CHAPTER V

DISCUSSION OF FINDINGS AND CONCLUSIONS

This chapter will discuss the findings of the content analysis, syntax analysis and lexical analysis reported in Chapter IV as well as conclude the whole study.

Section A

Discussion on content analysis

As mentioned in *method of analysis* in Chapter III, content analysis was carried out by rating the content of subject's post-description transcript (refer to Appendix 1) based on Homzie et al.'s (1975) rating of content (refer to Section A, *method of analysis*, Chapter III). The scores were then tabulated in Table 1 (refer to Table 1, Chapter IV).

The findings obtained from Table 1 showed that 52.3% of the content of the child's post-description transcript comprising pictures 2, 5, 6, 9, 10, 12, 15, 14, 16, 17, 19 and 20, scored 4 points. This indicated that the child made some substitution which was, somehow, still related to the original content and omitted

certain important segments presented by the adult in this study as in the actual description transcript.

This depicts the child's ability to primarily comprehend the adult's intended content as in the actual description transcript even though he used a different surface structure for most of his post-description in imitating the adult's deep structure. The following instances will illustrate this situation.

Picture 5 showing a boy sitting in a boat and a girl getting into a boat.

Instance 1

<u>Excerpt from description of Picture 5</u>

<u>actual description</u>

The girl is getting into the boat.

<u>child's post-description</u>

The girl want to ride boat.

His 4 point score for this picture was due to the omission of the boy's act of sitting in the boat although the other suggested content in the actual description transcript was present in his post-description transcript for this picture even though the child used a different surface structure.

Instance 2

<u>Picture 20 script extract</u>

<u>actual description</u>

The boy and the girl are waiting for a bus. The are both carrying a bag.

<u>child's post-description</u>

The boy not carry.... The boy want to ride bus. The girl carry the bag to ride the bus.

Picture 20 illustrates a boy and girl waiting for a bus. Both of them are carrying a bag. The child concluded the act of waiting for a bus as wanting to get on the bus. Even though the act of waiting for a bus and wanting to ride a bus can be considered as two different intentions in an isolated context, but in this study, considering the link of activities in the picture series, the two intentions could be considered as carrying the same meaning because the subsequent picture which is picture 21 shows the boy and the girl on the bus. Hence, it could be concluded that the child had successfully imitated the adult's suggested content in the actual description transcript. The child scored 4 points for this picture due to the omission of the boy's act of carrying a bag. In fact, from his script, *'The boy not carry...'*, it could be inferred that the child was about to say that the boy in the picture did not carry a bag.

Nevertheless, 35% (pictures 1, 3, 4, 7, 8, 11, 13 and 23) of the child's entire post-description transcript scored 5 points (refer to Table 1 in Chapter IV). This suggested that the child was virtually able to preserve the relations in the pictures in the post-description transcript the way the pictures were described in the actual description transcript without leaving out any important segment of the suggested content in the actual description transcript although there was a slight difference in the surface structure which will be discussed at a greater length in section B of this chapter. The following examples would point out this situation.

Instance 1

Excerpt from description of Picture 4

actual description

The boy is pointing to a fish in the water.

Post-description

The boy and the girl.....The boy want to catch the fish.

As mentioned in procedure section in Chapter III, the actual description only includes those actions and objects which are considered obvious by the researcher. The decision not to include certain objects and actions was due to the consideration in avoiding unreasonable complexity in the actual description because this study involved a comparatively young second language learner with

very limited second language resources as roughly estimated based on the preliminary observation as well as the numerous pictures involved. It was afraid that this unreasonable complexity would lead to doubtful findings regarding the child's actual ability to imitate.

Picture 4 (refer to Appendix 2) illustrates a boy talking to a girl while pointing to a fish in the water. The girl is holding a fishing rod (this description was not included in the actual description). Perhaps due to his age, the child was able to infer that the boy's act of pointing to a fish in the water, as illustrated in picture 4, with the girl holding a fishing rod, means that they want to catch the fish. The same inference would also be made by any adult when looking at this picture. The child's act of inferring showed that his content imitation was based on comprehension and not merely from memorisation.

The same situation could also be seen in the next example.

Instance 2

<u>Excerpt from description of Picture 7</u>

<u>actual description</u>

The girl and the boy are watching a train.

<u>Child's post-description</u>

The boy and the girl see train coming.

Imitation in content is rather explicit in the above instance, even though the child described the picture differently.

Based on the above evidence, it could be concluded that the child does describe the pictures with the same intended content as presented by the adult as in the actual description transcript (refer to Appendix 1). This is further evident through the content analysis which showed that 87.3 percent of the content in the child's post-description transcript was similar to the content in adult's actual description transcript. This finding was, however, incongruent with Bandura's and Harris's (1966) finding where their subject produced utterances which were similar in structure to those of the model but were different in content, whereas in this study, the child's post-description transcript when compared to adult's actual description transcript were rather different in structure but were more similar in content.

Besides the above scores, a score of three points was given to the child's post-description transcript for picture 18 (refer to Appendix 1). This picture illustrates a boy and a girl at a fruit stall. The picture seemed to be drawn in a manner suggesting that the boy and the girl want to buy some red apples with a fruit seller attending to them (refer to Appendix 2). A score of 3 was attributed to this picture due to a substantial omission of the original content as in the actual description transcript. Furthermore, the child altered the content when he substituted the term 'fruit seller' to 'daddy' which resulted in the deviation from the original content as shown in the script below.

Picture 18

actual description transcript

The boy and the girl are at a fruit stall. They want to buy red apples. The

fruit seller is attending to them.

child's post-description transcript

*The boy and the girl and **daddy** buy red apples.*

The underlined scripts in the actual description transcript were unsuccesfully imitated by the child. This resulted in the child using the term 'daddy' to replace the omitted content. Nevertheless, the child did not completely alter the original content as shown above.

A score of 2 points was given to picture 22 (refer to Appendix 1) due to the child's substantial alteration of the original content. Picture 22 (refer to Appendix 2) illustrates a boy handing some cakes to another boy and a girl handing a cup of drink to another girl. Before we further discuss the finding for this picture, it would be easier to follow the discussion with the script for picture 22 below.

Picture 22

actual description transcript

The boy is passing some chocolate cake to another boy. The girl is

handing a cup of drink to another girl.

child's post-description transcript

The boy want to give to a boy eat the cake. The boy want to drink the water.

The girl want to drink the water.

Instead of describing the action of the doer (the main character in the picture series), the child described the receiver. The underlined script is the only correct content similar to the actual description transcript. Since this study concerning imitation, the child's post-description transcript, even though perfectly intelligible, has to be considered as primarily imitatively incorrect because the child, again, deviated from the actual description intended content. Perhaps, the complexity of the sentences used in the actual description transcript caused the child to filter the internalisation of the original content. Thus, he described the picture based on his level of comprehension. Based on this finding, it could be concluded that if a child is requested to imitate content which is higher than his level of comprehension, his attempt at content imitation will be hindered by his current comprehension skill. This on the other hand, lends to a possibility that modelling and reinforcement could help to improve the child comprehension competence.

A score of 1 point which was given to picture 21 was due to the nature of Homzie et al.'s (1975) rating of content which considers a child as unable to reproduce the original content when leading questions are involved, even though, the child in this study was finally able to describe the picture with the content suggested as in the actual description transcript.

Even though according to Brown, Bellugi and Fraser (1963), imitation performance did not work through the meaning system, the content analysis on the whole suggested that the subject in this study was able to imitate with appropriate amount of comprehension by showing similarity in content between his post-description transcript and the actual description transcript even though different in structure as discussed in the following section. The findings on content in this study is in line with Maratsos (1975) who viewed content reorganisation as evidence of internal processing of the model that is imitated, suggesting some semantic interpretation of the model sentences. Maratsos's view seemed to be in line with the overall findings on content analysis in this study.

Section B

Discussion on syntax analysis

The findings on syntax analysis was presented in section B in Chapter IV. Syntax development due to imitation was first analysed through MLU calculation

(refer to *method of analysis* in Chapter III) as in Table 2 (refer to Table 2, Chapter IV).

As many as 15 pictures (pictures 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 19, 20 and 22) described by the child in the post-description transcript showed that the child's MLU in the post-description transcript was lower than the target MLU as in the actual description transcript. The cause of the child's lower MLU was due to the child's deletion of certain parts of the original description in the actual description transcript as well as the child's omission of functors such as auxiliary verbs. The child's use of base form of verbs in most of his sentences (refer to Table 3 in Chapter IV) affected his post-description MLU calculation. This measure indicates very little, if any, similarities between the child's sentence structure and the sentence structure presented by the adult in the actual description transcript. However, according to Whitehurst and Vasta (1973) based on the phenomenon derived from Carol et al.'s (1969) and Rosenthal's and Whitebook's (1970) studies, a child's language may be imitative without being an exact copy of any complete utterance of a model. Therefore, what was demonstrated by the child in this study could be an example of linguistic development through imitation.

This conclusion is further supported by Maratsos (1975) who considers imitation as assimilatory if the child replaces the model sentences in relation to the imitator's available linguistic structures.

The content analysis previously discussed in Section A above lends its support to the evidence of the child's attempt in using the adult's description as

model description. On the contrary, the child's post-description transcript depicts insignificant amount of a complete structural imitation. This could be due to the reason that when children begin to combine words, this combination is telegraphic (Brown and Fraser, 1963) and so grammatically incomplete (Fraser, Bellugi, and Brown 1963). In this study, the child's telegraphic and ungrammatical utterances were mostly due to the omission of vital functors which were primarily the auxiliary verbs as mentioned previously resulting in the child producing a 'telegraphic' strings of nouns and verbs, even though, the complexity of model utterances in the actual description transcript could be an additional factor hindering the child's ability to imitate the suggested structure completely.

In addition, Brown and Fraser (1963) specifically hypothesised that because children have such small memory span, function words may be dropped because they carry little information and tend to be unstressed in speech. Thus, to make effective use of their limited memory span, the child did not attempt to store this unstressed, low information words and so will delete them when asked to imitate sentences (Freedle, Keeney & Smith, 1970). This could be the case in this study.

Although by leaving out the auxiliary verbs the child's utterances could be considered as ungrammatical but this is inevitable especially for a young second language learner because according to Menyuk (1963), children sometimes use a set of rules which deviates from complete grammaticality to generate their sentences. Thus, adult's utterances could provide models of grammatical utterances which the child could adopt into his language system through imitation

which would unconsciously replace the ungrammatical rules in the child's internal language system.

In accordance to the above, the child's use of mostly the base form of the word as shown in Table 3, apart from being the cause of the child's lower MLU, is also an indication that the child's syntactic structure could be described as still being at the phrase-structure level whereby parts of speech were used to formulate simple-active-declarative sentences of the type 'The girl play swing'. Chomsky (1964) calls these type of sentences as terminal strings or sentences in transitional state and yet, they form the basis for the child's other sentences. Other examples of this type of sentences are shown below.

Examples:

Picture 2

The boy ride saw sion.

Picture 3

The boy climb on the boat.

Picture 4

The dog barking.

Picture 5

The boy laughing.

Even after hearing adult's grammatical sentences in describing the pictures, the child still produced the above same type of phrase-structure level utterances in his post-description transcript. Evidence that imitation may be limited to the present grammar is provided by Odom, Liebert and Hill (1968).

On the other hand, the subject's MLU for pictures 1, 15, 16, 17, 18, 21 and 23 exceeded the target MLU. This was due to the repitition of some phrases in the child's post-description. This could be seen in the following examples.

Picture 1 describes a boy and a girl playing on swings and a dog is watching them. The child's excess MLU for this picture could be a result of the repitition of the phrase 'the girl play swing' as shown below.

Instance 1 (picture 1)

actual description transcript

A boy and a girl are playing on swings. A dog is watching them.

child's post-description transcript

The girl and the boy ride swing. The dog look at the girl

play swing.

Even though in the first sentence in the post-description transcript, the child substituted the verb 'are playing' with 'ride' which could reduce his MLU but in his second sentence, his produced more utterances compared to the second sentence in the actual description transcript with the repitition of the phrase 'the

girl play swing' instead of using pronoun 'them' as used in the actual description transcript (refer to the above underlined utterances). This pronoun might be cognitively filtered due to the child's different perception regarding the dog's action. Thus, he made no attempt to imitate this pronoun as part of his sentence structure. This is in line with Piagetian (1962) theory that a child makes his own interpretation of perception which resulted in an additional element in his description due to his figurative aspects of thought.

As mentioned previously in Chapter IV, for picture 15 excessive MLU was due to the child's usage of conjunction 'and'. Picture 15 (refer to Appendix 2) shows a boy on an apple tree, plucking some apples and passing the apples to the girl to be put in a basket.

Picture 15

actual description

The boy is on an apple tree. The boy is passing an apple to the girl.

The girls puts the apple in the basket.

Child's post-description

The boy climb on the tree and take red apple and give to the girl

and put in plastic the red plastic.

As a result, the child ended up producing only one sentence. Since the number of sentences is a vital component in MLU calculation, the collapsing of sentences by the child in his post-description transcript definitely inflates his MLU when compared to the target MLU for the same picture of which the adult described using several sentences. Another contributing factor to the child's excessive MLU was that he deleted one third of the adult's description causing the adult's number of utterances and sentences to increase compared to the child's number of utterances and sentence. The same reason explains the child's MLU to be higher than adult's for pictures 16, 18 and 21.

The difference in adult's and child's sentence structure could occur due to the internal conflict in the child's mind in deciding whether to follow adult's structure or to obey the rules of language which he hypothesised to know. The child's decision to follow his hypothesised language rules resulted in the child's imitation of the adult's form to differ (Braine and Rodd, 1970).

Based on the findings of Braine's and Rodd's study, an extrapolated view could be that, the different form in the child's imitation could be explained as due to the child's judgement of grammaticality. Even though the adult's description was linguistically grammatical, but the child might refuse to follow the grammar suggested by adult which according to the child's language system was ungrammatical. This could reasonably explain the reason there was no exact copying of adult's structure as well as the substitution of adult's nouns with the

nouns which the child felt would be more presentable compared to the model nouns in this study (refer to Table 3 in Chapter IV).

The child's excessive MLU for picture 23 could be attributed to his extended post-description transcript where he included some direct speech which were not in the actual description transcript. This particular post-description transcript showed tremendous syntax development. The child seemed to be able to manipulate adult's structure which provides him some language resources to the extent that he was able to use direct speeches appropriately. This reasonably suggests that imitation of linguistic structure could go beyond the structure presented by model whom the child imitated from. This could also be seen through the emergence of the correct usage of the phrase 'as well' in his post-description transcript which increases the degree of complexity of the child's sentence. Looking at the child's actual language level as in the pre-description transcript, his syntax development in his post-description transcript could be concluded as the result of imitation.

Nevertheless, the child's relative MLU indicated his ability to obtain 60 percent of the target MLU. This means that the child's sentence complexity was about 60% of the adult's sentence complexity. Perhaps, modelling through reinforcement could further improve the child's ability to produce sentences with the degree of complexity comparable to adult's. In this study, the child's imitation could still be considered as an active process of assimilating and reorganising the

adult's description and reproducing these descriptions in accord with his current grammatical competence.

Considering subject's young age, as a second language learner, he seemed to be still in the process of developing his second language sentence structure. The general similarity between the child's post-description transcript and the actual description transcript indicated that the child did attempt to imitate his mother's sentence structure but he was unable to imitate the structure completely because his sentence structure is limited to his current second language grammatical skills. The following examples will give a clearer view of the above claim.

Instance 1

Picture 13

actual description	child's post-description
Father is driving the car.	*The daddy drive the car.*
The girl is sitting in front.	*The girl sit in front.*
The boy is sitting at the back of the car.	*The boy sit at the back.*

Instance 2

Picture 8

actual description	child post-description
The boy and the girl are playing with a toy train.	*The boy and the girl play toy train.*

This is in agreement with Fraser et al.'s (1963) finding which suggested that even though a child cannot accurately reproduce long utterances but his imitating utterances in relation to his comprehension competence are still relevant to his current grammatical skills.

Latency to full sentence production and fluency are also vital elements in language learning. The improvement in these two language elements would contribute to a higher proficiency as well as language development. Hence, subject's improvement in latency to full sentence production and fluency were analysed based on Table 4 and Table 5 in Chapter IV.

Based on Table 4, the significantly lower mean for frequency for incomplete sentences (refer to Section B, method of analysis, Chapter III for incomplete sentence definition) which was 0.22 in the post-description transcript compared to 1.00 in the pre-description transcript indicated that in terms of frequency, the child's latency to full sentence production had tremendously improved. This

improvement would increase the child's fluency. This was also indicated by the decrease in the number of incomplete sentences from thirteen under the short description picture category to only two incomplete sentences in the post-description transcript. In addition, the number of incomplete sentences under the long picture category also dropped from ten incomplete sentences to three incomplete sentences in the post-description transcript. The most possible contributing factor for this improvement is the child's imitation of adult's actual description transcript.

Even though the child still produced incomplete sentences in his post-description transcript but the occurrence seemed to move towards the rational normal pattern where the child seemed to have more difficulty in describing long description pictures compared to his difficulty in describing the short description pictures in the post-description transcript. This is in contrast with his incomplete sentence production pattern in the pre-description transcript where the child seemed to have more difficulties describing short description pictures compared to long description pictures.

Another contributing factor to the child's improvement in latency to full sentence production and fluency in the post-description transcript could probably be the expansion provided by adult in the actual description transcript which served as a guideline from which the child derived a clearer example to imitate from. Therefore, the child managed to produce more complete utterances in his

post-description transcript. The availability of the opportunity to imitate model utterances enhanced the child's certainty and confidence in his sentence production. The reduction of the child's frequency of incomplete sentence utterances in his post-description transcript was owed to the adult's actual description transcript which helped to patch up the child's lack of resources in the second language. This finding is in line with Cazden's (1965) finding on the effect of expansion on syntax improvement through imitation where her subjects who imitated adult's expanded utterances were found to improve more than the subjects in the control group.

The child's latency to full sentence production and fluency which were further analysed based on Table 5 (refer to Chapter IV) showed that the total frequency of the child's phrasal utterances in the post-description transcript went down approximately 50 percent in comparison to his total frequency of phrasal utterances in his pre-description transcript (refer to Section B, method of analysis, Chapter III for phrasal utterance definition).

The child produced the most number of phrasal utterances when describing the long description picture in both his pre- and post-description transcripts. This pattern is in line with his incomplete sentence production in his post-description transcript which could be considered as an expected normal occurrence for a child learning second language.

The significantly lower mean of phrasal utterance in the child's post-description which was 1.6 compared to 3.0 in the pre-description transcript indicated tremendous improvement in the child's latency to full sentence production and fluency. In fact, imitation helped the child in being able to give a smooth description without producing any phrasal repitition when describing pictures 1, 2, 11, 13, 15, 16, 17 and 19 in the post-description transcript (refer to Appendix 1).

Since this study is guided by Vygotsky's (1978) theory regarding adult's function as a language model to children through imitation, Table 6 (refer to Chapter IV) was constructed in order to examine the applicability of the above Vygotsky's theory by looking at the degree of similarity between the child's transcript (pre- and post-) to actual description transcript.

The findings obtained from Table 6 indicated that the child's mean for frequency of article, verb and noun in the post-description transcript were much closer to the adult's mean for the three grammatical items compared to his mean for the three items in his post-description transcript. This shows that the child's post-description transcript was more similar to adult's transcript compared to his pre-description transcript. The increase in similarity between the child's post-description transcript and adult's transcript depicts the child attempt to imitate the model utterances as closely as possible. However, the child in this study is imitating in second language. Although he is already above 4 years of age, his

ability in acquiring the second language may be virtually the same as those children below 3 years who are in the process of acquiring the first language. As suggested by Vygotsky (1962) and other theorists, development of a language is a process which goes from the external to the internal. The child in this study may be at the level at which he both evaluates the stimuli in terms of the rules of his grammar and reproduces what he hears primarily in accordance with these rules because his evaluation and production are still operating more externally. This could be seen in Table 3 in Chapter IV where in his attempt to imitate the adult's structure, the child seemed to inevitably use his own verbs and the omission of the auxiliary verbs is a sign of his external stage language operation.

The child's correlation coefficient for the three grammatical items in the post-description transcript showed a stronger relationship with the actual description transcript compared to the child's correlation coefficient for the three items in pre-description transcript. The findings, therefore, supported Vygotsky's (1978) theory regarding adult's role as a language model to children especially through imitation.

Section C

Discussion on findings on lexical analysis

Lexical analysis which was carried out by looking at the emergence of a new noun in the child's post-description transcript in comparison to the actual description transcript (refer to Section C in Chapter IV).

The findings on lexical analysis indicated that imitation does play an important role in noun acquisition. The noun 'swing' which emerged in the post-description transcript for picture 1 (refer to Chapter IV) led to the intelligibility of the child's description. Since this noun was not in the child's post-description transcript for this picture, the acquisition of this noun was undeniably a result of imitation.

The child's ability to imitate the word 'barking' in the post-description transcript for picture 4, helped the child to improve his comprehension competence through correct content assimilation (refer section C, Chapter IV). The same situation holds for the child's acquisition of the word 'carrot' and 'soccer' (refer to section C, Chapter IV).

Nevertheless, the nature of this experimental study involving drawings, had somehow affected the acquisition of other lexical items. The agreement and disagreement in terms of perception probably plays quite an important role in the child's lexical development. Those new nouns imitated by the child could be due to the congruity of both the child's and the adult's perception of the drawings. Therefore, the child's mind agreed to the lexicon suggested by his mother in naming the actions and the objects in the pictures.

On the other hand, a contradictory situation occurred for a picture which deteriorated his imitation in content performance. This is shown from the child's post-description transcript for picture 21 (refer to Appendix 1) where the child argued on naming an object in the picture (refer to Appendix 2). The picture of the coin box which virtually resembles a camera in shape might be the cause of conflict between what was described by the adult and what was perceived by the child. This is explained by Flavell et al.'s (1983) finding which suggested that the widespread view of young children as being "prone to accept things as they seem to be, in terms of their outer, perceptual, phenomenal, "on the surface characteristics" (Flavell, 1977, p.79).

Based on Mervis's (1978) object-word learning principle, children's description of an object is normally extended to objects that have the same overall shape and functional parts. Thus, it could be concluded that perception might have a role in lexical imitation.

Excerpt from post-description of picture 21

Adult: This is a coin box.

Child: (objected) *This is not a coin box...camera!*

An older child used as the subject in this study could be one of the contributing factors to conflict in perception. The case might be different with a much younger child. Nevertheless, this conflict supports Piagetian view that a child's mind is structurally different from adult's and this leads to incongruity with Macnamara (1982) who claimed that a child's mind is structurally equivalent to the adult's.

Regardless of the difference in perception, in line with Reger's (1986) findings, imitation as found in this study had to certain extent aided the child to expand his repertoire which enabled the child to produce more intelligible descriptions after imitating the model lexicons.

CONCLUSION

Within the limits of this study, imitation seems to have contributed to the child's second language development in terms of content assimilation which can be assumed to further concretise the child's comprehension competence, in terms of syntactical development which enhances the improvement of the child's grammatical skills and the

expansion of the child's repertoire through lexicon internalisation which was achieved through the child's aim to fulfil the task in meeting the mother's demand to describe the pictures.

This is in line with what was suggested by Vygotsky (1978), where significant others place demands on children that require them to encode and retrieve information which in this study was done through imitation of adult's utterances that provided cognitive structure and an organisational model of language to the child.

This study also gives rise to the fact that in order to imitate, a child must be provided with the reason why he should imitate. In this study, the child seemed to perceive the picture describing as his interaction in a natural language environment with his parent where he sort of knew that he was supposed to re describe the pictures the way the pictures were described by his mother. The extent to which purpose serves as a pushing factor in enhancing imitation in language development is still not clear. Nevertheless, the role of imitation in language development cannot be denied.

LIMITATIONS AND RECOMMENDATION FOR FURTHER RESEARCH

Throughout the experimental period, it was impossible to prevent the child from talking about the pictures to his father with whom he also interacts in his home environment. Therefore, his post-description might be affected by his father's description

which might be presented to him in a different manner. Nevertheless, the period of data collection was limited to five days to reduce the impact that the child's interaction with his father might have had on his post-descriptions.

The other limitation is the nature of the supporting stimuli used in this study which was in the form of drawings might affect the child's perception due to some ambiguity of the pictures. A clear case as in the child's post-description of picture 21.

The third limitation is that the verbal stimuli which was the actual or model descriptions were based on adult's perception. On the contrary, the child might perceive the pictures differently according to his child perception.

The above factors would most probably influence the child's performance in this study.

Since this study involves only one subject, therefore the findings in this case study cannot be used as a generalisation on children of the same age. Further directions for research, which might remedy some of the shortcomings listed above could therefore include:

1) A longitudinal study might produce more useful insights on the role of imitation in second language development.

2) Studying older subjects learning a second language which might enable the finding of useful 'tool' in relation to imitation which could be employed in second language teaching in schools.