome develop precocious reading abilities in terms of their ability to decode print, but their level of understanding is limited by their level of language development. The child may be able to read aloud complex words that would be very difficult for other children of that age to say correctly. However, an assessment of the child's reading ability usually indicates relatively advanced reading accuracy but reading comprehension consistent with his or her language abilities. Thus, the printed or written instructions for a child with Asperger's syndrome will need to be consistent with

the child's level of language comprehension rather than based on his or her ability to say or read complex words.

7). Verbal Fluency

One of the language characteristics of the child with Asperger's syndrome is that he or she may talk too much or too little. Sometimes the child's genuine enthusiasm for the special interest leads to garrulous speech and questions, a never-ending 'babbling brook' (another example of a potentially confusing figure of speech) which can be quite endearing – if occasionally tedious. The child is keen to develop and demonstrate his or her knowledge with a remarkable verbal fluency, but may have to learn the cues that indicate when to be quiet.

In contrast, some children with Asperger's syndrome may have periods when they are genuinely 'lost for words' or even mute. Clinical experience has identified children with Asperger's syndrome who will talk only to their parents and are electively mute with other adults or in the classroom (Gillberg and Billstedt 2000; Kopp and Gillberg 1997). Verbal fluency is affected by anxiety, as explained by Therese Jolliffe:

One of the most frustrating things about autism is that it is very difficult to explain how you are feeling; whether something hurts or frightens you or when you are feeling unwell and you cannot stick up for yourself. I take Beta Blockers sometimes to reduce the physical symptoms of fear and although I can now tell people if something frightens me, I can never actually tell them while the event is occurring. Similarly, on several occasions when I have been asked what my name is by a stranger I cannot always remember it and yet when I am more relaxed I can remember phone numbers and formulae after just hearing them once. When I am very frightened by somebody or something, or I am in pain, I can often make motor movements and a noise, but the words just do not come out. (Jolliffe *et al.* 1992, p.14)

Thus, being lost for words or even mute may be due to a high level of anxiety. Certainly some adults with Asperger's syndrome are prone to stuttering when anxious. Here the problem is not strictly impairment in language skills, but the effect of emotion on the ability to speak. Should this problem become apparent, there is a range of strategies to help the person with Asperger's syndrome cope with anxiety.

5. Mozart and the Whale

Mozart and the Whale is a film about two people with Asperger's Syndrome (a form of high-functioning autism) and how their ailment impacts their relationship. Josh Hartnett plays as Donald, an eccentric, but talented math genius who organizes a support group for other autistic people. Australian actress Radha Mitchell plays Isabelle, a musically-inclined lady who joins Donald's group and eventually becomes his love interest. It is interesting to watch two adults with Asperger's Syndrome falling in love. The film chronicles how their relationship begins and the difficulties of trying to coexist in a romantic situation on the autism spectrum.

Myles (2005) said that Asperger Syndrome, in short, is a difference in the mind that cause difficulties relating to people, and in some cases, uncommon reactions to certain stimuli. It's related to a more commonly known condition, autism, but tends to be milder. People with Asperger's have problems with social skills, have certain interests they dwell on, and don't easily 'change gears.' Some of them are introverted, and others try to relate, but come off as sort of odd.

Introversion, possibly, could be a reaction to being misunderstood. Generally they are gifted, and grow up to live more independently than people who are autistic.

Overall, this *Mozart and the Whale* movie seems like more of a tool to explain Asperger Syndrome than a proper story.

6. Previous Research Findings

Researches dealing with psychopragmatic analysis, especially autistic savant's person language have been conducted for several times. In this psychopragmatics case, the researcher presents the previous study has relation to the researcher's study; that is, the study that concerns with Autistic Savant features, especially in communication impairments and the use of the illocutionary acts by the Asperger syndrome person. The research was conducted by Erma (2010) in the title "*A Psychopragmatic Analysis of Autistic Savant Person's Language in Rain Man Movie*". The research focuses on verbal language of autistic savant person, the use of the illocutionary acts by autistic savant person, and the use of conversational implicature based on maxims on an autistic savant person's utterances as reflected in *Rain Man* movie.

After conducting the research the finding of Erma's (2010) research are that main character's (Raymond) language reflect all the criteria of autistic disorder (except the excluded features) and the savant skill that he possesses. For the use of illocutionary acts by Raymond, he is only able to perform 4 types of illocutionary acts, they are: assertive, directive, expressive, and commissive. For the conversational implicature used by Raymond, Erma found that he uses 4 maxims and 3 maxims unintentionally flouted. The maxims are maxim of

quantity, quality, manner and relation. Meanwhile, the unintentionally flouted maxims used by Raymond are maxim of quantity, manner, and relation.

In this research, entitled “*A Psychopragmatic Analysis on Communication Impairments and Illocutionary Acts in Asperger Syndrome Character’s Conversation Portrayed in Mozart and the Whale Movie*”, the objectives are to figure out the communication impairments of a Person with Asperger syndrome in communicating with others as portrayed in the main character’s language and to describe the illocutionary acts used by the main character in the conversation.

Compared to the previous research, this research differs in several aspects. First, subject of the research. In Erma’s research the subject of the research is the Autistic savant person, while, the subject of the present research is a person from Asperger syndrome. Autistic savant is different with Asperger Syndrome, because people with Asperger Syndrome have, by definition, normal to above-normal intelligence, whereas people with autism can have a range of intellectual functioning from below to above normal.

The next difference is in Erma’s research, is the objectives of the research in which one of the objectives is to derive the conversational implicature based on maxims. On the other hand, in the present research, the researcher does not propose that issue as his objective of the research. The present objectives of the research are to figure out the communication impairments of a Person with Asperger syndrome in communicating with others as portrayed in the main character’s language and to describe the illocutionary acts used by the main character in the conversation.

The last difference is the movie that researcher uses object of the research. In Erma's research the movie used is *Rain Man*, meanwhile, *Mozart and the Whale* is used for the present research.

7. Conceptual Framework and Analytical Construct

a. Conceptual Framework

This research uses two approaches to solve the formulations of the problem. The two approaches are Psycholinguistics and Pragmatics (Psychopragmatics). Psycholinguistics is employed by the researcher to solve the first problem in figuring out the communication impairments of a Person with Asperger syndrome in communicating with others as portrayed in the main character's language. On the other hand, Pragmatics is used to solve the second problem in concerning the illocutionary acts used by the main character in the conversation.

Language disorders is the result of the brain damage, it simply says that when someone has a damage in his brain especially in the part where it functions to maintain his ability in using language. Language disorders divided into two categories, they are developmental language disorders, and acquired language disorders. In this research, the researcher conducts the research on people with Asperger syndrome. Asperger syndrome is under developmental language disorders.

Moreover, in analyzing Asperger syndrome's language in the conversation in the movie, the researcher needs another approach in order to interpret his language. In this, Pragmatics is used by him to describe Asperger syndrome's

language function and its meaning. Hence, speech acts in terms of Illocutionary acts are used to analyze them.

b. Analytical Construct

In conducting the research, the researcher uses the systematic way as presented in the analytical construct below:

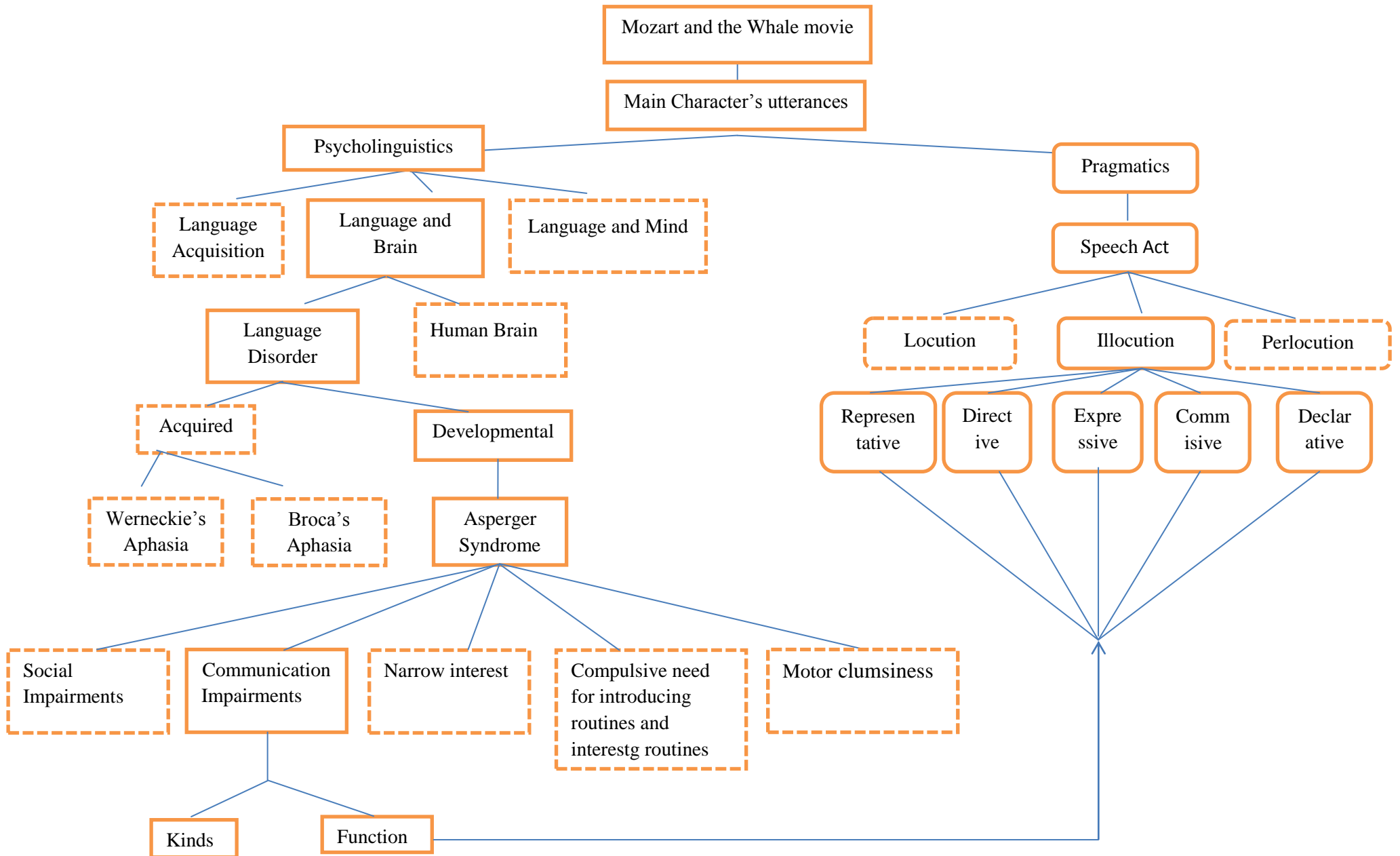


Figure 1. Analytical Construction

Figure 1. Analytical Construction

CHAPTER III

RESEARCH METHOD

A. Research Method

The method of this research was descriptive qualitative. Bogdan and Taylor (in Moleong, 2003: 3) state that as a qualitative research, the research produces the data description in the form of written or spoken words from observable people or behavior. In addition, Wiersma (1995: 12) quotes a definition of a qualitative research provided by Krathwohl (1998: 690) that it is a research that describes phenomena in words instead of numbers or measures.

Vanderstoep and Johnston (2009: 7) define a qualitative research as producing a narrative or textual description of the phenomena under study. Thus, according to them, the findings of a qualitative research will be not in the form of statistic (quantitative). The methods of this study solve an actual problem by collecting, classifying, analyzing, and interpreting data. Thus, a qualitative research taps into researcher's interpretation of his or her experience. The method of a qualitative study itself is inductive

Furthermore, according to Vanderstoep and Johnston (2009: 35), in selecting a research strategy, qualitative research may employ descriptive research which describes the attitudes, and behavior of the subject under study during the investigation. Thus, in this strategy, the researcher has no control over the variables. He only reports what has happened or what is happening.

B. Data and Source of Data

The data of this research were the utterances of the main character, Donald Morton, in *Mozart and The Whale* movie. The utterances were in the forms of words, phrases, clauses, sentences, or even paragraphs. This is similar to what Bungin (2007) mentions in his book that qualitative data are in the forms of sentences, utterances, even short stories. He says that the units to analyze in a qualitative method can be categorized into four categories: individual, group or family, society, and social institution. This research employs the individual unit of analysis – the communication impairments that happens in Donald Morton character and the illocutionary act used by him. In other words, the data of this research are the utterances spoken by Morton. However, not all of Morton's utterances are used as the data of this research, but only Morton's utterances in which the phenomenon of communication impairments exist.

The data source of this research were the utterances from a movie transcript which was downloaded from the internet.

C. Technique of Data Collection

The techniques of collecting data in this research are illustrated as follows:

1. Observed *Mozart and the Whale* movie which is related to the topic (Asperger Syndrome).
2. Collected the data from the main character's utterances which are related to the topic.
3. Selected the data from the main character's utterances which are related to the topic.

Note:

SL	:Speech and language peculiarities	6	: Limited use of gestures
NC	:Nonverbalcommunicationproblems	7	: Clumsy or gauche body language
R	:Representative	8	: Limited facial expression
Dir	: Directive	9	: Inappropriate facial expression
C	: Commissive	10	: Peculiar, stiff gaze
E	: Expressive	11	: Agreeing
D	: Declarative	12	: Stating
Con	: Conversation	13	: Informing
1	: Delayed speech development	14	: Protesting
2	: Superficially perfect expressive language	15	: Ordering
		16	: Request
3	: Formal pedantic language	17	: Feeling anxious
4	: Odd prosody, peculiar voice character	18	: Feeling like
		19	: Feeling frightened
5	:Impairment of comprehension including misinterpretations of literal or implied meanings	20	: Refusing
		21	: Promising
		22	: Declaration

D. Research Instrument

The main instrument in this research was the researcher himself. He was involved in all process of the research observation, data analysis and interpretation the data. Moleong (2001: 121) states that the key instrument in qualitative method is the researcher, who acts as the main player, the designer, the data collector, the analyst, the data interpreter, and the reporter of the researcher.

Meanwhile, the secondary instruments were data sheets, which are consisted of linguistic phenomena found in utterances by the main character who has Asperger Syndrome in *Mozart and the Whale* movie.

E. Technique of Data Analysis

The next step was the analysis of the data. In this research, questioning, observing, recalling, and identifying process are involved. This is in line with Bogdan and Biklen (2003 :147) who state that data analysis as the process of

systematically searching and arranging accumulated materials to increase the researcher understanding and to enable the researcher to present what has been discovered to others.

The techniques of data analysis were illustrated as follows:

1. Watched the movie and then read the script that were retrieved from the internet, in order to check the correctness of main character's utterances;
2. Recorded the data into data sheet to recognize the utterances of main character in *Mozart and the Whale* movie dealing with the reflection of Communication Impairments, Asperger Syndrome, and Illocutionary Acts;
3. Decoded the data based on the classification that are in the form of a data sheet;
4. Applied the trustworthiness of the data by asking friends and lectures to check the data, to support the analysis of the data;
5. Described and interpreted the data in order to answer the research questions; and
6. Derived conclusion based on the result of the research.

F. Data Trustworthiness

According to Moleong (2001: 173), the criteria to check the data include credibility, dependability, conformability, and transferability. In this research, credibility, dependability and conformability were applied in order to get data trustworthiness. The credibility of the data was gained through triangulation technique. These were four main types of triangulation: by source, by methods, by researcher, and by theories. Sources were in the form of videos and scripts that are

retrieved from internet website and DVD. Meanwhile, to get credibility of the data through triangulation by theories, this research used some books, papers, journals, and some written sources from the internet that were related to pragmatics, psycholinguistics, and asperger syndrome.

Dependability refers to stability and the track ability of the changes in both data collection and data analysis. In this research, the data were read and reread to get certainty and stability of the data. Thus, to achieve the degree of dependability, the process of data collection and data analysis were examined by matching the research questions with the result of data collection.

The idea of conformability was neutrality, meaning that the data were more pointed to the inquiries than the subjectivity of the researcher. To set the degree of conformability, the data were provided and the peer reviewers were asked to give suggestion and opinion about the data analysis. The data also were checked from the point of view of the researcher's consultants Suhaini M. Saleh, M.A and Eko Rujito, M.Hum. , their judgments on the research give advantages to the accuracy of research findings.

CHAPTER IV

FINDINGS AND DISCUSSION

This chapter is divided into two parts: the findings of the research and the discussion of data analysis. The first part shows the findings of the two objectives of the research: the communication impairments in communicating with others as experienced by the main character in *Mozart and the Whale*, and the illocutionary acts used by the main character while he is communicating with others. Meanwhile, the second part presents the discussion of those findings.

A. Findings

The findings of the objectives of this research are presented in the forms of words. However, to make each finding clear, tables are employed to present the occurrence of each type in number and percentage. Thus, number is used to support argument of the data occurrence.

1. Types of Communication Impairments of Person with Asperger syndrome Experienced by the Main Character in *Mozart and the Whale*

The findings of communication impairments' types of person with asperger syndrome in *Mozart and the Whale* are presented in the following tables:

Table 2. Data Findings of Types of Communication Impairments of Person with Asperger syndrome Experienced by the Main Character in *Mozart and the Whale*

No	Communication Impairment	Frequency	Percentage
	Speech and language peculiarities; and Non-verbal communication problems		
1.	Delayed speech development	0	0%
2.	Superficially perfect expressive language	2	7.41%
3.	Formal pedantic language	0	0%
4.	Odd prosody, peculiar voice characteristics	0	0%
5.	Impairments of comprehension including misinterpretations of literal or implied meaning	2	7.41%
6.	Limited use of gestures	6	22.22%
7.	Clumsy body language	6	22.22%
8.	Limited facial expression	4	14.82%
9.	Inappropriate facial expression	6	22.2%
10.	Peculiar stiff gaze	1	3.7%
	Total	27	100%

Based on the table above, Morton only able to perform 7 from 10 types of communication impairment. Based on the table above, limited use of gestures, clumsy body language, and Inappropriate facial expression are the most frequent occurrence with 22.22% or 6 times occurrences per each. For the second rank is reached by limited facial expression with 14.82% or 4 times occurrences. Next rank is reached by superficially perfect expressive language and impairments of comprehension including misinterpretations of literal or implied meaning with 7.41% or 2 times occurrence per each, and the last rank is given to peculiar stiff gaze with 3.7% or 1 times occurrence per each. Meanwhile, the rest type that are not acted by Morton is odd prosody, peculiar voice characteristics, formal pedantic language and delayed speech development.

2. The Illocutionary acts used by the Main Character which occur in *Mozart and the Whale*

Concerning with the second objective of this research, there are 17 occurrences which are related to illocutionary acts used by Morton as the main character in *Mozart and the Whale*. For further explanation about this topic, the table below shows the frequency of occurrence of the illocutionary acts used by the main character.

Table 3. Data Findings of The Illocutionary acts used by the Main Character which occur in *Mozart and the Whale*

No	Illocutionary acts	Frequency	Percentage	
1.	Assertive/ Reperesentative	Agreeing	0	0%
2.		Stating	4	23.5%
3.		Informing	11	64.7%
4.		Protesting	0	0%
5.	Directive	Ordering	2	11.8%
6.		Request	0	0%
7.	Expressive	Feeling anxious	0	0%
8.		Feeling like	0	0%
9.		Feeling frightened	0	0%
10.	Commissive	Refusing	0	0%
11.		Promising	0	0%
12.	Declarative	Declaration	0	0%
Total			17	100%

Based on table 3, Morton is only able to perform 2 types of Illocutionary act. The 2 types are: Assertive or Representative and Directive. Assertive or Representative consists of informing occurs 11 times or 64.7% and stating occurs 4 times or 23.5%. Directive consists of ordering occurs 2 times or 11.8%. From the calculation, it can be concluded that the most frequent occurrences go to informing, then stating and the last is ordering. Meanwhile, the three types that Morton unable to perform are Expressive, Commissive, and Declarative. The ability to employ the two types provides evidences that Morton is able to state

what he believes to be the case or not and is able to ask someone to do something. The inability of employing the other types proves that Morton is unable to express his psychological state, commit himself to an action and change the world of others.

Although the result of this findings gives an idea about Morton's capability of performing 2 types of Illocutionary act, it still give an evidence that he has minimum function in performing speech act. As provided in table 3, Morton performs Assertive or Representative acts only for informing and stating. Directive is performed only for ordering. Expressive, Commissive, and Declarative are the types that become his deficiencies because he is unable to perform speech act which has the function related to the activity of engaging social interaction with others, but he is able to perform speech act which has the function related to his personal interest, in this case is calculating numbers.

B. Discussion

In this part, the researcher presents a deep elaborative discussion of the findings for each objective. The discussion also provides examples for each phenomenon.

1. Types of Communication Impairments of Person with Asperger syndrome

Experienced by the Main Character in *Mozart and the Whale*

The findings show that almost all of the types of communication impairment of person with Asperger syndrome experienced by Morton. From all ten types of communication impairments, eight types occur in this movie as experienced by Morton. They are limited use of gestures, limited facial

expression, inappropriate facial expression, clumsy body language, superficially perfect express language, impairment of comprehension including misinterpretations of literal or implied meaning, delayed speech development and peculiar stiff gaze. Meanwhile, the absent type are odd prosody, peculiar voice characteristic and formal pedantic language. Below are the analyses of each type of communication impairments experienced by Morton found in this movie.

a. Limited use of gestures, Clumsy body language, and Inappropriate facial expression

Limited use of gestures, inappropriate facial expression and clumsy body language are the most occurrence communication impairments phenomena in *Mozart and the Whale* movie. They occur 22.2%, meaning that from 27 data of communication impairments which occur in this movie they occur 11 times per each. Gesture is a part of body language. Gestures can be some of the most direct and obvious body language signals. Waving, pointing, and using the fingers to indicate numerical amounts are all very common and easy to understand gestures. In *Mozart and the Whale* movie Morton has very limit use of gestures. The examples of this type are available after the explanation of inappropriate facial expression and clumsy body language, these there types: limited use of gestures, inappropriate facial expression and clumsy body language expression occur simultaneously in one conversation in several times.

Body language is a form of mental and physical ability of human non-verbal communication, consisting of body posture, gestures, facial expressions, and eye movements. Humans send and interpret such signals almost entirely

subconsciously. Some people use and understand body language differently, or not at all. Interpreting their gestures and facial expressions (or lack thereof) in the context of normal body language usually leads to misunderstandings and misinterpretations (especially if body language is given priority over spoken language). It should also be stated that people from different cultures can interpret body language in different ways. In this movie Morton's body language is uncertain and seems too clumsy, this is happened because he has an Asperger's syndrome.

Facial expressions are also among the most universal forms of body language. The expressions used to convey fear, anger, sadness, and happiness are similar throughout the world. Through facial expressions people may know if someone is lying or not. In this movie, sometimes Morton has an inappropriate facial expression so that people around him unable to interpret it. Here are the examples of those three types.

(Crushing another car)	with	:	What the hell is this? What's the matter with you? Are you crazy or something?
Man:			Look at this! Look at all...! Who's gonna pay for all this? I am talking to you. This is coming out of you, pal.
Morton		:	We're gonna get you home before group. (talk to his bird)
The passenger		:	Hey, where are you going? You can't leave us right here.
Man		:	Don't walk away. Come back here! You...!

No.3. NC: 6,7/ R: 12/ Con: 21-26

In this conversation, Morton's car crushes with another car. It happens because he does not concentrate well while he is driving his car. Because of that accident, he feels anxious and frightened. He has limited use of gestures so that in

facing this situation his body language is clumsy too. His eye contact is weird, he does not even have any courage to stare the man's eyes and asking for apologize after the accident. He cannot answer the questions which are given by the man, he feels so nervous, so that he prefer talking with his bird to talking with the man, who has the car which is crushed by him. The utterance of Morton toward his bird can be categorized as statement, in this case, he wants to state that it is better for them to leave the man because he does not want to solve the problem between him and the man. Morton's action is the impact of his nervous and frightened feeling, so that he cannot even think correctly and it seems he shows his irresponsibility in this scene.

Another example which shows those three types is presented in the datum below.

Morton's friend	:	Quick. What's 5,589 times 3,972 divided by 17?
Little morton	:	<u><i>1,305,853 point 411 etc.</i></u>
Morton's friend	:	See? I told you.

No.5. NC: 6,9/ R: 13/ Con: 122-124

The setting of this conversation is in the kindergarten playground. There, little Morton is eating his lunch on the bench. Then his friends come to him and ask him a question in order to test his ability in calculating numbers by giving him a difficult question which cannot be answered by an elementary student like him without using a calculator. The result is that Morton's answer is correct. In doing conversation with his friends, he is too busy with his lunch instead of look at their eyes he does not even stare at their eyes. Moreover, he often shakes of his head and this can be categorized as limited inappropriate gesture. Those two things above indicate the impairment in communicating between Morton and his friends.

The Illocutionary act of this utterance is to inform Morton's friends the answer of the question. The last example is presented as follow.

- Morton : **You know, a mandrill spends two hours a day eating breakfast. So, when you think about it, that's 2,628,000 seconds a year eating breakfast which only leaves him 28 million... 908 thousand seconds a year not to eat breakfast.**
- Isabelle : (laugh)
- Morton : You know, I don't have to do numbers all the time. I can control myself.
- Isabelle : Don't stop. Don't ever stop. I love it.

No.8. NC: 6-9/ R: 13/ Con: 282-285

This conversation happens at the mall when Morton and Isabelle hanging out together. He starts the conversation by informing her about time allocation of breakfast each day by a mandrill. Here, he uses his unique ability in numbers when he explains it. In this conversation, it can be seen that he has limited use of gesture, clumsy body language. In addition he often close and open his eyes, and often looking up rather than staring at her eyes these can be categorized as limited and inappropriate facial expression. Furthermore, Isabelle's response toward his explanation is laugh, which make him feels uncomfortable. Morton says he will not do it anymore if it is necessary, but surprisingly Isabelle appreciates it because she knows that it is hard for an Asperger Syndrome people to neglect his nature habit.

b. Limited facial expression

In *Mozart and the Whale* movie, limited facial expression appears 14.82%. Meaning that from 27 data of communication impairment which appear in this

movie, inappropriate facial expression or gestures appear 4 times. Facial expressions are also among the most universal forms of body language. The expressions which are used to convey fear, anger, sadness, and happiness are similar throughout the world. Through facial expressions people may know if someone is lying or not. In this movie, sometimes Morton only uses particular expression whenever he sad, nervous, or feeling uncomfortable. This can be categorized as limited facial expression. For normal people, each feeling has different facial expression. However, it cannot happened to Morton. As people with Asperger's syndrome, he fulfills one of 10 types of its characteristic. It is limited facial expression. Here are the examples of limited facial expression which are happened in the movie experienced by Donald Morton.

Morton	:	It's kind of like in the arcade. When I want to factor a number I just I visualize it going across my eyes. <u>Pick a number.</u>
Isabelle	:	589
Morton	:	Okay. So then I shoot prime numbers at it, so 3 won't go into it and 5 won't go in it. It won't even have a chance because it doesn't end in a 5 or a 0. And then you know You know, 7, 11, 19. When I shoot 19, it breaks into two 19 and 31.
Isabelle	:	Your process is very sensual.

No.11. NC: 8,9/ R: 13/ D: 15/ Con: 436-447

In this situation, Morton wants to explain Isabelle the way he factors a number. For the first bold and underlined sentence, he orders her to pick up any number she wants. After that he explains how to factor that number. When he talks about this, he often close and open his eyes, often looking up rather than staring at her eye, he also had limited and inappropriate facial expression. This conversation shows that Morton has a special ability in numbers. The

illocutionary acts of those utterances are ordering and informing. It is considered as order when he asks Isabelle to pick a number, but it is considered as informing when he informs the way he factors a number. The last example of limited facial expression is presented in the following table.

Morton	:	Your license plate is better. You can trade the letters for Roman numerals, that's 215. If you add the one, that's 216. That's 6 cubed. 27 is 3 cubed. I'm doing all the numbers in the parking lot. It helps calming me down.
Homeless man	:	Did you lose your job?
Morton	:	No, my woman And my shower curtain.

No.12. SL: 2/ NC: 6,8/ R: 13/ Con: 619-629

After getting mad to Isabelle because of throwing away his shower curtain, Morton runs away to the parking lot. There, he meets a homeless man, then he tells that he loses his girlfriend and shower curtain. Moreover, he tells to him about his habit in counting the plat number of the cars in order to make him calm down whenever he getting troubles. When he talks to the homeless man he cannot stand properly, he is so nervous, and his eye contact is so abnormal because he does not even stare at the homeless man's eyes when he is speaking with him. He also has limited use of gestures and facial expression. The illocutionary act of this utterance is informing. In this utterance, Morton informs the homeless man about his habit in calculating numbers or calculating the plat number of the cars in the parking lot when he is in troubles, and it can help calming him down.

c. Superficially perfect expressive language and Impairments of comprehension including misinterpretations of literal or implied meaning

People with Asperger's syndrome sometimes so quiet and do not saying a single word, but there is a time when they suddenly start speaking because they "have something to say". Some of them actually say: "Why should I speak before I have something important to say?" There are also children who are able to read before they start speaking. They have superficially expressive perfect language and they are very often formal and pedantic in their style. This kind of characteristic also happened to Morton. There is a conversation in which he suddenly speaks to his passengers in the taxi about his job in the taxi company. Here are the examples of this type of communication impairment.

Passengers	(<i>doing</i>	:	@#%#@#&^%#
<i>conversation</i>	<i>in</i>		
<i>Japanese language</i>)			
Morton (interrupting)	:	But this was different. I can feel it. Even though I've been here for about 7 days, 9 hours and 37 minutes.	

No.1. SL:2/R:13/ Con: 5-6

The setting is in the taxi. In this situation, Morton tries to interrupt the passengers' conversation in order to make a conversation between him as a taxi driver and them as his passengers by informing that being a taxi driver is the best job he ever had along this time. Unfortunately he can't get the situation that the passengers are still in doing serious conversation. From the explanation above, the researcher categorizes Morton as a person with perfect expressive language. It is shown when he talks too much to the passengers as they are his close friends, in fact, they only just meet once in that taxi. Moreover, in this conversation there is a typical characteristic of person with Asperger syndrome, it is shown when he says

7 days, 9 hours and 37 minutes. Every person with Asperger syndrome has special interest which is followed by the ability of it, and in this case, Morton has special interest in Mathematics and he is good in calculating numbers. The other example of this type is available in the following table.

Passengers (*still doing conversation in Japanese language*) : @#% %#@#&^%#

(Radio is on)

Morton (listening to the radio then interrupting) : **See? 87 last checked in at 4th and Wall which puts in a good 13 minutes away, while 223 and 41 are both south the Interstate, which makes them much, much closer to Division and Trent.**

No.2. SL:2/ R: 13/ Con: 11-14

This conversation takes place in the taxi. In this conversation, Morton tries to explain to the passengers that radio is the main cause of car accidents in that area. The researcher categorizes Morton as a person with perfect expressive language. It is shown when he talks too much to the passengers as they are his close friends. Moreover, his interest in mathematical calculation also appears, it is shown when Morton informs the passengers about “**87** last checked in at **4th** and Wall... which puts in a good 13 minutes away, while **223** and **41** are both south the Interstate...”. After all of his explanation, the passengers are still do not give any response to him, and it shows their unawareness to him. Moreover, Morton still does not get the point that the passengers do not want to be disturbed by giving nonverbal communication cues to him by ignoring him when he talks to them.

The next type which reaches this rank is impairments of comprehension including misinterpretations of literal or implied meaning. The person with Asperger's syndrome tends to make a literal interpretation of what the other person says, being greatly confused by idioms, irony, figures of speech, and sarcasm, so that they usually have misinterpretation of literal or implied meaning. An example of a relatively simple literal interpretation of what someone says was when a young man was asked by his father to make a pot of tea. Sometime later his father is concerned that he has not receive his refreshment and asks his son, 'Where's the tea?' His son replies, 'In the pot, of course.' His son is unaware that the original request implied not just the preparation of the tea, but the presentation of a cup of tea for each person. The person with Asperger's syndrome is not being deliberately lazy, obtuse or defiant, but responding to the literal, not the implied, meaning. The example of this type which is occurred in this movie is presented as follow.

Little Morton's friends	:	Quick. What's 5,589 times 3,972 divided by 17?
Little Morton	:	1,305,853 point 411 etc.
One of little Morton's friends	:	See? I told you
Little Morton	:	You know, when McDonald's says 13 billion served it's not that much. Only 43 visits per person....
Little Morton's friends	:	(before Morton completes his information about McDonald, they did not respond his statement and choose to avoid and leave him.)
Little Morton	:	...per year which is once every 8.49 days.

No.6. SL: 5/ NC: 6,9/ R: 13/ Con: 122-127

The setting of this conversation is in the kindergarten playground. There, little Morton is eating his lunch on the bench. Then his friends come to him and

ask him a question in order to test his ability in calculating numbers by giving him a difficult question which cannot be answered by an elementary student like him without using a calculator. The result is, Morton's answer is correct. In doing conversation with his friends, Morton does not even look at their eyes he focuses too much on his food because he was eating at that time and he does not even stare at their eyes. Moreover, he is too much shake of his head and this can be categorized as limited inappropriate gesture. Those two things above indicate the impairment in communicating between Morton and his friends. In addition, the bold sentences which are stated by little Morton indicate that he has an impairment of comprehension including misinterpretations of literal or implied meanings because he still talking while his friends do not want to talk with him anymore, he does not know and feel that his friends are doing bullying on him. The last example of this type in this movie is found in the datum below.

Man (in the office)	:	Mr. Morton, I run Administrative Services for the Medical Center. Your profile is a plus because we want to give opportunities to people with special needs.
Morton	:	You can say autistic, I already know.
Man (in the office)	:	Touché. The job would be looking at statistical runs finding inconsistencies. Telling me where the computer got it wrong. You can do that, can't you?
Morton	:	Well, sure.
Man (in the office)	:	Well, I can't, and neither can anybody else I've ever met. So I'm blessed to have you. (ask for shaking hands)
Morton	:	(did not respond anything)

NO.13.SL: 5/ NC: 6,7/ R: 13/ Con: 701-710

This conversation takes place in the office where Morton meets the man for job interview. There, Morton simply answers the question, in this case he has a

misinterpretation of literal and implied meaning because the interviewer hopes that Morton not only give a simple answer. Since this is a job interview he needs more information about Morton's background knowledge and others, but unfortunately Morton tends to make a literal interpretation of what the man says. It is similar phenomenon with the phenomenon that mentioned earlier by the researcher in the explanation of misinterpretation of literal and implied meaning in the beginning of discussion. In addition, Morton doesn't response anything toward the man who asks him for shaking hands, it shows that Morton has a difficulty in interpreting others' nonverbal cues. Moreover, his eye contact is so abnormal because he does not even stare at the man's eyes when he is talking with him.

d. Peculiar, stiff gaze

The last rank of communication impairment in this movie with 3.7% or 1 time occurrence is peculiar, stiff gaze. Individuals with Asperger's often have difficulty with initiating and maintaining eye contact, particularly with strangers. When they meet with strangers their gaze may instead be stiff, strange, peculiar or abnormally intense, because it shows their uncomfortable with strangers. In this movie, Morton only doing this one time when he meet Isabelle in front of his apartment, he gazes her peculiarly, he feels uncomfortable and sorry for her because he cannot being on time on their first date. Here is the example.

Isabelle : Nice whale costume
 Morton : Dr. Mozart, I presume.
 Isabelle : Mozart wasn't a doctor. (whistling) Symphony 40, G
 Minor. It's about anger, passion,
 and transcendence.
 Morton : Like you
 Isabelle : Thanks.
 Morton : **I'm sorry I'm 63 minutes late. I really was gonna
 come, I just...**
 Isabelle : That's okay, I just figured you screwed up. Come on.

No.9.NC: 8,10/ R: 12/ Con: 354-360

Morton is shocked by the presence of Isabelle in front of his room. He has nothing to say except apologize to her for not coming on time on their date. His nervous is shown from his limited inappropriate facial expression, and peculiar gaze. Moreover, his identical characteristics in numerical calculation are still exists in this conversation. It is shown when he says that he late for 63 minutes.

2. The Illocutionary acts used by the Main Character which occur in *Mozart and the Whale*

The last analysis based on second research objective is about figuring out the types of the illocutionary acts used by Morton in his conversation in *Mozart and the Whale* movie. The illocutionary acts, which are found in this movie, are stating, feeling frightened, ordering, feeling anxious, and informing.

The findings show that not all types of the illocutionary acts are found in the data. Thus, only 3 types from 11 types and there are 17 occurrences of the illocutionary acts in data in *Mozart and the Whale*. The further explanation of each type are presented in following discussion.

a. Informing

Informing is kind of Illocutionary acts under category of representative or assertive. It happens when Morton tries to inform people who are being asked to talk with. This kind of category aims to inform the others about the information through his utterances. In this movie, most of Morton utterances informs the others about his ability in calculating numbers. Based on the data, informing is the most frequent occurrence in this movie. It occurs 64.7%, meaning that from 17 types of illocutionary acts which occur in this movie, informing appears 11 times. Below are the examples of informing.

Morton : **So, I was going to take the 303 bus instead of the 809. And then I was thinking about how 303 square is 91,809 and the last 3 digits are the same as 809, so I just forgot which one I was gonna take. Then I thought...**

Isabelle : Like I said! I figured you screwed up. Come on, we're going this way.

No.10. NC: 7/ R: 13/ Con: 361-362

This conversation happens between Morton and Isabelle on the way to the mall for their first date. Here, the bold sentences shows that in those utterances, Morton tries to inform Isabelle about the bus he should take if he wants to go to the mall. The aim of informing that is to let Isabelle know which bus he should take if he wants to go to the mall. Another example of informing is shown in the following datum.

Morton : **You know, a mandrill spends two hours a day eating breakfast. So, when you think about it, that's 2,628,000 seconds a year eating breakfast which only leaves him 28 million... 908 thousand seconds a year not to eat breakfast.**

Isabelle : (laugh)

Morton : You know, I don't have to do numbers all the time. I can control myself.

Isabelle : Don't stop. Don't ever stop. I love it.

No.8. NC: 6-9/ R: 13/ Con: 282-285

This conversation happens between Morton and Isabelle at the mall where they hanging out together for the first time. The Illocutionary act of the bold utterance above is informing. In that conversation, Morton informs Isabelle about the time allocation of a mandrill in eating breakfast per day. This topic is used by him to begin a conversation. The topic is so rare to be discussed by people in general, because they usually begin a conversation by asking somebody's condition, health, or others.

The same phenomenon also occurs in the following datum.

- Morton : **Your license plate is better. You can trade the letters for Roman numerals, that's 215. If you add the one, that's 216. That's 6 cubed. 27 is 3 cubed. I'm doing all the numbers in the parking lot. It helps calming me down.**
- Homeless man : Did you lose your job?
- Morton : No, my woman And my shower curtain.

No.12.SL: 2/ NC: 6,8/ R: 13/ Con: 619-629

After getting mad to Isabelle because she throws away his shower curtain, Morton runs away to the parking lot. There, he meets a homeless man, and then he tells that he loses his girlfriend and shower curtain. Moreover he tells to him about his habit in counting the license plates of the cars in order to make him calm down whenever he gets troubles. The illocutionary act of this utterance is informing. In this utterance, Morton informs the homeless man about his habit in calculating numbers or calculating the license plates of the cars in the parking lot when he is in troubles, and it can help calming him down.

The following datum shows the other example of informing.

Passengers (*doing conversation in Japanese language*) : # % @ % # @ # & ^ % # (& ^ % \$ # W @) * I ^
 Morton (interrupting) : **But this was different. I can feel it. Even though I've been here for about 7 days, 9 hours and 37 minutes.**

No.1. SL:2/R:13/ Con: 5-6

The setting is in the taxi. In this situation, Morton tries to interrupt the passengers' conversation in order to make an open conversation between him as a taxi driver and them as his passengers by informing that he had been fired by 3 previous taxi companies. Unfortunately he can not get the situation that the passengers are still in doing serious conversation. As a result, the passengers do not give any response to his conversation, and it implies that they do not want to be disturbed by him. The illocutionary act of his utterances in this conversation is to inform the passengers about his 3 previous taxi companies that fire him.

b. Stating

The other categories of Illocutionary acts which occur in this movie is stating. Stating occurs 23.5%, meaning that from 17 Illocutionary act's data that occurs in this movie, stating only occurs 4 times. Stating is a kind of representative that is used to represent or assert an opinion firmly to make the addressee recognize something. The datum below shows us the statement of Morton which is occurred in the movie.

Isabelle : You can kiss my self-esteem butt, Donald Duck! Why tell your life story and tell only the good parts?
 Morton : It's Donald Morton
 Isabelle : You're missing my point!
 Morton : **No, I'm not. I just never know what to say.**
 Isabelle : Neither do I.

No.7. NC: 7,9/ R: 12/ Con: 170-174

In the beginning of the conversation Isabelle calls Morton, Donald *Duck*, then he replies by *it's Donald Morton*, because his real name is Donald Morton. In her opinion Morton does not get the point that she wants to deliver, but in fact, Morton definitely gets the point and do not know what should he say. It is shown when he says: *No, I'm not. I just never know what to say*. The illocutionary act of the utterance above is a statement. He tries to state to Isabelle that he just never knows what to say, and this is like a pleading towards Isabelle who thinks that Morton does not get her point.

Another example of statement is as follow.

Isabelle	:	Nice whale costume.
Morton	:	Dr. Mozart, I presume.
Isabelle	:	Mozart wasn't a doctor. (whistling) Symphony 40, G Minor. It's about anger, passion, and transcendence.
Morton	:	Like you
Isabelle	:	Thanks.
Morton	:	I'm sorry I'm 63 minutes late. I really was gonna come, I just...
Isabelle	:	That's okay, I just figured you screwed up. Come on

No.9.NC: 8,10/ R: 12/ Con: 354-360

This setting of this conversation is in front of Morton's apartment. He is actually late for his first date with Isabelle, so that he is shocked by the presence of Isabelle in front of his room. He has nothing to say except apologize to her for not coming on time on their date. The Illocutionary act of that utterance is statement. In this conversation he tries to tell Isabelle that he feels so sorry for being 63 minutes late on their first date.

The other examples of statement utterance which performed by Morton is shown in the following datum.

(crushing with another car)

- Man : What the hell is this? What's the matter with you? Are you crazy or something? Look at this! Look at all...! Who's gonna pay for all this? I am talking to you. This is coming out of you, pal.
- Morton : **We're gonna get you home before group. (talk to his bird)**
- The passengers : Hey, where are you going? You can't leave us right here.
- Man : Don't walk away. Come back here! You...!

No.3. NC: 6,7/ R: 12/ Con: 21-26

In this conversation, Morton's car crushes with another car. It happens because he does not concentrate well while he is driving his car. Because of that accident, he feels anxious and frightened. The man asks how could be this accident happened, but he cannot answer the question. He is nervous, so that he prefers talking with his bird than talking with the man, who has the car which is crushed by him. The utterance of Morton towards his bird can be categorized as statement. In this case, he wants to state that it is better for them to leave the man because he does not want to solve the problem between him and the man. Morton's action is the impact of his nervous and frightened feeling, so that he cannot even think correctly. Moreover, it seems he shows his irresponsibility act in this scene.

The last example of statement utterance is in further datum.

- Morton : **I'm gonna find another phone. I know the number.**
- Gracie : Is it as good as the number, say, 2-8-0-9?
- Morton : **2809 is 53 squared and 5 + 3 is 8. The cubed root of 8 is 2, which is her dress size. I bought her this beautiful dress the other day that has flowers on it**
- Skeats : 6
- Morton : It's not a richly textured number, but it is her shoe size. She has beautiful feet. You guys, I know her better than anybody!

No.14. NC: 7/ R: 12,13/ Con: 994-1002

In this situation, Morton feels panic and anxious about Isabelle's condition because she attempts to suicide. She does that after Morton proposes her. Fortunately, she does not die because the doctors can rescue her life. On the other side, Morton still in panic and he thinks that it's better for him to call her, if he does not call her she might think that he does not love her anymore. But, then Gracie comes with her question about numbers, in order to make him calm down. But unfortunately she cannot make him calm down. His panic and anxious feeling can be shown in the way he walks and talks with everyone but he does not see their eyes, and also the gestures he has made. The Illocutionary acts of these utterances are statement and information. It is considered as a statement when he states that he will find another Isabelle's phone number, but it is considered as information when he informs the others about the numbers they asked about.

c. Ordering

The other categories of Illocutionary acts which occur in this movie is ordering. Ordering occurs 11.8%, meaning that from 17 Illocutionary act's data that occurred in this movie, ordering only occurs 2 times. Ordering is used to tell somebody to do something. This action usually done because the speaker has an authority over the addressee or it is done with an assumption that the addressee will cooperate. The datum below shows us when Morton orders Gracie to gather all of the women.

- Morton : **I want you to gather all the women and I'll gather all the guys and go to the bleachers. (looking at the microwave) 48 is interesting, because we add the 4 and the 8 together you get 12. If you flip 4 and 8 around, you get 84, and you subtract from 48 you get 36, all of which are exact multiplies of 12. And 36 is interesting because we add 3 and 6, we get 9 and if you flip it around, you get 63 and then, minus 36 is 27 all of which are exact multiplies of the 9. And now 144...**
- Gracie : Why will I gather all the women?

No.4. SL:1/ NC: 9/ R: 13/ D: 5/ Con: 69-77

The setting of this conversation is in the kitchen. In this situation, Morton asks Gracie to gather all the women to the bleachers. In this conversation he has delay in developing speech. In the middle of the conversation, he is interested in the numbers that appeared in the microwave. When he see numbers or talk to the others, his eyes contact changes, he often close his eyes then open them again, it happens several times. Moreover, when he sees numbers, his facial expression also changes, he feels happy and enthusiastic in explaining numbers to the others like the teacher who explain the lesson to his students, he has such a great passion in doing that. As we know earlier, that Morton has the abilities in Mathematical calculation, so that, this time he informs Gracie about the uniqueness of number 48, and 36. The Illocutionary acts of this utterance are ordering, it is shown in the underlined utterance, and informing it is shown when Morton informs Gracie about the uniqueness of number 48.

The last example of ordering is shown in the datum below.

- Morton : **It's kind of like in the arcade. When I want to factor a number I just I visualize it going across my eyes. Pick a number.**
- Isabelle : 589
- Morton : **Okay. So then I shoot prime numbers at it, so 3 won't go into it and 5 won't go in it. It won't even have a chance because it doesn't end in a 5 or a 0. And then you know You know, 7, 11, 19. When I shoot 19, it breaks into two 19 and 31**
- Isabelle : Your process is very sexual

No.11. NC: 8,9/ R: 13/ D: 15/ Con: 436-447

The setting of this conversation is in the park. In this situation, Morton wants to explain Isabelle the way he factors a number. For the first bold and underlined sentence, he orders her to pick any number she wants. After that he explains how to factor that number. When he talks about this, he often close and open his eyes, often looking up rather than staring at her eye, he also had limited and inappropriate facial expression. This conversation shows that Morton has a special ability in numbers. The illocutionary acts of those utterances are ordering and informing. It is considered as order when he asks Isabelle to pick a number, but it is considered as informing when he informs the way he factors a number.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the results of findings and discussion in Chapter IV, some conclusions can be drawn. Both the formulations of the problems and the objectives of this research are also concerned in formulating the conclusions. The conclusions are stated as follows:

1. There are 14 data analyzed in this research. Communication impairment occur 27 times. In addition, only 7 out of 10 types of communication impairment are found in this movie. Limited use of gestures, clumsy body language, and inappropriate facial expression are the most frequent occurrence with 22.22% or 6 times occurrences per each. The next is limited facial expression with 14.82% or 4 times occurrences. These are followed by superficially perfect expressive language and impairments of comprehension including misinterpretations of literal or implied meaning with 7.41% or 2 times occurrence per each. The least is peculiar stiff gaze with 3.7% or 1 times occurrence per each. Meanwhile, the rest type that are not acted by Morton, the main character in the movie, are odd prosody, peculiar voice characteristics, formal pedantic language and delayed speech development.

2. Among the 14 data analyzed, illocutionary act occurs 17 times. Donald Morton is only able to perform 2 types of Illocutionary act. The 2 types are: Assertive or Representative and Directive. Assertive or Representative consists of informing occurs 11 times or 64.7% and stating occurs 4 times or 23.5%. Directive consists of ordering occurs 2 times or 11.8%. From the calculation, it can be concluded that the most frequent occurrences go to informing, then stating and the last is ordering. Meanwhile, the three types that Morton unable to perform are Expressive, Commissive, and Declarative. The ability to employ the two types provides evidences that Morton is able to state what he believes to be the case or not and is able to ask someone to do something. The inability of employing the other types proves that Morton is unable to express his psychological state, commit himself to an action and change the world of others. Although the result of this findings gives an idea about Morton's capability of performing 2 types of Illocutionary act, it still give an evidence that he has minimum function in performing speech act.

As a matter of fact, Morton performs Assertive or Representative acts only for informing and stating. Directive is performed only for ordering. Expressive, Commissive, and Declarative are the types that become his deficiencies because he is unable to perform speech act which has the function related to the activity of engaging social interaction with others, but he is able to perform speech act which has the function related to his personal interest, in this case is calculating numbers.

B. Suggestions

From the conclusions above the researcher proposed some suggestions for some parties.

1. To English Education Department of Yogyakarta State University

English Education students learn each Psycholinguistics and Pragmatics only one semester. Therefore, it is considered not enough for them to learn these two subjects. In fact, there are a lot of interesting topics to be discussed and analyzed. As the result, many topics are not learned and discussed in detail. In relation to this, the researcher suggests that the students should learn psycholinguistics more than one semesters, so that they can learn and discuss psycholinguistics in detail.

2. English Students

Psychopragmatics is the combination of Psycholinguistics and Pragmatics. Therefore, this branch of study is considered new for English students. In addition, there are still many interested topics of Psychopragmatics which have been analyzed. In relation to this, the researcher suggests that a lot of topics on Psychopragmatics should be discussed and analyzed more.

3. Other Researchers

The weakness of this research is limited data, so that the researcher suggests to other researchers to be selective in choosing other movies as object of the research. There are a lot of movies or phenomena which portrayed psychopragmatics cases. Unfortunately, they have not been analyzed. In fact, the findings of study from this branch of science will

contribute much to the society in the form of theories. Moreover, the new theories are needed to overcome the problem. Therefore, the researcher suggests that much research on this subject is conducted.

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APPENDIX

Appendix. Types of Communication Impairment and Illocutionary act Experienced by Donald Morton Portrayed in *Mozart and the Whale*

No	Code	Dialogue	Asperger Syndrome								Illocutionary Act										Explanation																				
			Communication Impairment										R		D		E			C		D																			
			SL					NC																																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20	21	22																
3.	NC: 6,7/ R: 12/ Con: 21-26	<p>(Crushing with another car)</p> <p>Man: What the hell is this? What's the matter with you? Are you crazy or something? Look at this! Look at all...! Who's gonna pay for all this? I am talking to you. This is coming out of you, pal.</p> <p>Morton: We're gonna get you home before group. (talk to his bird)</p> <p>The passenger: Hey, where are you going? You can't leave us right here.</p> <p>Man: Don't walk away. Come back here! You...!</p>						√	√																	√															<p>This accident is happened because he does not concentrate well while he is driving his car. Because of that accident, he feels anxious and frightened. He has limited use of gestures so that in facing this situation his body language is clumsy too. His eye contact is weird, he does not even have any courage to stare the man's eyes and asking for apologize after the accident. He cannot answer the questions which are given by the man, he feels so nervous, so that he prefer talking with his bird to talking with the man, who has the car which is crushed by him. The utterance of Morton toward his bird can be categorized as statement, in this case, he wants to state that it is better for them to leave the man because he does not want to solve the problem between him and the man. Morton's action is the impact of his nervous and frightened feeling, so that he cannot even think correctly and it seems he shows his irresponsibility in this scene.</p>

Appendix. Types of Communication Impairment and Illocutionary act Experienced by Donald Morton Portrayed in *Mozart and the Whale*

No	Code	Dialogue	Asperger Syndrome										Illocutionary Act										Explanation							
			Communication Impairment																											
			SL					NC					R				D		E		C			D						
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		21	22					
8.	NC: 6-9/ R: 13/ Con: 282-285	<p>Morton: You know, a mandrill spends two hours a day eating breakfast. So, when you think about it, that's 2,628,000 seconds a year eating breakfast which only leaves him 28 million... 908 thousand seconds a year not to eat breakfast.</p> <p>Isabelle: (laugh)</p> <p>Morton: You know, I don't have to do numbers all the time. I can control myself.</p> <p>Isabelle: Don't stop. Don't ever stop. I love it.</p>						√	√	√	√				√															<p>This conversation happened at the mall when Morton and Isabelle hanging out together. He starts the conversation by informing her about time allocation of breakfast each day by a mandrill. Here, he uses his unique ability in numbers when he explains it. In this conversation, it can be seen that he has limited use of gesture, clumsy body language. In addition he often close and open his eyes, and often looking up rather than staring at her eyes these can be categorized as limited and inappropriate facial expression. Furthermore, Isabelle's response toward his explanation is laugh, which make him feels uncomfortable. Morton says he won't do it anymore if it is necessary, but surprisingly Isabelle appreciate it because she knows that it is hard for an Asperger Syndrome people to neglect his nature habit.</p>

Appendix. Types of Communication Impairment and Illocutionary act Experienced by Donald Morton Portrayed in *Mozart and the Whale*

No	Code	Dialogue	Asperger Syndrome										Illocutionary Act										Explanation								
			Communication Impairment																												
			SL					NC					R				D		E			C		D							
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		21	22						
10.	NC: 7/ R: 13/ Con: 361-362	<p>Morton: So, I was going to take the 303 bus instead of the 809. And then I was thinking about how 303 square is 91,809 and the last 3 digits are the same as 809, so I just forgot which one I was gonna take. Then I thought...</p> <p>Isabelle: Like I said! I figured you screwed up. Come on, we're going this way.</p>													√																<p>This conversation happened between Morton and Isabelle on the way to the mall. Morton feels nervous so he speaks to much without seeing Isabelle's face, so that he walks to the wrong way, in doing that his body language is so clumsy. Moreover, in this conversation his ability in number calculation are still exist. It is shown when he decide which one the bus he will take, and the illocutionary act of this utterance is informing. In this utterance Morton informs the bus should he take if he want to go to the mall.</p>

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Demikian surat pernyataan ini saya buat. Semoga dapat dipergunakan sebgaimana mestinya.

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Triangulator



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