

A CLOSER LOOK AT THE ISSUES IN FIRST LANGUAGE ACQUISITION: NINE MAJOR ISSUES REVISITED¹

Abstract: Concerning issues in first language acquisition, the present paper explores positions in theory-making, asyntacticity of early child language, Piaget's idea about children's logical thinking, Vygotsky's and Chomsky's controversy over the origins of language, the relationship between communicative competence and other abilities, the stage where child's utterance is counted to be communicative, reflecting on the relationship between language and thought, the idea of modularity, the role of emergentism in language acquisition, and the authors' perspectives about different explanations on language acquisition in general.

Keywords: Acquisition, Innateness, Connectionism, Syntacticality, Emergentism, Modularity.

Introduction

First language acquisition, as a sophisticated topic, has challenged many genius scholars such as Chomsky, Piaget, and Vygotsky, to name a few. To be able to theorize or conduct any experiment in the area, one needs to study the relevant rich literature to gain the necessary knowledge. Being interested in the topic and reviewing some schools of thought, anthropologically, the authors deliberately selected some issues and combined them with their own perspectives. The result of such juxtaposition is a compact package of information which significantly provides many readers with a sound background concerning the areas dealt with and topics for further research.

Issue One: Position meeting the criteria for a scientific theory

Chomsky's innateness position seems to meet a convincing criterion for a scientific theory. It covers aspects of some other theories, possesses the properties of scientific theory and has claims for contents. Chomsky believes that both body and mind exist, and the elements needed for theory-making are body, behavior, and mind. His position shares aspects from other positions; for example, epiphenomenalism considers mind as the side effect of an action.

Connectionism believes the mechanical operations of nerve system. Neurons are interpreted in terms of body and the result of their cooperative action is called mind. Emergentism believes that mind is an emergent or evolution of body. In interactionism, both mind and body exist and they interact with each other. Regarding interactionism, Popper refers to three worlds—world 1 is nature or objects, world 2 is mind (feeling and thought) and world 3 is objective knowledge. World 3 affects world 1 via world 2. For example, we can imagine a gardener who has knowledge about gardening. Through his feeling and thought, he intentionally acts upon nature, and plants a tree (Steinberg, 1991). The creativity of language, also, resembles the extensional position. Based on some finite rules, human beings produce an infinite number of sentences. Moreover, mathematically, we may combine language elements together in different ways, and every time, we do

¹ Lotfollah Karimi, Hamedan Branch, Islamic Azad University, Hamedan, Iran, Karimi.lotfollah@gmail.com; Nematullah Shomoossi, Sabzevar University of Medical Sciences, Iran, nshomoossi@yahoo.com; Ahmad Shomoossi, Islamic Azad University of Maragheh, Iran, ahmadshomoossi@yahoo.com.

obtain something new or different (Yule, 1988). Therefore, Chomsky's position covers some characteristics of some other positions.

The innateness position in line with the universal grammar (UG) is supported by evidence. UG consists of principles and parameters; principles are shared by all languages; for example, all children acquire language, more or less, in the same way regardless of what language they learn. Innateness position has provided ground for further studies, thus it is testable and refutable. It also challenges other theories. In his famous attack of behaviorists, Chomsky revealed the strong power of cognition; for example, the sentences below cannot be justified by habit formation, but through rule discovering:

- 1) He goed home.
- 2) They have two childs.

The other criterion for the innateness position, as a sound scientific theory, is that it is still upheld by Chomsky and some other scholars.

To further evaluate Chomsky's theory of language, we may concisely refer to some other aspects. The biolinguistic perspective regards the language faculty as an "organ of body", along with other cognitive systems. Adopting this view, three factors are expected to interact to determine (I-)languages attained: genetic endowment, experience, and principles that are language- or organism-independent (Chomsky, 2005). It is the innateness of UG which enables the language learner to provide a basis for first and second language acquisition, although there is no consensus as to the access of the second language learner to UG. The complexity, orderliness (SOV/OSV), and limited variety in human languages make linguists accept that language is learned through a biological program that puts bounds on the possible grammatical systems a child can postulate. The complexity of the rules that characterizes the adult system, the independence of grammar from other cognitive systems, and children's apparent obedience to the linguistic rules all argue for a substantial innate component. Children's errors occur within bounds (Fletcher & Garman, 1986:49).

There are two claims fundamental to UG as the core of language faculty (Praisse, 2005): first, the structuredness of language (i.e. recursiveness) and, second, the input poverty (Chomsky, 1967 as cited in Praisse, 2005:3). From Chomskyan perspective, grammatical competence gives us information about (un)grammaticality of sentences. For a Martian naturalist, human faculty of language appears to be organized like the genetic code — hierarchical, generative, recursive and limitless regarding its scope of expression (Hauser, Chomsky & Fitch, 2002).

Issue Two: (A)syntacticality of child's language

From 20 to 23 months, children's speech is characterized by the absence of functional category system or the order pattern it acquires. During the telegraphic stage, many grammatical morphemes such as *ing*, *at*, *the*, and *on* are absent in children's speech. In the telegraphic stage, children organize their vocabulary into **pivot** and **open** class words (Falk, 1978: 326-9):

- (1) (a) baby candy
- (b) doll get
- (c) mummy cook hotdog

- (d) Mary go home.

The earliest nominal structures produced by young children are indeterminate. Then it follows that early child nominal are purely *lexical* projection of a head N into NP, and lack further *functional* projection of NP into DP. This can be illustrated by the spontaneous speech data (Radford, 1990: 83-9):

- (2) (a) Where *helicopter*?

- (b) Got *bee*.

- (c) Open *door*.

- (d) Paula *good girl*.

- (e) *Blanket* gone.

To further elaborate the evidence, examples of responses to questions are worth being added (the child's responses are italicized):

- (3) (a) What's this? – *Telephone*

- (b) What's this here? –*Banana*

- (c) Did you drop your tea? –*Drop tea*

Syntactically, the genitive 's morpheme is considered a head determiner constituent, if it is correct to hypothesize that early child nominals lack a D-system, then it is expected to find that when children are at the *lexical* stage, their counterpart of adult genitive determiner phrase structure will show no evidence of acquisition of 's morpheme. This prediction is borne out by the fact that children at this stage don't attach the genitive 's suffix to possessor. Nominal is italicized:

- (4) (a) *Mummy car. Mummy hat.*

- (b) *Baby car. Betty car.*

- (c) *Nana key.*

The complementizer system is absent in the early child English. The earliest complement clauses produced by young children are...Small Clauses lacking a C-system. This prediction appears to be borne out, in so far as early child complement clauses show [NP X] pattern as found in:

- (5) (a) *Sausage bit hot*

- (b) *Wayne in bedroom*

Radford (1990:112-21) introduces small clauses in the adults' speech:

- (6) I considered [this candidate unsuitable for the post].

Then comparing the adults' clauses and those produced by the young children, Radford argues that the early child clauses are small clauses which lack a C-system. Based on this argumentation, we may develop the following logical reasoning: *Small clauses in adult speech are not asyntactic, and young children produce small clauses.* Therefore, young children's small clauses are not asyntactic (as far as lack of complementizer is concerned, not the other elements). Although adults and children both produce *Small Clause*, there is a difference in this regard. Adults possess complementizers in their linguistic knowledge but they consciously delete it, while the complementizers appear in children's speech several months later (around 25-30 months). The following examples of young children's clauses are found in the literature (*Small Clause* complement is bracketed):

(7) (a) Want [hat on]

(b) Want [car out]

(c) Want [Teddy drink]

Also, early multi-unit productions are governed by any ordering constraints that we would wish to call syntactic. That is, such predictions may either be unordered (e.g. *bye bye Calico, Calico bye bye*), or they may have fixed but bear non-contrasting orders (e.g. *airplane allgone, allgone juice*), where *airplane* always comes first and *juice* always comes second (Braine, 1976a:7 as cited in Fletcher & Garman, 1986:313). Therefore, until we find evidence in children's productions for contrasting order patterns (e.g. that *bye bye Calico* means something different from *Calico bye bye*), we will call them *combinations* not syntactic constructions (*Ibid*).

The young children try to produce whole phrases and only subsequently segment them into words and extract structural patterns in the form of frames with slots to be filled. This sort of rote memorization of phrases has been noted as a pre-syntactic device (Dore, Franklin, Miller & Ramer 1976; Mac Whinny, 1982, as cited in Fletcher & Garman, 1986:315), but they do not trace the subsequent fate of such phrases.

Issue Three: Child's logical thinking

Piaget supports the child's logical thinking which is attributable to his third stage of development called "*concerned operational period*" (occurring roughly around the age of 7 to 11 years). Piaget labels stage three as "preparation for an achievement of concrete operations". In many ways, the period is simply preparation for the pinnacle of cognitive development — the operation. Regulations and identities turn into operations as they become more complete, differentiated, quantitative, and stable. An operation is an internalized action that is part of an organized structure. With the ability to use these concepts, the child's representations are no longer isolated; rather, they are brought to life (Lee & Gupta, 1995: 30-31). We can most easily see operation at work in Piaget's famous *conservation task* — the problem of *liquid quantity*. The child sees two identical containers equally filled with water and judge them to contain the same amount of water. As the child watches, one container is poured into a container with different dimensions or into several small containers. A "nonconserver" claims that the amount has changed, because the water level has changed. Both the nonconserver and the conserver judge on reasonable bases (Lee & Gupta, 1995:31).

Conservation is an important concept because it gives certain stability to the physical world. In addition, Piaget assigns a great deal of importance to the conservation task because it reveals the presence or absence of mental operations. It is a diagnostic tool that probes the cognitive structures. Piaget asserts that a child cannot conserve unless he has certain mental operations. These operations are illustrated by the children's explanations:

"If you pour it back where it was, they will have the same amount" (*Reversibility*).

"The water goes up higher, but the glass is thinner" (*Compensation*).

"You didn't add any water or take any way" (*Addition-subtraction*).

Other examples of operations may include the common mathematical operations of multiplying, dividing etc. Operations apply not only to *classes*, but also to *relations*. If a concrete operational child knows that *John is taller than Bill*, and *Bill is taller than Henry*, s/he can naturally infer that *John has to be taller than Henry* (Op.cit). Operations are also applied to *temporal-spatial* representations; for example, a concrete operational child keeps the liquid parallel to the larger context, the surface of the earth. In other words, the child can be seen moving from an understanding of the world based on action schemes, to one based on representations, and finally to one based on internalized and organized operations. Accordingly, the thought is now decentered rather than centered, dynamic rather than static, and reversible rather than irreversible. For the first time, the lawful nature of the world seems to be reflected in a logical system of thought. Thought is in tune, and in equilibrium, with the environment (Op cit, p. 32).

Issue Four: The origins of language

First, we refer to Chomsky's position and then to that of Vygotsky. Chomsky is nativist, and he argues that the ability to acquire language is innate and that children are programmed to learn language. Some form of pre-programming can explain the speed with which children learn the complex skill of using language and the similarity of language acquisition across cultures. Chomsky noted that all human languages share certain features (i.e. they all have nouns and verbs), which are called linguistic universals. He suggested that we have an innate mechanism called the language acquisition device (LAD) that allows children to identify the grammar of the language to which they are exposed by picking out the linguistic universals. He believed that only something like the LAD can explain how children are able to learn correct grammar from the fragments of sentences and incorrect grammar they hear. Chomsky believes that the LAD is unique to humans, and that no other animals use language, nor can they be trained to use language (Lund, 2003:57).

As for the egocentric speech, Vygotsky argues that speech is primarily, and from the very beginning, social in nature, but at first undifferentiated from a functional point of view. In other words, speech merely accompanies ongoing actions and perceptions in the context of utterance, serving as a means of social contact with others. At a later point when speech becomes differentiated, it forms a system which is multifunctional for the adults; when used externally, it has a distinct communicative and social function; when used internally, it mediates higher mental functions, e.g. in problem-solving situations where no interlocutor is present. In fact, egocentric speech is a transitional phase between the initial undifferentiated phase and the later differentiated one (Fletcher & Garman, 1986:26). More generally, language development is at the center of what Vygotsky calls "the social line of development" which interacts with "the natural line of development" in ontogenesis and in phylogenesis (p. 12).

Issue Five: Similar terms used differently by Piaget and Vygotsky

The following table compares their views concerning some terms as far as language development is concerned.

Terms	Piaget	Vygotsky
Language development	Language development is relatively peripheral to Piaget's theory that child's cognition development results from the internalization of the means-ends organization of sensorimotor activity achieved in early development	Language development is the principal motor of development, as it mediates the child participation in both intellectual and social life surrounding them. That is, the mechanisms of cognitive development are not independent from the... linguistic signs which the child confronts in his interaction with the world (Fletcher & Garman, 1986:10-11)
Egocentric speech	The prevalence of egocentric speech over communicative speech in younger children became the real foundation of Piaget's theory. He emphasizes that egocentric speech does not provide communication. It is rather chanting, rhyming and accompanying the major melody of child's activity. A child may merely repeat words, or play with words, without understanding the concept. It is not intended to convey information.	Vygotsky insisted that the earliest speech of the child is social. At a certain age this original social speech becomes rather sharply divided into egocentric speech, that is, speech-for-onself and communicative speech, speech-for-others. Egocentric speech gives rise to inner speech which is later product of the transformation of a speech that earlier had served the goal of communication into individualized verbal thought. Egocentric speech is a form of self-guidance which occurs because it has not been internalized (Lund, 2003:25; Vygotsky, 1986: xxxv; 28).
Language and thought	Language is dependent upon thought. Language cannot be used to communicate ideas until the child has developed the appropriate concepts.	Language and thought are initially independent and separate, but that during childhood thought gradually becomes more and more verbal and that language requires and reflects thought (Lund, 2003:26).
Social interaction, context-dependency and language acquisition	For Piaget, social-interactive and context-dependent properties of language are somewhat peripheral to the mechanisms which set development in motion. His view of language is explicitly inspired by a Saussurean framework. He	In contrast, the context-dependent and social nature of language is primary in Vygotsky's developmental theory. His approach to language is much more consistent with some functionally and/or pragmatically inclined semiotic and linguistic

	<p>considers language as an abstract system of sign relations. With respect to language acquisition, decentering of children's cognitive structures underlies a decontextualization of children's speech, allowing them to speak of displaced entities, events, and relations among them which are not part of the here-and-now and/or to take into account the perspectives of their listeners. The clearest impact of decentering on language acquisition within this paradigm is shown in the child's ability to use language as an abstract, context-independent system of signs (e.g. in logical reasoning).</p>	<p>theories ... than with Saussurean approach. His linguistic framework is apparent in a number of ways: e.g., his focus on speech rather than <i>langue</i>, a distinction which can be compared to ... Saussure's distinction between <i>langue</i> and <i>parole</i>, his focus on the indicatory basis of communication in his discussion of both nonverbal signs and verbal sings, his distinction between <i>sense</i> and <i>reference</i> (Fletcher & Garman, 1986: 17-18).</p>
--	---	---

Issue Six: Child's communicative competence and cognitive development

Cook (2003: 42-6; 126) refers to communicative competence as the knowledge necessary to use a language effectively, and the ability to put that knowledge into action. Successful communications need four types of knowledge: *Possibility*, *feasibility*, *appropriateness*, and *acceptability* (Brumfit & Johnson, 1979:14). Quoting from Hymes (1972), Schmitt (2002:6) considers language competence as consisting of more than just being able to form grammatically correct sentences but also to know when and where to use these sentences and to whom. Hymes (1972) and others have called communicative competence the intuitive mastery that the native speaker possesses to use and interpret language appropriately in the process of interaction and in relation to social context (Stern, 1983: 229). Cognitive development is a (collective) term used to cover the processes involved in organizing, (language) acquiring, knowledge developing and using, problem solving, remembering, understanding, fantasizing, using symbols, and so on (Lee & Gupta, 1995:3).

When children start to acquire language as a competence for communication, they build first on categories they have already discriminated. The conceptual representations they set up in their first year for objects, relations, properties, and other qualities provide a broad cognitive basis onto which they can map words from child-directed speech. This speech draws their attention to specific categories and their properties. In acquiring a language, children must eventually attend to all the distinctions relevant in that language. This includes the ability to take different perspectives on the same event/object. But as linguistic representations capture only certain aspects of cognitive representations, both types of representations remain crucial, not during language acquisition but on other occasions when children and adults need to draw on non-linguistic and linguistic categories (Clark, 2004).

According to Lee and Gupta (1995), utterance is communicative if it involves a shared arbitrary symbolic system accompanied by intention (pp. 49-50). If these

characteristics are found in the child's utterance, then it is communicative. They also state that before a child produces a first word there is evidence suggesting that many conversation-related skills are being developed in the context of a specialized and helpful language environment. Also, present in the pre-verbal exchange between infant and caregiver are some the properties of conversations such as turn taking, contingency and topic sharing (p. 60).

Issue Seven: Language and Thought

The first view is the linguistic relativity hypothesis or Sapir-Whorf hypothesis (Lund, 2003), which proposes that language influences the way people think about the world. For example, the words referring to "stone" and "cloud" by American Indians possess the feature of *animacy* (Yule, 1985). The *strong* version states that language determines thought. Also, Whorf (*Ibid*) notes that Inuits use a number of different words for different types of snow, whereas in English there is only one term. The original evidence used by Whorf was flawed, and no evidence has emerged subsequently to fully support the strong version. On the other hand, the *weak* version states that language *influences* thought. This version has been studied using cross-cultural studies in color perception; for instance; some languages have more labels for basic colors, and categorize colors differently. If language influences perception, the differences in color labels should influence the perception of color. The vagueness of the hypothesis results in the fact that we cannot quantify the extent of influence (Lund, 2003).

The second view states that *thought determines language*. Focusing on the cognitive development of children, Piaget (1950, 1967) believed that language development was the result of cognitive development. To use language appropriately, a child must first develop the ideas or concepts. Piaget argues that egocentric speech is repeating words without understanding the concepts without conveying information. The problem with this view is that some children with learning difficulties (e.g. Laura) are capable of a sophisticated level of language (Yamanda, 1990).

The third view considers language and thought as interdependent. Studying child development, Vygotsky (1962) suggested that initially thought and language are independent and have separate origins. In this stage, thought are non-verbal and primarily based on image while language is pre-intellectual and is not linked to thought. Around the age of 2, language and thought become interdependent and children start to use language in their thought and their speech begins to represent their thought. The problem with Vygotsky's theory is that it is not replicable because he did not describe details of the methods he used in his studies.

Based on the fourth view, language and thought are independent. Chomsky (1957, 1959, 1965) argues that language is innate [having a separate module (authors' emphasis)] and only some form of pre-programming can explain the speed with which children learn the complex skills of using language and the similarity of language acquisition across cultures. Chomsky noted that all human languages share certain features or universals, and that language is the mirror of mind.

The fourth theory seems more plausible than those considered earlier for some reasons:

1. Empirical evidence supports the theory, i.e. the process of language acquisition is very similar in all cultures;
2. All languages share linguistic universals;

3. The theory possesses the characteristics of some other theories, that is, for language to be developed the children should be exposed to the linguistic environment and
4. If language were not independent from thought, those who are multilingual should perceive the world differently (Lund, 2003: 9-26; Vygotsky, 1986; Steinberg, 1991; Marvcsik, 1990).

Issue Eight: Modularity

On the spectrum of modularity, there are competing positions from one pole to another. At one extreme, there is *massive modularity* hypothesis which has been proposed by evolutionary psychologists. Based on this hypothesis, our cognitive architecture including that part that subserves "central processing" – responsible for reasoning, conceptualization, belief forming, decision making, and inference drawing (Pinker, 1997; Barret, 2005).

At the other end of the spectrum of modularity, we come to Fodor's position. In his book "The Modularity of Mind" (1983), he insists that much of our cognition is subserved by non-modular systems. In this minimal peripheral-system of modularity, only input and output of cognition including audition, vision, face recognition, language processing, and various motor control systems are plausible candidates for modularity. By contrast, the central systems which are responsible for higher cognitive processes such as reasoning, problem-solving etc. are likely to be non-modular. By the same token, there is a variety of modularity which claims that computational mechanism is not the only possible kind of innate, domain-specific psychological structure. Another possibility is that humans possess innate, domain specific bodies of knowledge. It is also claimed that human reasoning is guided by collection of innate domain-specific system of knowledge such as that of language, that of physical objects, and of numbers. Such types of knowledge are operated on by *domain-general* computation devices. Such a position, termed Library Model of Cognition (LMC) by Samuels (1998), holds that the computational mechanisms which subserve "central processes" are "domain-general".

In addition to the mentioned position, mind is wholly or partly *modular* for Chomsky, and language growth is controlled by specific, innate modular faculty distinct from that part of the mind responsible for general cognitive processing. This language faculty devoting to the acquisition of natural language, in turn, consists of specialized modules for each language subtasks such as syntactic processing, lexical processing etc. (Chomsky, 1980; Fodor, 1983:2). To sum up, there is no consensus over the extent to which the mind is modular on the one hand, and the issue of modularity or non-modularity of the "central system", on the other hand. For instance, Fodor's modularity considers the central capacity to be non-modular, but massive modularity hypothesis (MMH) divides the "central cognition" into domain-specific modules for perception, language knowledge, forces, understanding the working of plants, animals, etc.

Finally, the position we dare to take is a moderate one which accepts the existence of both peripheral input and output modules as well as the central modules. But concerning the extent to which the mind is modular, we should wait for further empirical evidence to be found in the area under study.

Issue Nine: Emergentism

In line with theories such as connectionism and Piaget's behavioral change, emergentism now seems to be capable of explaining language acquisition, because it

challenges nativism and has some claims. All reasonable scholars today agree that genetics and environment interact to determine complex cognitive outcomes. Genes do not act independently; rather, they can be turned on and off by environmental signals. A good deal of emergentism studies within linguistics adopts the techniques of connectionism which, in turn, provides a useful way to test various predictions about language acquisition. According to Piaget, logic, knowledge, and grammar probably emerge from the interaction between genes and the world (Bates, Elman, Johnson, Karmiloff-Smith, Parisi, & Plunkett, 1998).

The emergentist approach to language acquisition views language as a structure arising from interacting constraints. In an emergentist view, accounts generatively emerge not from stipulated rules, but from the interaction of general mechanism. There is no gene in the bee that codes for hexagonality in the honeycomb; rather, it is the emergent consequence of the application of packing rules to a connection of honey balls of roughly the same size. MacWhinny (1999) quotes Tomasello and Akhtar (1995) as having emphasized the crucial role of the mutual gaze between mother and child in support of early word learning. The burst of vocabulary has been attributed to the control over-articulatory representations (Schwartz, 1998). MacWhinny (1982) also refers to the role of syntactic patterns in the learning of new words due to extensive use of stable syntactic frames.

The factors emergentists turn to, for their explanations, are the features of physiology and perception, processing and working memory, pragmatism, social interaction, and properties of input and of the learning mechanism. Contemporary emergentist work remains committed to the idea that much of language acquisition involves the use of simple learning mechanisms to extract statistical regularities in ordinary linguistic input – knowledge of language is created and strengthened in response to opportunities to interpret and/or from utterances. A well-defined emergentist program for the investigation of language or its acquisition is based on the simple thesis that the core properties of language are best understood with reference to more fundamental non-linguistic (non-grammatical) factors and their interaction. Emergentist accounts are now showing how language structure emerges from social pressures, memory mechanism, attentional focusing, motor control, and loads imposed by online processes (MacWhinny, 1999).

Temporarily, we may conclude that a convincing emergentist account of development is now possible because (1) bee-hive metaphors have given way to an explicit, formal account of emergent form; (2) it is now possible to simulate behavioral change in multilayered neural networks that embody the non-linear dynamic principles required to explain the emergence of complex solution from the simpler inputs, and (3) neurobiological results support the case for an emergentist approach to the development of higher cognitive functions. Despite limitations, emergentist models have been successful in introducing a new outlook on questions about language acquisition. To close the discussion, we should refer to gestures, neural systems, straight posture, social life, and face-to-face communication as fundamental factors underlying emergentism.

Concluding Remarks

There are generally three main explanations or theories provided in the area of language acquisition by children. Each theory, in one way or another and to some extent, either suffers or enjoys its own weaknesses and strengths. These explanations are environmentalist, social interactionist and nativist. Environmental theorists concentrate on the role of learning in language acquisition; Skinner proposed that the reinforcement and

behavior shaping the child's vocalization could explain the language acquisition or verbal behavior. Such behaviorist psychologists consider language to be learned like other behaviors; they suggest that verbal behavior is learned through imitation, practice, and habituation. Such views do not differentiate human's learning from that of animal. Moreover, it ignores the idea of language creativity. If each sentence (including words and phrases) is a behavior to be established through stimulus, response, and reinforcement, our short life would never suffice to teach infinite number of language sentences to children. Children are able to produce sentences (based on a situation) they have never heard. Then, how can behaviorists justify such a power via imitation? Of course, we think nobody denies the role of practice in learning.

The social interaction theory stresses the importance of language in communication and suggests that language is acquired via using language upon interacting with others (Lund, 2003: 62-3). Pinker (1994:52, quoting Bruner, 1975) believes in the connection between child and caregiver and the later stages of language development. In this shared history of language, the child's partner in communication will make the greatest contribution until the child is able to take a progressively more active role. Social interaction is necessary and plays an effective role in language acquisition. Those who are deprived of the community of human language users may remain without language skill for communication. But social interaction is not enough. Therefore, this view also faces some problems. First, the extent of language a child receives from the society would not be sufficient to deduce the complexity of all aspects of language. Second, the proponents of this theory do not clarify how social interaction influences language acquisition. Finally, just relying on social interaction threatens the language universals for which there is enough evidence. This threatening is due to the fact that in different cultures, the style of social interaction between children and adults is different, hence causing different forms of language acquisition.

Nativist theories such as Chomsky's, on the other hand, emphasize the role of innate mechanism. Chomsky believes in LAD which enables children to acquire any language by being exposed to it. This theory is more convincing than others because it is supported by the following themes:

1. The existence of linguistic universals and universal nature of language acquisition such as pre-linguistic, holophrastic, telegraphic, and more complicated grammar stages from birth to around 30 months old,
2. The instinctness of language (first articulated by Darwin, 1871) and believed by Pinker (1994: 15-24),
3. The juxtaposition of psychological, social, and environmental growth (Stern, 1983:303; Pinker, 1994: 15-24; Lee & Gupta, 1995: 51-2; Lund, 2003: 39-60).

References

- Barrett, H. C., 2005, Enzymatic computation and cognitive modularity. In R. Stainton (ed.), *Contemporary Debates in Cognitive Science* (pp. 22–36). Oxford: Blackwell.
- Bates, E., Elman, J., Johnson, M., Karmiloff-Smith, A., Parisi, D., & Plunkett, K., 1998, Innateness and Emergentism. In W. Bechtel & G. Graham (Eds.), *A Companion to Cognitive Science* (pp. 590-601). Oxford: Basil Blackwell.
- Brumfit, C. J., & Johnson, K., 1979, *The Communicative Approach to Language Teaching*. Oxford: Oxford University Press.
- Bruner, J., 1975, From communication to language: A psychological perspective. *Cognition*, 3, 255-287.
- Chomsky, N., 1957, *Syntactic Structures*. The Hague: Mouton.

- Chomsky, N., 1959, *Review of Verbal Behavior by B.F. Skinner*. *Language* 35(1): 26-58.
- Chomsky, N., 1965, *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
- Chomsky, N., 1980, *Language and Problem of Knowledge*. Cambridge, MA MIT press.
- Chomsky, N., 2005, Three factors in language design. *Linguistic Inquiry*, 36(1), 1-22.
- Clark, E. V., 2004, How Language acquisition builds on cognitive development. *TRENDS in Cognitive Science*, 8(10): 472-478.
- Cook, G., 2003, *Applied Linguistic*. Oxford: Oxford University Press.
- Darwin, C., 1871, 1896, *The decent of man and selection in relation to sex*. New York: D. Appleton and Company.
- Dore, J., Franklin, M. B., Miller, R. T., & Ramer, A. L. H., 1976, Transitional phenomena in early language acquisition. *Journal of Child Language* 3:13-19
- Falk, J. S., 1978, *Linguistics and language: A survey of basic concepts and implications* (2nd ed.). New York: John Wiley & Sons, Inc.
- Fletcher, P., & Garman, M. (eds.), 1986, *Language Acquisition: Studies in First Language Development* (2nd Ed). Cambridge: Cambridge University Press.
- Fodor, J.A., 1983, *The Modularity of Mind*. Cambridge, MA: MIT Press.
- Hauser, M.D., Chomsky, N., & Fitch, W.T., 2002, The Faculty of Language: What is it, Who has it, and How did it Evolve? *Science* 298, 1569-1579.
- Hymes, D.H., 1972, On Communicative Competence. In: J.B. Pride & J. Holmes (eds) *Sociolinguistics. Selected Readings* (pp. 269-293). Harmondsworth: Penguin.
- Lee, V., & Gupta, P.D. (Eds.), 1995, *Children's cognitive and language development*. Oxford: Blackwell in association with the Open University Press.
- Lund, N., 2003, *Language and Thought*. London: Routledge.
- MacWhinny, B., 1982, Basic syntactic processes. In S. Kuczaj (Ed.) *Language Acquisition: Vol. I. Syntax and Semantics*, pp. 73-136. Hillsdale, NJ: Lawrence Erlbaum.
- MacWhinny, B., 1999, The emergence of language from embodiment. In B. MacWhinny (Ed.), *The emergence of language*, pp. 213-256. Mahwah, NJ: Lawrence Erlbaum.
- Moravcsik, J.M., 1990, *Thought and Language*. London: Routledge.
- Piaget, J., 1950, *The Psychology of Intelligence*. London: Routledge & Kegan Paul.
- Piaget, J., 1967, Language and intellectual operations. In H. Furth (ed.), *Piaget and knowledge*. Englewood Cliffs, NJ: Prentice-hall.
- Praisse, C., 2005, New Perspective on language development and the innateness of grammatical knowledge. *Language Sciences*, 27(4): 383-401.
- Pinker, S., 1994, *The Language Instinct*. New York: William Morrow & Company, Inc.
- Radford, A., 1990, *Syntactic Theory and the Acquisition of English Syntax*. Oxford; Basil Blackwell Ltd.
- Samuels, R., 1998, Evolutionary psychology and the massive modularity hypothesis. *British Journal of Philosophy of Science*, 49: 575-602.
- Schmitt, N. (ed.), 2002, *An introduction to applied linguistics*. London: Arnold.
- Schwartz, R. G., 1988, Phonological factors in early in early lexical acquisition. In M. D. Smith & J. L. Locke (Eds.), *The Emergent lexicon: The child's development of a linguistic vocabulary*. New York: Academic Press.
- Steinberg, D. D., 1991, *Psycholinguistics, Mind and World*. London: Language Group Limited.
- Stern, H.H. 1983, *Fundamental concepts of Language Teaching*. Oxford: Oxford University Press.
- Tomasello, M. & Akhtar, N., 1995, Two-year-olds use pragmatic cues to differentiate reference to objects and actions. *Cognitive Development*, 10: 201-224.
- Vygotsky, L., 1962, *Thought and language* (translated and edited by E. Hanfmann & G. Vakar). Cambridge, MA: MIT Press.
- Vygotsky, L., 1986, *Thought and Language*. (translated and edited By Kozulin, Alex). Cambridge, MA: MIT Press.
- Yamada, J.E., 1990, *Laura: A Case for the Modularity of Language*. Cambridge, Mass: MIT Press.
- Yule, G., 1988, *The Study of Language*. Cambridge: Cambridge University Press.