



Child Language Acquisition & Bilingualism- Some of the best practices

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This literature review was born out of my belief in limitless possibility that a prominent early language education could bring to a child's future. It guides parents and caregivers through the basic understanding of child language acquisition and bilingual education. This present paper is not only dedicated to children of mixed backgrounds but also to any children whose parents are open to bring up their children speaking languages other than their own parental language. Since it is quite a large topic with a lot of complexity, the age target of this thesis is exclusively limited to children from 0-6 years old.

Literature review using thematic analysis is the main method of composing this thesis. Theoretical foundation of the thesis comes from dominant studies and researches in the domain of Child Language Acquisition and Early Bilingual Education. From the body of literatures, several findings were taken into consideration:

There are remaining mysteries in the study of languages-mind and the process of child's language acquisition, no theory approach is absolute. It is essential to consider each child as individual in his/ her own context to support his/her journey of languages learning.

If we embrace all the theory approaches and form a synthesis of them, it is worth noting that, every human child is naturally capable of learning any human language. The mechanism that babies learn languages is extraordinary during their childhood compared with adulthood. The language acquisition process is the same for babies raised monolingual and those raised bilingual. The only difference lies in the fact that bilingual toddlers receive two language inputs at once and see those languages as two first languages instead of having only one first language like monolingual toddlers. Despite child's innate ability of acquiring languages, the process of child language acquisition, especially in the case of bilingual raised kids, could not be fulfilled without favourable environment, interactions (notably with those who can act as language guide of the child) and suitable educational methods.

Training children to be bilingual is done through controlling the language inputs. There are two methods of raising children bilingual: either One-Parent-One-Language (OPOL) or drawing language boundaries through situations. There are also some cautions that need parents to pay attention during the critical period of language acquisition.

In further analysis and discussion of the topic, I refer to the actuality of the topic, suggestion about future studies, supporting language education and developing early bilingualism.

Keywords: language immersion, bilingual education, child language acquisition

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1 Introduction

Neurological research shows that early years play a key role in brain development and language development is one of the most important infancy cognitive developments (Centre on the Developing Child 2007). Having knowledge of child language acquisition allows caregivers to facilitate the language learning of child and consider a better approach to child language education. Promoting bilingualism early on could be the best thing that parents can do for their kids.

In the context of our modern society where mobility has never been easier, one lives with not only a single identity but multiple, questions concerning raising child bilingual are increasingly popular to both multicultural families and those who wish to maximise children's opportunities in the globalised world. There were 364,787 people with foreign background living in Finland in 2016 and of these, 306,840 were born abroad and 57,974 in Finland (National Institute for Wealth and Healthcare Finland 2018). The number of immigrants has been increasing every year, which means that there would be more and more children with mixed background having full potential and ability to become bilingual. For many immigrant families, having their children speaking their language of origin, along with the local language, is important to save their ethnic patrimoine. While it seems like never too late to learn a new language, researches show that children have the best chance to be native-like fluent in any language they learn while adults need to struggle a lot more (Ramirez Naja & Kuhl Patricia 2016; Flege James et al. 1999).

I am always intrigued with the topic of 'bilingualism' in early childhood education and a believer in the limitless possibility that a prominent early language acquisition period could bring to child's future. Adolf Berle (1895-1971) was a youngest Harvard Law graduate, a notorious American diplomat, a member of US President Roosevelt's 'Brain Trust'. His father's special education method was recorded and analysed by a Japanese author Kyuichi Kimura in his book 'Sôkyôiku to tensai' (1916) (Translated from Japanese 'Genius and the early education'). In the book, Kyuichi mentioned that Berle's father saw foreign language teaching as the best method of training child's brain.

There are a lot of myths surrounding 'bilingualism'. For example: bilingualism slows down child development; the language competence of bilingual child is less good than monolingual child; speaking two languages simultaneously confuses child. However, modern studies have proved otherwise. Bilinguals outperform monolinguals in tasks requiring executive control and as the result have better cognitive abilities, bilinguals are less likely to have dementia compared with their monolingual peers (Bialystok E 2011). Bilingual children have better metalinguistic skills (Bialystok E 2007) and hence could acquire the third language easier; They also can distinguish the differences among the different languages (Linguistic Society of America ND). Nevertheless,

we all admit the fact that languages bridge cultures which makes bilingualism an extraordinary gift. A good thing to know is that being bilingual is not something exceptional but rather a norm despite that it requires some certain efforts (Steiner N et al. 2008).

The purpose of this thesis is to guide parents and caregivers through the basic understanding of child language acquisition and bilingual education. Along with literature review, the side examples and further analyses on the topic are presented. This present paper is not only dedicated to children of mixed backgrounds but also to any children whose parents are open to bring up their children speaking languages other than their own parental language. Since it is quite a large topic with a lot of complexity, the age target of this thesis is exclusively limited to children from 0-6 years old with no special conditions. At this range of age, children focus on building their oral and communication skills before picking up their reading and writing skills in elementary school. Therefore, I will not get deeper into the process of writing and reading acquisition of (bilingual) child.

2 Background of the thesis

'Child Language Acquisition and Bilingualism: Some of the best practices' thesis is a part of my bachelor study in Social Services, majoring in Early Childhood Education in Laurea University of Applied Sciences, Finland. This section stumbles on the context of languages education in Finland with extended perspective from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the European Union (EU).

UNESCO (2011) has recognised the importance of enhancing language education across the world, particularly multilingual education for those of diverse background. It is to contribute to the goal of protecting children's first language and preserve the world linguistics' diversity (UNESCO 2011, p57). To promote every child's opportunities to learn, UNESCO called out for 'immediate practical solutions to increase the availability of quality mother tongue based bi/multilingual education for young children' (UNESCO 2011, p57). Bilingual education programmes for minority first language children are available in some minority and indigenous communities but still far from common (Benson 2009 cited in UNESCO 2011, p58). UNESCO encouraged more advancement in **preschooler's bi/multilingual education research** since these researches are 'scarce' (UNESCO 2011, p58); it also mentioned the lack of 'systematic and meaningful data collection' of the issue to make it available for policy makers and educators and required more financial investment into pilot projects in the field (UNESCO 2011, p58). The discussion about languages education goes beyond educational policies. Despite the progress in improving comprehensive school's formal education, UNESCO admitted the importance of home language learning and the efforts made by parents and communities to empower child's language acquisition (UNESCO 2011, p58).

In Europe, the EU strongly committed in promoting language learning and linguistic diversity. Multilingualism is one of the key policies in European Commission's education and training (European Commission 2019). EU has been working with national governments to achieve its ambitious goal: European citizens will be able to learn at least two foreign languages from early age (European Commission 2019). EU acknowledged the role of language education in maintaining harmonisation within European Union as languages can facilitate the understandings between people and people among themselves and about their own countries and cultures (European Commission 2019). Languages are also seen as 'a factor of competitiveness' in the labour market (European Commission 2019) for EU is all about free economical mobilisation: liberated trade and human workforce. Foreign language skills enable European citizens to be employable within Europe. In spite of actions done, many European citizens leave school without a sufficient knowledge of a second language requiring better improvement in languages education (European Commission 2019).

In Finland, apart from two first national languages as Finnish and Swedish, there are more than 150 different first languages spoken (Institute for the Languages of Finland 2019). The data from Statistics Finland suggests that 93% Finnish residents are bilingual with nearly all (97-98%) people under 45 years old speak at least one foreign language (Statistics Finland cited in Daily Finland 2018). English proficiency in Finland scores higher than it of European average and among the top 10 globally during the period from 2011 to 2018 (EFa 2019). In 2018, Finland EF EPI score was 65,86 vs 56,64 of Europe EF EPI (EFb 2019). Aside from English- the world dominant language, it is challenging to evaluate fluency level of other foreign languages (especially the minority foreign languages). Nevertheless, there is no information that I could find on how many among bilingual Finnish residents actually received bilingual education since birth.

Current Finnish education curriculum emphasizes the education of languages and allows first graders (7 years old) to have formal second language lessons for the first time (Prime Minister's Office 2018). Children under 6 have subjective rights to receive Early Childhood Education and Care in Kindergarten (public or private) (Ministry of Education and Culture 2017, p12). 244 000 (68%) out of 358 400 total children aged 1-6 attended daycare in Finland in 2016 (Kumpulainen T 2018, p8). This participation rate is low relatively to international standard (Kumpulainen T 2018, p8). Municipal daycares provide children with wide range of child development activities in the national languages: Finnish or Swedish (Info Finland 2019). In Helsinki, for example, some municipal daycares provide children with language immersion programmes, intensive bilingual early education programmes and early enriched-language programmes (the three types differ from each other by the amount of instruction in the foreign language) (City of Helsinki 2019). There are some other languages-oriented daycares but they are usually private and only limited to certain mainstream languages such as: French, Spanish, English, Arabic, Russian, German, etc. We can find a full list of registered private language-oriented daycares in the official page of each regional city.

Policy makers and educators around the world and in Finland all agree that language education, particularly bi/multilingual education is a fundamental part of any national government's education framework. Finland, in line with the EU guidelines, allows its pupil to expose to several foreign languages during compulsory school. Opportunities to develop early child languages are always presented to Finnish early children. However, guidelines for developing bi/multilingualism in early childhood education (0-6 years old) are not widely available. There are also not sufficient choices for parents to choose the most suitable language education for their kids, especially those with mother tongue in a minority language. To surmount this challenge, along with efforts made by the official systems, families and communities also need to participate in the education/languages education of their kids. Nevertheless, early childhood education caregivers should also be well aware of the matter, committing to do their best to facilitate the languages acquisition of the children. I hope that this thesis may suggest some directions for

parents and early child caregivers to work towards meeting language education needs of each individual child.

Section 3 introduces the role of language in early childhood development and education.

3 Language and Early Childhood Development

‘For most mammals that have been studied in detail, the conditions influencing physical development and behaviour in the early stage of life have a significant effect on the later stages’ (Mustard J 2002, 28). For human development, early years of development affects fundamentally cognition, learning and behaviour in the later stage of life (Mustard J, 2002, 28). Robinson (2007) composed a summary of aspects and components of human development in the table 3.1 (Robinson M 2007, 7).

<i>Brain function</i>	<i>Sensory integration</i>	<i>Emotions/ feelings</i>	<i>Thought and communication</i>	<i>Physical development</i>
Level of integrity of brain organization linked to both genetic and experiential factors	The level of functioning of each sensory system	Awareness of feelings and the sense of a feeling of self	The capacity to frame experience into internal imagery/internal ‘language’	Awareness of the bodily self and allied spatial awareness
Level of integrity of the communication mechanisms within the brain	The commonalities and differences between the sensory systems in the processing of information	Ability to recognize emotions in self and others	The capacity for communication, its use and expression via facial expression, body language and spoken (or sign) language	Capacity for movement, both gross and fine motor
The health and functioning of the structures of the brain	The rate of maturation of each sensory system	Ability to express or contain emotions within social and cultural frameworks	Understanding of expression and gesture in others	Physical growth and change over time and rates of maturation
Specificity or otherwise of roles and functions within the brain	Impact of sensory systems on the formation of a sense of bodily and psychological ‘self’	Type and quality of interactions including attachment formation	The presence (or not) of ‘innate’ knowledge	Level of integrity of reflexes, balance and coordination
The rate of maturation of different brain areas	Impact of sensory perceptions and thereby internal reactions to day-to-day experience	Ability to manage emotional reactions/ feelings to daily experience	The capacity for imitation, play and imagination in learning	

Figure 3.1: Aspects and components of development (Robinson M 2007, 7)

According to her, there are five dimensions of human development: Brain Functions, Sensory Integration, Emotions/Feelings, Thought and Communication and Physical Development (in simpler terms: physical, social and emotional, language and learning) (Robinson M 2007, 6). The human development is time sensitive. It is shaped as an 'integrated whole' of those domains instead of a set of separate domains (Robinson M 2007, 6). The table 3.1 clearly shows that language is a big part of thought and communication development which interconnects with the rest of human physical and mind development.

In the next chapter, we focus on some of popular theories about Child Language Acquisition and Early Bilingualism. Following it is the presentation of the thesis method and findings. The report ends with further analysis and discussion.

4 Theoretical Framework

This part aims to summarise the precedent scientific findings in the field to explore the topic of ‘Child language acquisition and bilingualism’. ‘Language’ is ‘a method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way’; non-verbal communication is called body language; each country has its own different communication system, that is the language of that country (Oxford English Dictionary NDa). Correspondingly, Eifring & Rolf (2005) described language as ‘system of communication based upon words and the combination of words into sentences. Communication by means of language may be referred to as linguistic-communication, the other ways (...) - laughing, smiling, shrieking, and so on - are types of non-linguistic communication’ (Eifring & Rolf 2005, 2). Language, hence, an exclusive human property (Eifring & Rolf 2005, 2). It is commonly believed that the process of learning languages is not the same for adults and children. Section 4.1 brings up some of the most influential ideologies in the study of child language acquisition. Section 4.2 touched on common practice of ‘child-directed speech’ and the science of it. After having acquaintance with the general perception of child language acquisition, we dive into the potential of more advanced language education- bilingual education.

Conventionally, every child grows up speaking at least one language of their origin. The ability of speaking only one language is referred as ‘monolingual’ (Oxford English Dictionary NDb). On the other hand, those who are fluent in two languages are bilingual (Oxford English Dictionary NDc). While the definition of ‘monolingual’ is quite accurate, the use of the term ‘bilingual’ is somehow unclear. Firstly, bilingualism could be acquired since birth (simultaneously) or sequentially (the second language is acquired much later in life); therefore, it is challenging to differentiate these two types of bilingual. In addition, under some circumstances, ‘bilingualism’ is utilised to refer to both multilingualism and bilingualism- those who speak at least two languages and more, such as in the case of Bhatia Tej (2017). Therefore, to maintain consistency in this thesis, I use ‘bilingual’ to refer to simultaneous bilingualism, including those who speak at least two languages or more. Section 4.3 compares the language acquisition process of monolingual child and bilingual child to demonstrate the extra needs and conditions that orient child to be bilingual. The mechanism of language acquisition in human is proved to be time-sensitive, the ability to acquire languages decreases when human gets older, it is to be discovered in section 4.4. Section 4.5 suggests some of the best advices and practices on methods of raising child bilingual with a side remark- an interview with a bilingual child’s parent.

4.1 Child Language Acquisition: Dominant Theories

Child language acquisition has often been a topic of debate and research in our modern society. Apparently, no single answer could uncover the mysteries of child language learning: why language is so complex, yet children can learn it fast with nearly perfect grammar comprehension

even before getting taught grammar rules? In language acquisition, what is learnt and what is not? Why the process of child language acquisition of one child resembles to a large extent the other? If that is the case, what are the stages of child language acquisition? Understanding the mechanism underlying in child language acquisition is important to approach the best language teaching method for each child.

Among the number of paradigms dominating the study of child language acquisition that I could hardly cover in this thesis alone, there are some paradigms occurred the most frequently in several studies of child language acquisition (Hare E NDa; Wanjohi A M 2010; Khanacademy ND; so forth): nature vs nurture, social interaction theory and cognitive theory. Though being invented the first time from the end of XX century, these theories are still seen as cornerstone and frequently referred to in modern studies of language acquisition (Hare E NDa; Wanjohi A M 2010; Khanacademy ND). There were no relevant replacement so far as significant as these hypothesis. Nature vs Nurture debate, for instance, has been there for over a century and the debate is still going on. With a simple keyword 'Nature vs Nurture debate' on Google Scholar, restricted criteria to the year of 2019 exclusively, we attain 8420 results in 0,06 second and the results show no accurate answer to whether or not deny this dichotomy. Therefore, to validate these theories, up-to-date revaluation and critics are included along with the theories presentation.

Section 4.1.1 Nature vs Nurture gives explanation to the way child acquire languages. The paradox between whether language acquisition is natural or is no more than a set of skills acquired through conditioning activities is examined. Section 3.1.2 introduces Jean Piaget's cognitive theories on child language development. He proposed child language acquisition process tackled into different development stages from birth until puberty. Last section 3.1.3 featuring two well-known interactionists Vygotsky and Bruner suggests the role of interactions towards child language development.

4.1.1 Nature vs Nurture

When it comes to language acquisition, the first and most important question is about the mechanism that human learns languages. The ability to learn a language is embedded in our instincts, our genes (nature) or thank to impacts from external environment (nurture)? It is a primordial debate topic in the beginning study of language and mind.

Noam Chomsky, representing 'nature' side of the paradox, proposed a 'biolinguistic' approach of language acquisition (Chomsky N. 2006, p173-185). According to him, language is an innate process derived from human minds since birth. It is one unique characteristic contributing only

to human and not influenced by external environment. There are stages of language acquisition that are biologically programmed in human mind and human can obtain language up to a certain age. He refused the idea that human mind could be made up by experience. Those characteristics lie in his proposal of 'language acquisition device' (LAD) (Chomsky N. 2006) which aims to explain how children can acquire any language that they are exposed to within a few years after birth. Noam Chomsky believed that LAD- the innate biological ability of human to acquire and develop language is a mechanism only found in human which helps us to understand, learn and use languages like no other animals. In this LAD, it must be included the knowledge of important characteristics of all languages in the world. The term 'universal grammar' was coined to describe this knowledge (Chomsky N. 2006. p24). During the process of learning a language, the child would discover certain grammar rules within the 'universal grammar' applying to the language that she/ he learns.

Noam Chomsky's reasoning makes sense based on several empirical evidences. For example: Non-human species do not learn human languages spontaneously like human babies. Even attempts to teach other animals human language yielded mixed results. In some cases where gorillas and chimpanzees were taught human sign language, though some very intelligent individuals of those species were able to communicate concrete ideas, they could not master the intricacies of building grammatically correct sentences: the cases of Koko/Michael- gorilla or Washoe- chimpanzee (Slate 2014). The modern study of brain structure, consistent with Noam Chomsky 's view, also showed that there are certain areas in human brain responsible for language learning and processing (Brainworld 2019), which are not present in non-human brain. However, the exact location of LAD in human brain is not defined. Human babies learn languages at an impressive speed, they imitate the speeches of adults but also understand the syntax and grammar structure of the language naturally and seems not to replicate the grammar errors of their caregivers. Supporting Noam Chomsky's idea that language knowledge is innate, Eric Lenneberg's 'critical period hypothesis' (Lenneberg E 1967) claimed that: human are capable of learning languages until puberty. After this critical period, human are unable to master the complexity of nature language anymore. It is proved that without exposed to human languages early enough, human-born individuals can not speak easily and fluently like other human beings; the case of Victor, Jennie- the wild child, individuals born with severe hearing loss rarely achieve native like proficiency if being exposed to sign language too late. Furthermore, those who attempt to learn a second language after puberty rarely achieve the level of proficiency compared with those who learn the language during their childhood (Smith D 2018).

However, understanding the language learning process from the 'nature' approach failed to take into consideration of the social key role in language acquisition. The study of Jacqueline Sachs, Barbara Bard and Marie L. Johnson (1981) highlighted the importance of social interac-

tion in child's language acquisition. The group of scientists organised a case study of two hearing children of deaf parents. The parents were deaf and the children were normal. The children got minimum understand of sign language, minimum interaction with other people but their deaf caregivers, exposed maximum to television, radio. Their understanding of first language hence was below the average, could speak barely few words, sentences were formed fragmented. The situation was improved when intervention took place. The children were put in touch with a language therapist, to whom they could speak with and listen to. Intervention led to significant improvement in their expressive abilities and spontaneous speeches. Their school performances later in life were shown normal despite some weak points in language tests (Jacqueline Sachs, Barbara Bard and Marie L. Johnson, 1981).

On the other hand, many researchers rejected the notion of innate mechanism of language acquisition, one notorious of them was the behaviorist Burrhus Frederic Skinner. Himself, together with other contemporary cognitive scientists such as David Rumelhart and James McClelland believed that language fluency is a set of nurtured skills as the results from general learning principles, rather than a biological mechanism. The child's mechanism of learning a language was seen more in favour of a conditioning act, a part of Skinner's larger theory of 'Operant Conditioning' (Skinner F 1957). Operant conditioning is a method of learning that occurs through rewards and punishments for behavior (McLeod A. 2018). Behaviors which produce positive results would be likely to be repeated and on the contrary, those which lead to unpleasant consequences are likely to be limited. According to Skinner, there are three types of responses (operants) that can follow behavior: neutral operants, reinforcers and punishers. Neutral operants do not affect the probability and likelihood of a behavior while reinforcers encourage the repetition of the act and punishers restrict the frequency of the act. Learning language under this angle is a set of skills achieved through **imitation** like other skills and reinforced through the rewards from the environment. For example: encouragement from parents when a child says a correct word reinforces child's repetition of pronouncing correctly that word, etc.

In fact, 'nurture' factors are vital in the process of language acquisition. Learning a language definitely requires imitation: imitation of pronunciation, intonation, so forth. However, imitation can not explain for the whole cognitive process. Children clearly go through certain language development stages no matter the language they learn. They have very great understanding of grammars, syntax, infinite number of sentences, expressions, etc. Imitation alone is not enough.

4.1.2 Jean Piaget's cognitive theory on child language development

In his work 'The language and the thought of the child' (Piaget J 1959), Piaget formed his hypothesis of child cognitive development arguing that: children do not think like adults, they

are active learners acting in certain ways to make sense of their surrounding world. They use environment and social interaction to shape languages. Piaget's theory circulates that children's language reflects the development of their logical thinking and reasoning skills through concrete stages corresponding to age reference: Sensorimotor (up to 2 years of age), Preoperational (2-7 years of age), Concrete Operational (7-11 years of age), Formal Operational (11 years old and up) (Piaget J 1959). The flowchart 4.1.2 resumes the stages in Piaget's theory of language development.

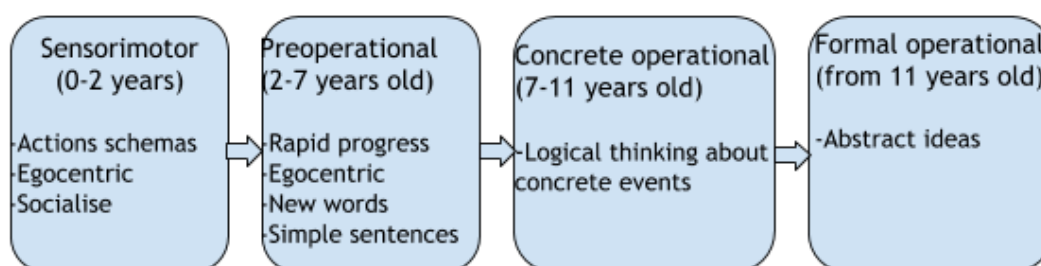


Figure 4.1.2: Jean Piaget's Child Language Development stages

Children were born with basic 'action schemas'- units of knowledge organised by an innate force which helps them to continue to build their blocks of knowledge throughout their life, to 'understand' the world through everyday 'adaptation'. 'Action schemas' is defined by Piaget's own words:

'a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning.' (Piaget J 1952, p7)

Schemas can be understood more simply as the representatives of all aspects, conductives of the world that direct the child's cognition. Every child possesses accordingly certain 'action schemas' benefiting them to communicate with other human beings such as sucking, crying before getting ever taught any word of human language. As children grow physically and mentally with time, they add more schemas into their own system until they have full awareness of the world, to become full adults. To Piaget, child's intellectual growth process is viewed as a process of adaptation to the world. Child's schemas are acquired and modified using this system of adaptation. It happens through three steps: 'assimilation', 'accommodation' and 'equilibration'. Child uses his own existing schemas to deal with objects and situations to assimilate the new information. Child is in 'equilibrium' state when the new information is processed smoothly, fitting into the child's existing schemas. If 'assimilation' does not work because the new information is unfamiliar with his existing schemas, child enters the state of 'disequilibrium' and by changing or adding more schemas into his intellectual system, his needs of new schemas are 'accommodated'. This adaptation process is how child shapes and reshapes the

knowledge about the world up until mature age. It is the same manner that child's language develops.

In 'Sensorimotor' stage, new-born babies discover the outside world for the first time. They have some basic 'action schemas' to communicate their needs and to sense the environment around. As it is the beginning of the process of learning human language, child's 'conversation' is still very limited, very egocentric. Babies socialise with very concrete lexis, learn to feel and classify objects and get to know about 'object permanence' (the understanding that the object continues to exist even if it can not be perceived by senses).

Children have rapid progress when they enter the stage of 'preoperational'. They acquire more vocabularies and able to form complex sentences as well as hold coherent conversations in the language they learn. Their conversations are still egocentric- tentative of expressing more about themselves, though their enriched amount of vocabularies enables them to do it better.

In the last two stages of language development, children get into the depth of their language learning. 7-11 years old kid are able to achieve systematic thinkings about concrete events and from 11 years old, abstract reasoning starts to take place.

While there are clearly connections between child's cognitive development and child's language acquisition, Piaget received quite a few criticisms for his theory. The most common criticism is about the inaccuracy of the stages of child's language development (Donaldson 1978; Weiten W 1992; Gray 1994). In fact, the development stages are not totally separated and sometimes blending with each other. Additionally, the stages of development are variable depending on each child given their individual contexts. The children in Piaget's experiment were born and educated in Geneva, his study was heavily oriented to Western schooling system.

4.1.3 Social Interaction Theory

Social Interaction Theory is a remarkable approach to explain the language acquisition process emphasizing the importance of social interactions, especially between developing child and fully linguistic capable adults. Not totally sided with 'nature' nor 'nurture' approach, social interactionists believe that children picking up languages is both biologically and socially inclined and these two factors exist inseparably. Most well-knowns in this domain of research are Lev Vygotsky (1896-1934) and Jerome Bruner (1915-2016). Vygotsky laid the foundation and his social-development theory is adopted and made prominent in the Western world by Bruner.

Vygotsky is convinced that human development process starting from birth until death is very complicated to break down into concrete stages like what did Piaget (Driscoll 1994; Hausfather

1996, cited in Dabbagh N & Riddle E, 1999). While Piaget believed that child's development needs to reach certain level to achieve the language learning; Vygotsky, on the other hand, sees language as a tool serving the need of socialisation, the act of internalise this tool immensely influences cognitive development (Vygotsky 1962).

According to Vygotsky, life-long development process depends heavily on social interaction and social learning eventually results in cognitive development. He named this phenomena: Zone of Proximal Development (Dabbagh N & Riddle E, 1999). Zone of Proximal Development (ZPD) is described by Vygotsky's own words: "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky 1978, p68). In ZPD, imitation and instruction contribute significantly to child's development (Vygotsky 1986, cited in McCafferty 2002). The ZPD in child language acquisition is illustrated in the figure 4.1.3

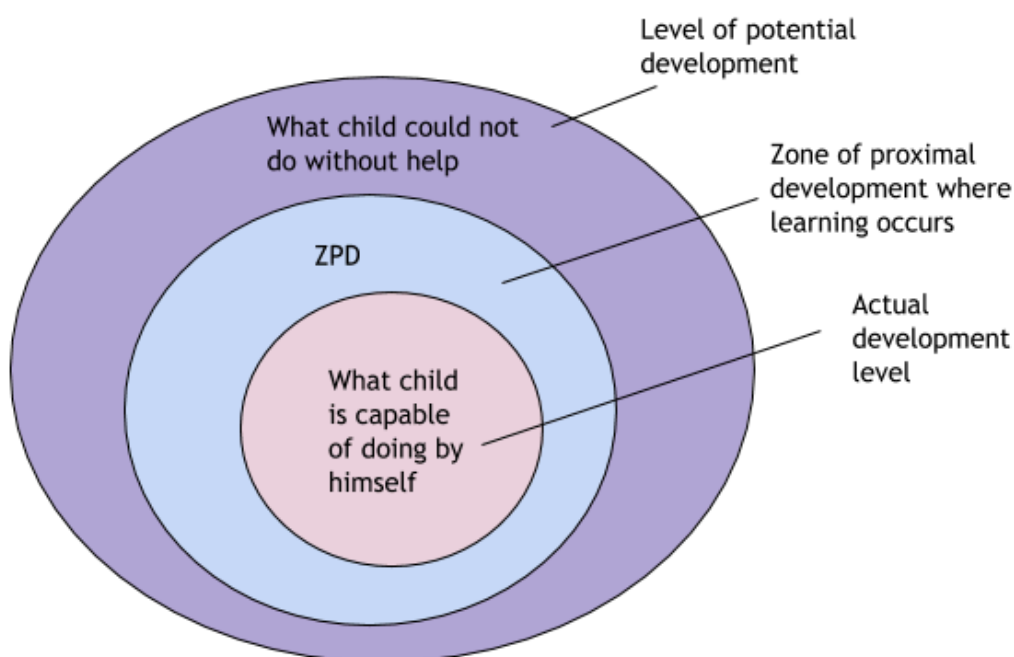


Figure 4.1.3: Vygotsky's Zone of Proximal Development

In Figure 4.1.3, the central pink circle represents for child's actual development level. This zone covers what child is capable of doing without guidance. The outermost purple circle is the level child could potentially reach to with helps from 'more knowledgeable others'. The blue zone marked 'ZPD' in between, bridging the pink and purple zone is Zone of Proximal Development where Vygotsky claimed that learning occurred.

As far as we know, Vygotsky did not leave any written text on systematic methods of how peer collaborations or adults' guidance should be conducted but rather formulated a theoretical logic for assessing the (subjective) ZPD of a child in a very approximate manner (Chaiklin S 2003). Despite the lack of comprehensive codes of conduct, Zone of Proximal Development is probably the most significant contribution of Vygotsky to contemporary education. This concept embedded in teaching and learning of several subjects not only languages but also including mathematics, sciences, music (Chaiklin S 2003).

There are several examples of how ZPD concept is interpreted into practices to accelerate child language acquisition. In formal schooling, ZPD is behind reciprocal experience of collaboration between teachers and pupils, among pupils themselves. The classroom becomes a community of learning (Dabarg N & Riddle E 1999). Besides, scaffolding or also known as guided learning pedagogy is also an effective strategy to help pupil get access to the ZPD. Scaffolding is the term (not used by Vygotsky himself but introduced by later interactionists like Wood, Bruner, Rose (1976)) to define a process where educators or more competent peers provide some activities as support to lead the child through ZPD. Vygotsky gave example of support interventions: "We assist each child through demonstration, leading questions, and by introducing elements of the task's solution" (Vygotsky 1987, p. 209). In line with that, Wood and Middleton (1975) also listed some types of support including: general encouragement, specific instructions, direct demonstration. For example: teachers give pupils tasks whilst engaging their interest, accompanying them until the tasks are solved; the process of managing to solve the tasks till the end gives pupils an opportunity to extend their skills and knowledge.

In home learning, parents could also drive their kids to ZPD through interactions and scaffolding practice.

Among Bruner's interpretations of Vygotsky's work, he came with the idea grounded on Vygotsky's social interaction theory acting as a companion for the LAD by Chomsky, which is called Language Acquisition Support System (LASS). LASS works in conjunction with LAD (Poje-Crétien J 1985, p.79-80). Human babies were born with innate instinct to learn human language but the interaction between the babies and human society also plays a vital role in their language acquisition process. LASS is a mechanism that child uses to acquire a language based on external supports. The external supports come from 'the more knowledgeable others', familiar environment and familiar social routines. 'The more knowledgeable others' imply language-master adults who are usually child's caregivers or parents. These adults act as casual tutors who reinforce child's language and direct his/her speech. Through interactions, child learns other conversational skills and pragmatics (Hare E. NDa).

Social interactions certainly play a vital role in language acquisition process to either child or adult learning language. However, it is challenging to evaluate the theory as relationship between the amount of child-adult interactions and language acquisition is difficult to measure.

4.2 Child language acquisition: Child directed speech

Adults start speaking to babies from very first months of babies' life and exchanging conversations with them. However, the manner that adults communicate with children (child-directed speech) is usually different from the manner that adults communicate with each other (adults-direct speech). Adults tend to naturally switch to a style of communication adapted to children as if it is instinctive.

Child directed speech (CDS) or also known with other terms such as motherese, baby talk, etc. is characterised with some distinctions from adult-directed speech (ADS) regarding to phonology, lexis and grammar (Hare E. NDb). With phonology, CDS seems to be slower with clearer pronunciation, contains more pauses, has higher pitch and exaggerated intonation. Vocabularies in CDS are more limited, simpler and concrete, it is reported that adults used approximately 100 words compared with thousands used in ADS (Ferguson 1977 cited in Saxton M 2009) to talk with their children and more often replace some certain words with others of diminutive forms, for example: doggie instead of dog, moo instead of cow. CDS grammar structure is also simpler, **repetitive** and frequently under question form. Adult repetitions, both of their own and children speech, are usually found with some alterations (Saxton M 2009). This kind of repetition referred as 'expansion' or 'recasting' was studied extensively by numerous researchers (Brown R & Bellugi U 1964; Cazden B 1965). They believed that 'expansion'/'recasting' facilitated the understanding and learning of language. Example below was taken from Brown (1973):

Eve: More cookie.

Mother: You have another cookie right on the table.

Eve: That finger.

Mother: Where is your finger?

Eve: Play Eve broom.

Mother: Yes, you play with Eve's broom. That's a girl.

From the conversation we could see that mother developed the child's utterance into a longer and more meaningful sentences: she repeated what Eve should have said in the complete form of sentence, she inquired Eve to trigger her thought of forming complete sentences. Parental recasts hence provide a good example of Vygotsky's scaffolding (Saxton M 2009).

In fact, CDS has been long a controversial topic of should or should not adults use CDS to children. Child's language is fully developed when his language is adult's alike. Many argue that adults should speak to children as normally as possible because children need to learn how to talk from the good example instead of following what we perceived as mistakes (Desmarais S 2018). Chomsky (1965, p31) described baby talk 'fairly degenerate in quality' characterised by 'fragments and deviant expressions of a variety of sorts' (cited in Saxton M 2009). Pinker (1994) considered CDS as the way that parents 'indulge' their child. CDS has bad reputation perhaps partly due to its broad definition and its variation in practice. While some traits of CDS are questionable for their usefulness, a few features of CDS are even seen inevitable in child language acquisition for some researchers (Saxton M 2009; Matychuk P 2005; Burnham D 2016). CDS is preferred by children (Aslin R & Cooper R 1990) and hence held their attention better, which benefits learning language (Saxton M 2009). The exaggerated intonation, slow speech and high pitch speech, according to those who support CDS, aids children in differentiating words and thus helps them acquire larger vocabularies. Additionally, countless parents refuse to stop talking with their children in baby language with the reason: 'let children be children' and many of them said that their children grew up just fine, happily and healthily. Raising child with or without CDS does not show much differences on the surface.

Until now, it seems like there is no exact answer for whether or not should we use 'baby talk' with children. Searching on Google with the keyword 'baby talk' also shows conflicting opinions and somehow misleading articles due to careless garbling information. However, for references, in some classical works about child education, parents of 'extraordinary' children such as Karl Witte, Adolf Berle did reveal the method that their children learn languages. I chose these examples as their life was empirical proof of the childhood education method that their parents used. Unsurprisingly, the parents of those great men believed that language education was the foremost intellectual priority because language was the tool for child to reason, communicate and approach other knowledge (Kyuichi K 1916). Both Karl Witte and Adolf Berle mastered several languages during their childhood and were extremely sharp intellectually. Karl's father stated that correct acquisition of his mother tongue language made Karl intelligent in the early age (Wiener L 1914). He clearly disagreed with 'baby talk' especially the use of words in diminutive forms like 'bah' instead of 'sheep', 'meow' instead of cat, called it 'unwisdom' and created an environment where Karl only got exposed to pure German (German was his native language) (Wiener L 1914). Shared the same point of view with Karl's father, Berle's father was convinced that teaching children the 'wrong' words, the words that they rarely used wasted child's time and capacity; adults' speech needed to be good example for children, that means with concrete pronunciation without exaggerated intonation (Kyuichi K 1916). Both Karl and Adolf were only exposed to the pure source of language, required to be considerate with words before speaking. The two fathers were common in their aim of shaping their children's language in the most precise way as if language actually shaped how child rationalised. However, despite

showing hostile towards ‘baby language’, Karl’s father might not realise his application of some characteristics of CDS in the education of Karl Witte. Karl was taught first words of his life by hearing his caregivers named **concrete objects**, so the simpler words were taught at first (Wiener L 1914). His parents spoke to him **appropriately slow** and **encouraged** him when he said something correctly (Wiener L 1914). His parents gave detailed explanation for asking him to say correctly words or to correct his utterances into better forms (Wiener L 1914). The trait of ‘expansion’/’recasting’ was very clearly in implementation in child language teaching method of Karl’s father.

Briefly, caregivers should highly pay attention to their language while communicating with children. CDS should be carefully studied and moderately controlled if being used with children of young age.

4.3 Child language acquisition: Monolingual vs Bilingual

Jayasundara (2015) has well exposed the language competences of both monolingual and bilingual child. This section summarised her findings in comparing the process of child language acquisition between monolingual child and bilingual child. While monolingual child grows up conceiving only a language as first language or language of birth, bilingual child acquires two or more languages when exposed to them as a very young child and regarded those languages simultaneously as two (or more) ‘first’ languages (Jayasundara 2015). The bilingual children are able to acquire competence of each that does not substantially differ from the speaking ability of monolinguals (Jayasundara 2015).

Researches suggest that bilingual children are children of normal intelligence (Steiner N & Hayes S 2008; Jayasundara 2015). It is natural that children acquire the languages that they are exposed to. Evidences also show that those children who ended up monolinguals or bilinguals went through the similar stages of language acquisition (Jayasundara 2015). There are four criterias differentiating the language acquisition process of bilingual children from those of monolingual: (1) the amount and type of input of each of the two languages, (2) the possibility of an asymmetry or dominance of one language over the other, (3) the interaction or separation of two language systems, (4) socio-psychological factors in bilingual acquisition and use (Jayasundara 2015).

The amount and type of input: While the linguistic data input for monolingual child is uniform and homogeneous, the input for bilingual child is always divided. The quantity of his or her exposure to any given language in the case of bilingual child is always smaller at any time

compared with monolingual child. Furthermore, the input from each language is also intermittent with the other. In reverse, the total vocabulary size of bilingual child (in both languages that he/she speaks) surpasses that of monolinguals (Allman B 2005).

Two linguistic systems in bilingual children: Ultimate separation does take place resulting in two language systems becoming autonomous from each other. However, it is still unknown whether there is this separation from initial stages. Bilingual children, once reach ultimate language competence, are able to separate the use of two languages and employ these two systems interactively.

Asymmetry/ Dominance of one language over the other: Due to socio-psychological factors and temporal-input relationship, though bilingual child is competent in both of the language, one language will become dominant. However, the dominance is not permanent and can interexchange over the course of child's life (Steiner N & Hayes S. 2008).

Socio-psychological factors: Though being bilinguals are normal, social cultural condition and motivation can play a vital role in training children to be bilingual. Every fully-function child acquires one language, some children may resist to acquire extra-another. Additionally, how much support that families or society have to help children in acquiring certain languages also matter.

4.4 Critical period of acquiring second language

'When it comes to learning languages, experts generally agree that earlier is better' (Steiner N & Hayes S 2008, p9). Kuhl (2011) analysed the relationship between age of second language acquisition and language skills based on a wide variety of second language learning studies (Figure 4.4). We can learn languages at any age but if the learning occurs after the puberty, the level of expertise will be different from that of native speakers (Kuhl P 2011).

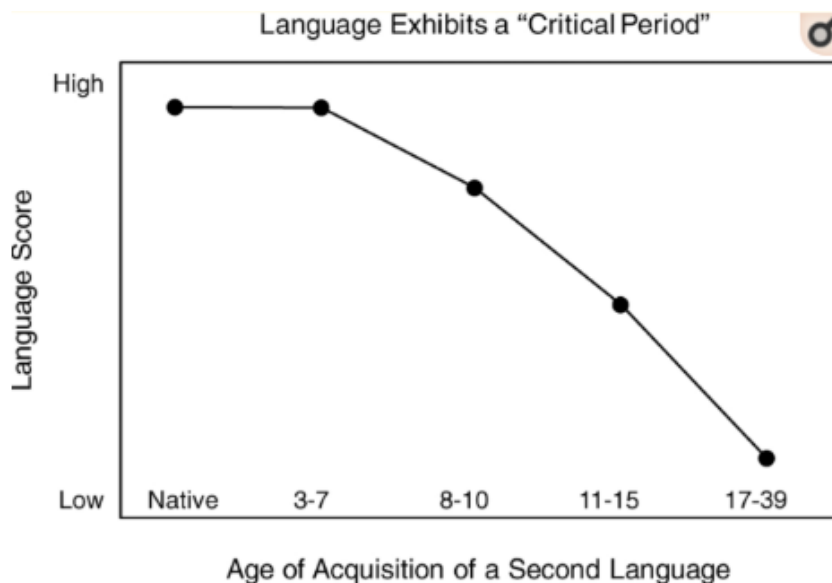


Figure 4.4: The relationship between age of acquisition of a second language and language skills (adapted from Johnson and Newport, 1989 cited in Kuhl P 2011)

From the Figure 4.4, human language acquisition mechanism is time sensitive. Human brain can never be better at learning languages than during the first 3 years of life.

4.5 Effective bilingual education methods and practices

As a monolingual child is different from a bilingual child only because he/she was not exposed to another language earlier in life, the secret to raise a child bilingual lies in the constant controlling of language inputs: early child should be exposed intensively to two languages simultaneously. The mechanism is illustrated in the Figure below

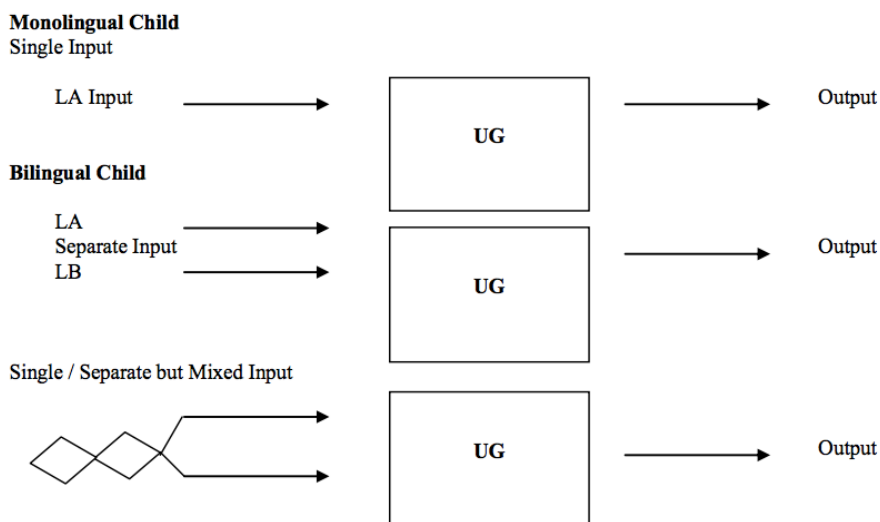


Figure 4.5: Language acquisition: Monolingual Child vs Bilingual Child (Jayasundara 2015)

In Figure 4.5, monolingual child only has a single input (LA- Language A) while bilingual child has two language inputs (LA- Language A and LB- Language B). LA and LB can be exposed to bilingual child in either separate or mixed manner. UG stands for Universal Grammar (the notion created by Noam Chomsky- see section 3.1.1) reasoning the language inputs and providing outcomes.

Using the same mechanism of monitoring language input, Steiner N et al (2008) proposed in her book methods of teaching children to acquire additional language since birth: One-Parent-One-Language (OPOL) or using language boundaries. OPOL is arguably more straightforward and most effective to execute. With this first method, each parent will be assigned to speak with their child in one particular language (one is different from the other) and remain always speaking the language they are assigned. By doing this, child receives constantly two language inputs in separate manner and effortlessly identify the language boundary. Child understands the differences between two languages and choose to use between two languages in suitable circumstances. There are variations of OPOL; however, for those variations to work, they need to adhere to one basic premise as OPOL: a clearly identifiable person who always consistently speak to the child in the same language. This method is notably useful for multicultural family in which parents have different native languages.

The other method, using language boundaries, draws the language boundaries around situations rather than people (Steiner N & Hayes S 2008). Child receives mixed inputs because caregivers and other people talk to him/her in two languages alternatively in a predetermined situation. Predetermined situation can be based on time of day (such as meal time, weekend), location (i.e: one language inside home another outside home), activities (i.e: during language tutoring courses, playing a language game). However, the language boundary can be blurred in everyday life and mixed language input may not deliver the best outcome (Steiner N & Hayes S. 2008). This method might be suitable though if parents find it the best strategy they can accommodate. With monolingual parents for example, they could speak with their child in language A and find a native tutor in language B to give courses at home or send their child to a school taught in language B. Experiment from I-labs showed that even babies from monolingual families can have the opportunity to learn an additional language if they get exposed to that language as much as one hour per day in an early education setting (University of Washington News. 2017)

In either of the methods, parents need to create an environment with disciplined routine favoring the dual-language acquisition of their child. They need to make sure that children will have enough language input preferably for both of languages they want their child to acquire. The

example remarked below is about a bilingual child who grew up speaking simultaneously French and Italian and later attended bilingual school specialising on French and Dutch.

In 2012, I got to know a Belgian-Italian family in Ath, Belgium. Cléo was 2 years of age at that time and she was very silent during the days I was staying in their home. At that time, her mom told me that her baby learnt to speak later than other kids due to the simultaneous exposure to two languages since birth. Cléo's father is Italian, he has talked with her in Italian while her mother is Belgian from French speaking region. We kept in touch during seven years and as far as I knew, Cléo grew up happily and healthily, was then studying in a bilingual school Dutch-French. She is not only French-Italian bilingual since birth but even trilingual based on her ability of using three languages. I had the interview with Cléo's mother last week to support my thesis (Transcript in Appendix 1). Briefly, Cléo's parents use the OPOL method in which each parent has been speaking to her their native language and did it strictly during her early years after birth. There was no mixing occurred with Cléo between the two languages. When I recalled the time when Cléo was not very active in speaking (2012), her mom was very certain that that period passed very quick and Cléo picked up each language as quick as other monolingual child. Now at the age of 9, she studies half of the courses in French and the rest in Dutch (nobody in the family speaks Dutch). Cléo is full orally fluent in French and Italian (we can not measure how fluent she is in Dutch when her parents do not have knowledge about this language) but she did not learn how to write in Italian. While oral language could be learnt passively through everyday conversations, reading and writing requires tutorials and guidances. Cléo's Italian father never taught her how to write in Italian and this is the reason why she can not write or read in Italian (yet). Both of the parents said that they did not use baby talk to their kid.

The case of Cléo is the typical case of bilingual child who gets exposed simultaneously to at least two languages since birth. Thank to the early exposure (within 0-3 years of age) through OPOL method, Cléo seems to pick up Italian and French language skills effortlessly. It is correspondent with the theory of critical period in child second language acquisition and Noam Chomsky's nature approach. The signs of rapid development in Cléo language acquisition started being shown while entering the second stage (2-7 years old) of Piaget's language development. In this case, Cléo did not express her detest against the learning of one or another language. The family nurtures her bilingualism in a normal condition. Interactions play a big part in her language acquisition process and direct the development of her language skills. Cléo lives in the French speaking region of Belgium with all her family members but her dad speaking to her in French, as well as studies in half French half Dutch school. It leads to the results that Cléo's dominant language is French as she received the most language input and guidances in this language. For Cléo, French and Italian are her two first languages since birth with an

emphasis on French. Without the use of baby talk, Cléo managed to acquire the languages naturally. The influences of baby talk on language learning is not clear.

5 Literature review as the selected method

According to literature review guide published by Harvard Graduate School of Education, 'A literature review is an assessment of a body of research that addresses a research question'. The main purpose of literature review is to pinpoint what are already discovered in the area of study; from that foundation, the new question is identified and the need of further study is reasoned (Harvard guide 2019). This thesis aims at raising parents and educators' awareness of child language acquisition and to offer those who are new to the topic a concise must-know piece of information about children bilingual upbringing. Therefore, what interested me is to associate as many relevant and quality findings in the field as possible and build the big picture out of those puzzles. Literature review, thus, was chosen as the main method of this thesis. The body research that was selected as the theory framework for this thesis consists of notorious ideologies in child language acquisition (the foundation of today language education pedagogies) from Noam Chomsky, Frederic Skinner, Jean Piaget, Vygotsky, Bruner, etc. along with up-to-date critics from other researchers on their ideologies. In addition to it, researches from international institutions were also included in the study to produce a comprehensive thesis.

Literature reviews generally have certain common objectives: (1) forming research questions; (2) searching relevant articles, researches, books; (3) managing and synthesizing them; (4) writing an assessment of the literature and analyse the information in order to answer the former research questions (Harvard guide 2019). My thesis, likewise, is also framed in the same pattern.

5.1 Forming research questions

Before conducting this literature review study, I took a first step to do a preliminary research on the general topic of 'child language acquisition' and 'early bilingualism' to see what researches and literatures have previously been done. From the former results of that preliminary research, it was clear that the topic is not new, but still worths replicating some certain aspects of it as it was essential to understand the nature of child language learning in its dominating theoretical context. I then concentrated myself on the aspects that I found important in the topic with several research questions: If I am totally new to the topic, what important notions should I know about it? What are the most important theories dominating the field? Are those theories trustable and if yes, we can trust them to what extent? Where are empirical evidences that we could find to prove that these theories work? Which methods should we use to raise bilingual kids, are they clinically and socially approved? What should we pay attention to during practicing raising child bilingual? what is trending regarding to this topic?

One might wonder about the reason I combined 'child language acquisition' process with notion of 'bilingualism' in this thesis. In fact, I see 'bilingualism' as a complementary component of child language learning process. Child acquires languages in such a natural way that makes us forget how magical this process actually is and how the ability of communication enables us in numerous ways. Understanding the mechanism of language learning is to apprehend the gift of communication and to influence child's language acquisition methodically. Next, the simultaneous learning of another language extends child language acquisition process to another horizon. I am convinced that a comprehensive child language development process needs a maximum methodical language education of which studies of different languages are emphasized.

Therefore, my question to evaluate the findings of my study was: How the knowledge of child language acquisition and early childhood bilingualism would help caregivers in supporting child language(s) acquisition? From my literature review, I also discuss necessary future studies.

5.2 Data collection/ Relevance, validity and reliability of collected data

For any field of study, accurate and large data collection is essential to maintain integrity and reliability of a writing work. Except for short interview remark (see Appendix 2) as primary data, the body of research used in this thesis consists of secondary data gathering from different sources: videos, journals, research papers from government and institutions, books from variable accredited sources. My data searching strategy started with preliminary research in the interested topic, then defining the research questions (see the section 5.1 above). Searchings were manually executed in large, well-trusted by researchers' database resources: Researchgates, Cambridge press, etc., indirectly through Google Scholar and local library database: Finna Laurea focusing on the research questions. My searching keywords were surrounding the topic's breakdown concepts: 'bilingualism', 'bilingual child vs monolingual child', 'child language acquisition', 'child language acquisition dominating theories', 'bilingual education', 'age of acquiring second language'. Through numerous rounds of searching, my hypothesis were formed and the searches acted to prove or deny the hypothesis until the point where the search was complete. For example, in section 4.1 Child Language Acquisition: Dominant Theories, the theories chosen to present there were the result of sorting the most notorious theories among the list of Child Language Acquisition theories through the search findings. I was not strict with inclusive and exclusive criterias regarding to year of publications and content. Languages of data were restricted to Finnish, English, Vietnamese and French.

While constantly searching for data, I organised my data into different categories and stored them in a database. The information was then sorted and refined to synthesize and inteprete. The process is illustrated in the figure 5.2 below.

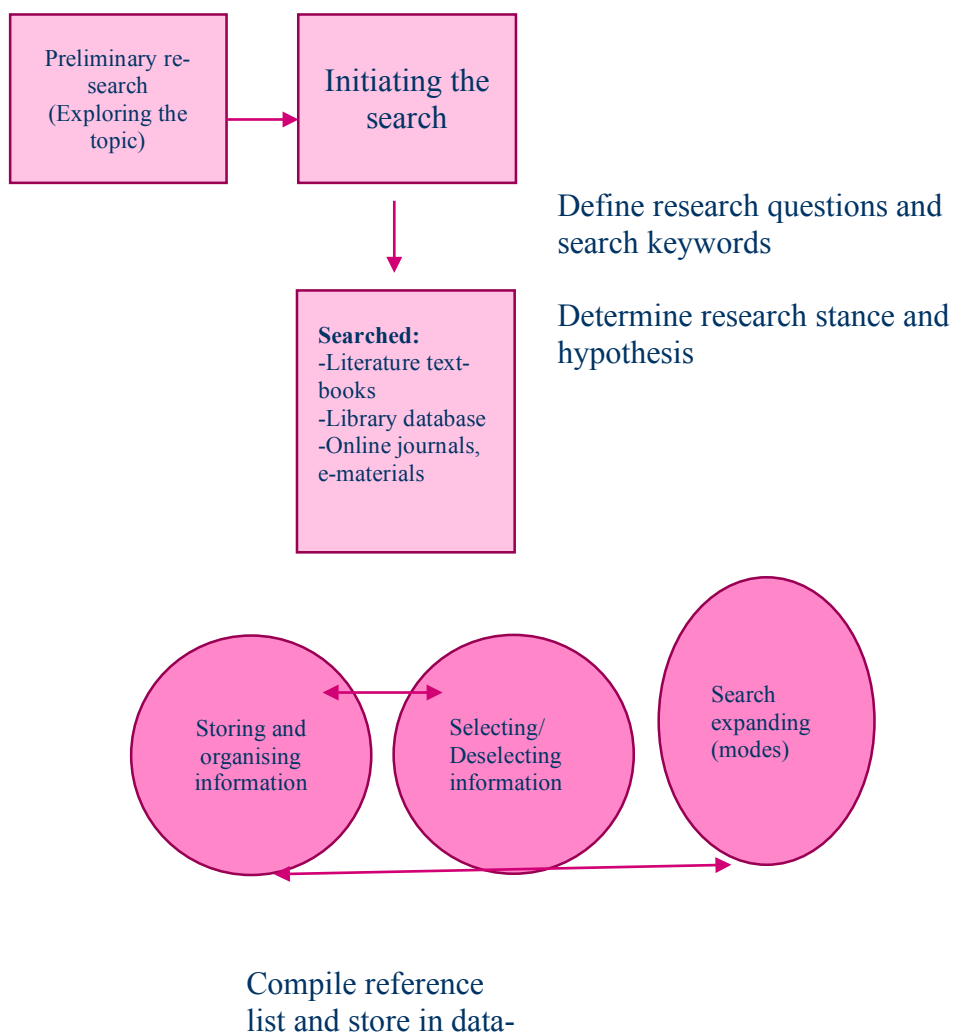


Figure 5.2: Process of data collection
(built based on seven-steps model of literature review (Onwuegbuzie A & Rebecca F 2016))

To ensure the validity, relevance and trustworthiness of the data, data itself comes from original academical sources without biases or distortions, the findings was always audited. If collecting data from an online platform, I verify if the website affiliate with credible institutions and governments. A question which might occur with the readers of this thesis could be about some data extracted from old references: Kyuichi K (1917), Piaget J (1959), etc. If one wonders about the relevance of the information, there are several reasons why I still included these works in this thesis of 2019. Firstly, the ideologies were born very early but there are many features of these works which are still utilised and included in modern works of child language acquisition and early bilingualism. Until now, researchers, though debate on some aspects of the ideologies, could not totally reject the reasoning in those works. Since those works are important and even dominating the field, it would be a great missing if one skips the urge of understanding them. Secondly, the theories were not reviewed separately but with up-to-this-

date revaluations and critics making them more reliable. Thirdly, it is challenging to find current studies which are as influential and empirically proven to replace the data.

In **Reference** page shall we find the whole list of resources that I used.

5.3 Data synthesise and analysis

There are two ways of analysing qualitative data: framework analysis and thematic network analysis. In framework analysis, data is examined with a pre-defined framework, researchers look for the answer that they seek for and abandon the rest (Pope, C., Ziebland, S., and Mays, N 2000). Thematic network analysis allows researchers to take a more explorative approach to the subject, examine the broader data and shapes the data interpretation in unexpected direction (Attride-Stirling J. 2001). In this thesis, I was guided by both approaches. This literature review was framed within the topic of the thesis (Child Language Acquisition and Early Bilingualism) while the collected data was explored, summarised and analysed under thematic method, persistent on obtaining unbiased results. Therefore, only topic-relevant search results passed to the stage of thematic analysis

Braun & Clarke (2006) proposed a framework of six phases to carry out a thematic analysis (cited in Maguire M & Delahunt B 2017): (1) Become familiar with the data; (2) Generate initial codes; (3) Search for themes; (4) Review themes; (5) Define themes; (6) Presentation of analysis. Accordingly, below is how the thematic analysis of this thesis was carried out:

Become familiar with the data: The first thing I did before analysing data was to get familiar with the data: read and reread the transcripts of data.

Generate initial codes: The topic was next organised in a meaningful and systematic way. Coding process was implemented by identifying key terms, sentences, phrases which were essential to answer the research questions from the database. The information as such was recorded in an excel file. Coding was continued until all the data coded. All coded data was followly assessed to identify common themes and categories.

Search for themes: At this stage, data coded was grouped into different themes and categories.

Review themes: Themes created in step (3) were now reviewed, modified and developped to make sure that they were consistent with each other.

Define themes: Before the final step of actually producing a coherent written work, refined themes were built into a thematic map to illustrate the relationships among themes.

Reporting the findings

Figure 5.3a illustrates an example of thematic map of section 4.2 Child language acquisition: Child-directed Speech.

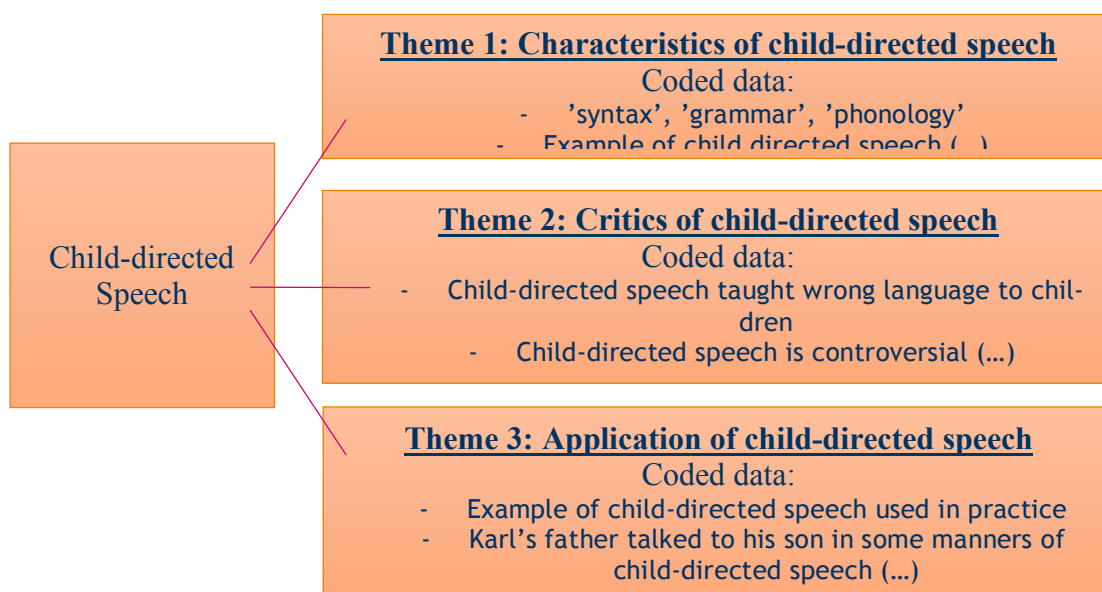


Figure 5.3a: Example of thematic analysis in section 4.2 Child language acquisition: Child-directed speech

Thematic map in Figure 5.3a is a small unit of the bigger thematic map covering the subject of this thesis. This small example aims to demonstrate the thesis' thematic analysis process that I described above. Coded data from database which was all about a common subject of 'child directed speech' was categorised into different themes based on data similarities and indications. Those three refined themes were: Characteristics of child directed speech, Critics of child directed speech and Application of child-directed speech. From this thematic map, section 4.2 was drafted and written.

Figure 5.3b is a general thematic map of the thesis. Though it does not include all the details of themes and sub-themes as well as coded data of the system, it gives an idea to readers of

how the information was synthesized and analysed. Recommendations and discussions of the topic were later written based on reasoning the data.

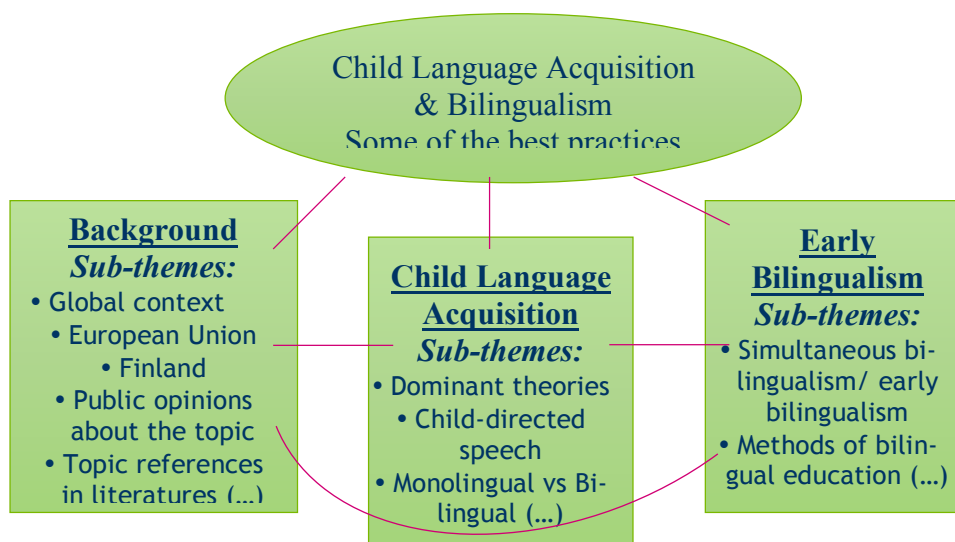


Figure 5.3b: Example of general thematic map of thesis

In Figure 5.3b, head subject is Child Language Acquisition and Bilingualism- Some of the best practices. Backgrounds, Child Language Acquisition and Early Bilingualism are important scopes to be covered in the thesis. Red lines define the relationships between head subject (topic) and its multitudes and the interrelations among the scopes of the topic themselves.

6 Supporting languages learning and developing bilingualism

Language learning, holistically, is the set of skills acquired from ‘nature’ and ‘nurture’. Native proficiency in a language is time sensitive, children are at their best of acquiring languages during their early years of age and this ability starts decreasing when they get older. Child innate mechanism of language acquisition (LAD) partly explains the deep unconscious understanding of child in the language they learn. Piaget’s child language development theory modeled the cognitive stages that resembled child language development broken by age. Nurture surrounding and interactions with other capable human beings add the other indispensable element in the success of child language acquisition. Bilingualism happens when child gets exposed to two inputs of languages instead of one. Whatever methods that we use, we need to make sure that we draw a boundary between the language inputs, for example, by the speaking person or by situations. Since children are extremely gifted with languages, an exposure to a language as little as one hour per day can make a difference for child in acquiring that language. There are some elements of baby talk that is essential in the communication between child and adults. However, it is necessary to understand the terms correctly and be cautious with the application of baby talk.

To support child language learning and promoting bilingualism, the only way is to create an environment which favours child language acquisition accompanied by a comprehensive constructive education model to accelerate child language learning. Figure 6 describes child development in the relationships with his environment according to the bioecological systems theory by Bronfenbrenner (cited in Paquette D & Ryan J ND). The environment input which is processed through child inner filter defines his thinkings and behaviours. We can come up with the methods of supporting child languages learning based on this theory.

Child’s surrounding is tackled into multiple layers: microsystem, mesosystem, exosystem, macrosystem and chronosystem (Paquette D & Ryan J ND). In this ecology system, microsystem is child immediate environment and affects child with the greatest force (Paquette D & Ryan J ND).

Microsystem is the familiar environment, the only environment that child has direct contact with. Structure in microsystem includes school, family, peers, neighbourhood. The relationship between child and microsystem is reciprocated: the microsystem environment shapes the child but the child also influences his environment.

Outer layers of this bioecological system also affect child development but in more indirect way through the interactions between layer and layer. **Mesosystem** provides the connections among entities inside microsystem; for example: relationships between parents and schools,

etc. **Exosystem** is larger social system and institutions connecting to the mesosystem like child's parents workplace, extended family networks, society, community. The outermost layer- **macrosystem** comprises of cultural values, customs and laws (Berk E 2000). **Chronosystem** which is not illustrated in the figure is changes that occur in child's life both personally and culturally.

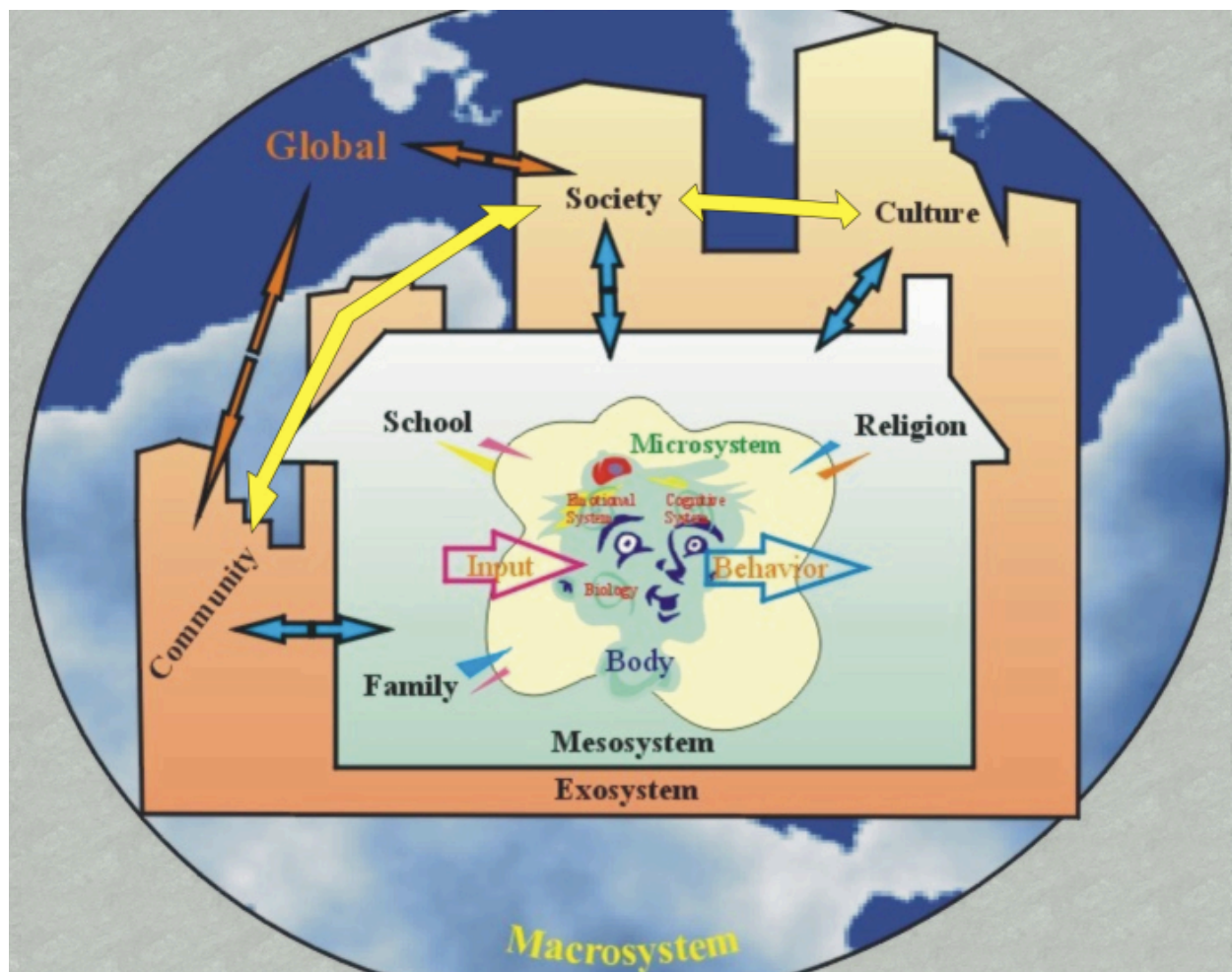


Figure 6: Child Development in the context of Bronfenbrenner's Bioecological System
(Paquette D & Ryan J ND)

All in all, microsystem is what caregivers have the most control over and yet the most influential to children's (language) development. It is necessary that children have beneficial familiar routines and quality language input in their home, school and living environment. Children receive the most support from their parents and educators. During 0-3 years of age- hypersensitive time for language acquisition, active home education and parents' interactions to their kid are the must. Young children study languages efficiently with physical interactions with adults where they can listen, talk to them and enhance their skills through adults' guidance/demonstration (Vygotsky's scaffolding). Psychologists from Stanford university claimed that the more amount of time parents talk to their kid, the larger the vocabulary size and language

proficiency their child can achieve (Stanford news 2013). Since our speeches conveys messages and meanings, talking to children benefits not only their language acquisition but also their cognitive development. Nothing can be more beneficial to children than the interactions that children have with their parents (Fitzgerald B ND). Furthermore, playful activities is a natural way to engage child attention and guide their development through language. Children learn through playing. Bella- a 4 years old Russian girl was a world phenomena. She fascinated international audiences with her ability of speaking fluently at least 8 foreign languages. Featuring in the program 'Corps humain' on TV 2 Channel in France (Corps humain, ND), her daily life activities recorded revealed how she learnt languages. It turned out that Bella spoke only Russian with her parents, but participated in several fun activities organised in other languages, for example: cooking in French language, singing in Chinese language, discussion in English, etc. Constant use of languages help children develop their knowledge in those languages.

When it comes to school learning, parent commonly choose bilingual programs for their kids hoping that their children will have more opportunities to develop their bi-languages skills. Another way to build a rich quality language environment for children include making good use of technology (TV/radio) for language passive learning, strong collaboration among parents, school and community where child lives in (beneficial mesosystem environment). Parents should not be shy away of sharing their education goals to other individuals who interact directly with the child. Teachers should also be aware of parents' opinions and do their best to support child's languages learning.

At the higher level, government actions and society's views also affect indirectly the development of 'bilingualism' and the way child learn languages. There is a need of more access to language and foreign language learning opportunities to all children regardless of their personal circumstances. (Multilingual) language education has long been emphasized and promoted among top global political bodies accross countries and regions. In the next section, we discuss the direction of language education development from Finland's perspective.

7 Develop child language education and early bilingualism from Finland's perspective

The education of languages in Finland has never been neglected and the government made several efforts to follow EU's multilingualism policy as well as support language minority and immigrants. Leena Nissilä, an expert in multilingual education from Finnish National Board of Education, expressed the recognition of Finnish authorities about the importance of language education not only in Finnish or Swedish but also in foreign languages including minority languages (This is Finland 2013). According to her, nationwide scheme provides funding enabling local communities to organise free language classes in any language if there are skilled teachers and at least 4 pupils who speak the language at home (This is Finland 2013).

Currently, Finland has been launching its Action Plan 2018-2019 for 'New learning environments and digital materials to comprehensive schools' (Prime Minister's office 2018, p20-21) with its key project for Languages. According to this Action Plan, experiment on earlier language learning and broadening languages range offered was initiated on 08/2017 and 08/2018 (Prime Minister's office 2018, p20). In detail, primary pupils, under this scheme, have opportunities to receive formal mandatory second language education earlier than before- in their first grade (7 years old) instead of the third grade (OPH 2019). In early childhood education (<6) and pre-primary education (<7), integrated measures introducing children to diversity, languages and promoting language learning were also implemented (OPH 2019). Like mentioned in section 2 Background, Finnish residents are rather skilled in languages with high English fluency rate in comparison with their fellow European citizens. Considering that highly adaptive education in Finland is available to all children with government financial aids, children who reside in Finland do have wonderful opportunities to develop themselves wholly, including their language skills. But still, Finland faces some certain challenges and can do even better.

Though under-age children all have subjective right to early childhood education, only 68% of total under-age children attended daycares, which is relatively low in the region and Europe (Kumpulainen T 2018, p8). The majority of Finnish children has their early education in normal municipal daycares. Unlike language immersion daycares, children in normal daycare have but very little exposure to a second language. There is better something than none, however, the question is: is it enough? In the beginning of this year (2019), Sanni Grahn-Laasonen- Minister of Education expressed her concern about about 'the decrease and unilateral nature of foreign-language learning by young people' (Helsinki Times 2019). The number of pupils studying a voluntary foreign language has decreased around 33% over the last two decades (Helsinki Times 2019). Once the critical period of language acquisition where children acquire languages naturally passed, to acquire a language, monolingual pupils or those who had very little exposure to a second language during early childhood need to go through a whole learning process and perhaps this is the reason of demotivation in learning languages. A couple of years from now,

Finland will need to work on expanding its early childhood education to reach as many children as possible and consider implementing strategically certain language immersion tasks or even a complete bilingual system in kindergarten's education. Sanni also proposed the idea of extension of early language integrative programmes in early childhood education (Helsinki Times 2019)

Micro-environment is primordial to child's development, home language and parental education are as essential as formal education, especially during early childhood (refer to section 5). At the moment, the data, statistics and researches regarding to home language education in Finland are not widely available. It is hard to say if Finnish households pay enough attention to language education of their kids and how language/bilingual education is carried out in practice. Parents in the country should have sufficient knowledge regarding to this matter and communities should work towards a common linguistical goal. Researchers and policy makers might have interest in develop a data system documenting more researches and statistics in connection to home language/bilingual education.

8 Conclusion

This literature review aimed at identifying some of the most useful knowledge and best practices regarding to Child Language Acquisition and Early Bilingualism. Language acquisition and early languages learning should be regarded as they should be. Literature selection in this thesis represented the matter under different perspectives from governments, institutions, communities, parents, educators, so forth. The review also covers different countries and cultures, though mainly focusing on ideologies of the West.

The results of the literature review suggests that: there are remaining mysteries in the study of languages-mind and the process of child's language acquisition. No theory approach is absolute. It is essential to consider each child as individual in his/ her own context to support his/her journey of languages learning. There should be more empirical studies with precisions to reach closer to the reality between languages and the mind.

If we embrace all the theory approaches and form a synthesis of them, it is worth noting that, every human child is naturally capable of learning any human language. The mechanism that babies learn languages is extraordinary during their childhood (especially during their first three years from birth) compared with adulthood. The language acquisition process is the same for babies raised monolingual and those raised bilingual. The only difference lies in the fact that bilingual toddlers receive two language inputs at once and see those languages as two first languages instead of having only one first language like monolingual toddlers.

Training children to be bilingual is done through controlling the language inputs. There are two methods of raising children bilingual: either One-Parent-One-Language (OPOL) or drawing language boundaries through situations. Despite child's innate ability of acquiring languages, the process of child language acquisition, especially in the case of bilingual raised kids, could not be fulfilled without favourable environment, interactions (notably with those who can act as language guide of the child) and suitable educational methods. I could not emphasise enough the importance of interactions between child and adults, especially with his/her own parents. To support effectively child languages acquisition, it requires the collaboration of all levels: government, society, parents, school and individuals. In the end, each child is unique and we should never forget that everything should be done for the best interest of the child.

Multilingualism is emphasized accross continents. The interest of governments in promoting diversity and languages learning is a very positive sign. However, the level of language fluency is not the same in every country, the situation can only be improved if each country is equally responsible to enforce new generation/ young children language skills. The reality, however, is not that easy. An article from Havard Business Review written by EF's education expert

claimed that countries with better English has better economies (Harvard Business Review 2013). Here speaking English as foreign language has direct connection with (language) education and indirectly link with wealth. In fact, more than few blamed poverty on the missing in language education, many believe that the two factors are two-way connected. There is a definite need of institutional intervention and particularly parents to maximise child language acquisition.

In Finland, formal language education is well taken care of at regional and national level. Fortunately, Finnish educators and policy makers consistently search for rooms to develop child language learning and early bilingualism. On the other hand, the responsibilities also lie with each household where parents should have enough time, attention and knowledge to nurture child's language skills. Home language learning situation in Finland requires more researches and data documentation for future studies and development.

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Appendix

Transcript of interview with Cléo's mother
(Translated from French)

Student (S): From our last message, you told me that Cléo is now 9 years old?

Cléo's mother (M): Yes, she is 9 years old and she studies in a bilingual school. She speaks French, Italian and started Dutch three years ago. At school, she studies half of the courses in French and the rest of the courses in Dutch.

S: So she does not study English?

M: No, not yet

S: Among the languages that she speaks, what is her dominant language?

M: It's French.

S: What about Italian?

M: She only speaks Italian with her dad (Her dad is Italian native) and apart from him, no one around her speaks Italian (given the context that they are Belgians living in the French speaking part).

S: She can write in Italian?

M: No, she can't

S: How did you teach her languages?

M: Since Cléo was born, me and her dad agreed to speak with her in each's native language. I speak with her in French, her dad speaks with her in Italian.

S: I remembered that when I was there with you (Summer 2012), Cléo hardly spoke any word and you told me that she heard the speeches in 2 languages, so it was normal that she learnt how to speak slower than other kids. Could you tell me more about it?

M: I could not remember well, however, I have an impression about something like that. It happened only at the beginning and Cléo quickly started to speak like other kids.

S: Did you see any linguistic specialist?

M: No, because it happened very briefly and before we are aware of it, she already overcame that period.

S: Have you or her papa ever used 'baby talk' with her?

M: No, we never do it.

End of the conversation