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Department of European Languages and Literature Sections: AC

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#### **References:**

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### Children have a remarkable ability to communicate:

- Small babies: children babble and coo and cry and vocally and nonvocally send messages and receive messages.
- End of first year: children start to imitate words and speech sounds and about this time use their first words.
- 18 months: their vocabulary in terms of words has increased and are beginning to use 2-word 3-word utterances (known as "telegraphic utterances").
- 3 years: Children can comprehend an incredible quantity of linguistic input, they chatter nonstop
- School age: Children start to internalize increasingly complex structures, expand their vocabulary and sharpen their communication skills and they also learn the social functions of their language.

### **Three Positions in First Language Acquisition**

- Behavioristic Position
- Nativist Position
- Functional Position

# **Behavioristic Approach**

## Characteristics:

- Children come into this world with a *tabula rasa* (a clean slate bearing no preconceived notions about the world or about language) and that these children are then shaped by the environment and slowly conditioned through various schedules of reinforcement.
- Language is a fundamental part of total human behavior.
- This approach focused on the immediately perceptible aspects of linguistic behavior-the publicly observable responses-and the relationships or associations between those responses and events in the world surrounding them
- A behaviorist might consider effective language behavior to be the production of correct responses to stimuli. If a particular response is reinforced, it then becomes habitual, or conditioned.
- This is true of their comprehension as well as production responses.

- The behaviorist view *imitation* and *practice* as primary processes in language development.
  - *Imitation*: Word for word repetition of all or part of someone else's utterance.
    - e.g. Mother: Would you like some bread and peanut butter? Katie: Some bread and peanut butter
  - Practice: Repetitive manipulation of form.
    e.g. Michel I can handle it. Hannah can handle it. We can handle it
- Children's imitation is selective and based on what they are currently learning.

#### B. F. Skinner

- One of the best-known attempts to construct a behavioristic model of linguistic behavior was embodied in B.F. Skinner's classic, *Verbal Behavior* (1957).
- Skinner was commonly known for his experiments with animal behavior, but he also gained recognition for his contributions to education through teaching machines and programmed learning.
- Skinner's theory of verbal behavior was an extension of his general theory of learning by operant conditioning.

# **Operant Conditioning:**

- Operant conditioning is the use of consequences to modify the occurrence and form of behavior.
- It refers to conditioning in which the organism (in this case, a human being) produces a response, or *operant* (a sentence or utterance), without necessarily observable stimuli.
- This operant is maintained (learned) by reinforcement (e.g. a positive verbal or nonverbal response from another person).
- If a child says "want milk" and a parent gives the child some milk, the operant is reinforced and, over repeated instances, is conditioned.
- According to Skinner, verbal behavior, like other behavior, is controlled by its consequences.
  - When consequences are rewarding, behavior is maintained and is increased in strength and perhaps frequency.
  - When consequences are punishing, or when there is a total lack of reinforcement, the behavior is weakened and eventually extinguished.
- Skinner's theories attracted a number of critics (Noam Chomsky) but it also had people who defended it (Kenneth MacCorquodale).

## **Chomsky's Criticisms:**

- Chomsky argues that the behaviourist theory fails to recognize what has come to be called 'the logical problem of language acquisition'.
- This logical problem refers to the fact that children come to know more about the structure of their language than they could reasonably be expected to learn on the basis of the samples of language which they hear.
- Children do not learn and reproduce a large set of sentences, but they routinely create new sentences that they have never learnt before.
- They internalize rules rather than strings of words (e.g. it breaked /mommy goed).
- The language the child is exposed to in the environment is full of confusing information. (e.g. false starts, incomplete sentences, or slips of the tongue)
- Children are not systematically corrected or instructed on language points. Parental corrections are inconsistent or even non-existent.
- When parents do correct, they tend to focus on meaning and truth values and not on language itself.
- Today virtually no one would agree that Skinner's model of verbal behavior adequately accounts for the capacity to acquire language, for language development itself, for the abstract nature of language, or for a theory of meaning.

It would appear that this position with its emphasis on empirical observation and the scientific method only began to explain the miracle of language acquisition. It left untouched genetic and interactionist domains that could be explored only by approaches that probed more deeply.

### **Nativist Approach**

- The term nativist is derived from the fundamental assertion that language acquisition is innately determined, that we are born with a genetic capacity that predisposes us to a systematic perception of the language around us, resulting in the construction of an internalized system of language.
- Noam Chomsky claims that children are biologically programmed for language and that language develops in the child in just the same way that other biological functions develop.
- Children are born with a special ability to discover for themselves the underlying rules of a language system.
- The environment makes a basic contribution in this case the availability of people who speak to the child. The child, or rather, the child's biological endowment, will do the rest.

### The Language Acquisition Device (LAD):

- LAD is the imaginary "black box" which exists somewhere in the brain.
- It is thought to contain all and *only* the principles which are universal to all human languages.
- For the LAD to work, the child needs access only to samples of a natural language. These language samples serve as a trigger to activate the device.
- Once it is activated, the child is able to discover the structure of the language to be learned by matching the innate knowledge of basic grammatical relationships to the structures of the particular language in the environment.
- More recently, Chomsky and his followers no longer use the term LAD, but refers to the child's innate endowment as *Universal Grammar* (UG)

McNeill (1966) described LAD as consisting of four innate linguistic properties:

- the ability to distinguish speech sounds from other sounds in the environment;
- the ability to organize linguistic data into various classes that can later be reformed;
- knowledge that only a certain kind of linguistic system is possible and that other kinds are not:
- the ability to engage in constant evaluation of the developing linguistic system so as to construct the simplest possible system out of the available linguistic input.

One practical contribution of nativist theories is the kind of discoveries that have been made about how the system of child language works:

- Research has shown that the child's language, at any given point, is a legitimate system in its own right.
- The child's linguistic development is not a process of developing fewer and fewer "incorrect" structures, not a language in which earlier stages have more "mistakes" than later stages.
- Rather, the child's language at any stage is systematic in that the child is constantly forming hypotheses on the basis of the input received and then testing those hypotheses in speech (and comprehension).
- As the child's language develops, those hypotheses are continually revised, reshaped, or sometimes abandoned.
- Chomsky drew attention to the fact that children seem to develop language in similar ways and on a similar schedule.
- Environmental differences may be associated with some variation in the rate of acquisition.
- Before generative linguistics came into vogue, Jean Berko (1958) demonstrated that children learn language not as a series of separate discrete items, but as an integrated system.

- Using a simple nonsense-word test, Berko discovered that English-speaking children as young as four years of age applied rules for the formation of plural, present progressive, past tense, third singular, and possessives.
- She found, for example,
  - if a child saw one "wug" he could easily talk about two "wugs;'
  - or if he were presented with a person who knows how to "gling," the child could talk about a person who "glinged" yesterday, or sometimes who "glang."

The three most important contributions of the nativist framework to our understanding of the first language acquisition:

- 1. Freedom from the restrictions of the so-called "scientific method" to explore the unseen, unobservable, underlying, abstract linguistic structures being developed in the child;
- 2. Systematic description of the child's linguistic repertoire as either rule-governed or operating out of parallel distributed processing capacities;
- 3. The construction of a number of potential properties of Universal Grammar.

## **Functional Approach**

More recently, with an increase in constructivist approaches to the study of language, there has been a shift in patterns of research. The shift has not been so much away from the generative/cognitive side of the continuum, but perhaps better described as a move even more deeply into the essence of language.

Two emphases have emerged:

- **a.** Researchers began to see that language was one manifestation of the cognitive and affective ability to deal with the world, with others, and with the self.
- **b.** Moreover, the generative rules that were proposed under the nativistic framework were abstract, formal, explicit, and quite logical, yet they dealt specifically with the **forms** of language and not with the deeper **functional** levels of meaning constructed from social interaction.
- \* *Forms:* Morphemes, words, sentences, and the rules that govern them. *Functions:* The meaningful, interactive purposes, within a social (pragmatic) context, that we accomplish with the forms.

### Cognition and Language Development

- The first social constructivist emphasis of the functional perspective was on Cognition and Language Development
- Dan Slobin (1971; 1986), among others, demonstrated that in all languages, semantic learning depends on cognitive development and that sequences of development are determined more by semantic complexity than by structural complexity.

There are two major pacesetters to language development, involved with the poles of functions and forms:

- 1. On the functional level, development is paced by the growth of conceptual and communicative capacities, operating in conjunction with innate schemas of cognition;
- 2. On the formal level, development is paced by the growth of perceptual and information-processing capacities, operating in conjunction with innate schemas of grammar. (In simple terms: what children know will determine what they learn about the code for both speaking and understanding messages.)

Child language researchers began to tackle the formulation of the rules of the **functions** of language and the relationships of the **forms** of language to those functions.

In recent years it has become quite clear that language functioning extends well beyond cognitive thought and memory structure.

## Social Interaction & Language Development

- The second social constructivist emphasis of the functional perspective was on Social Interaction & Language Development
- Some research (BerkoGleason, 1988; Lock, 1991) looked at the interaction between the child's language acquisition and the learning of how social systems operate in human behavior.
- Other investigations of child language centered on the function of language in discourse.
- Since language is used for interactive communication, it is only fitting that one study the communicative functions of language: What do children know and learn about talking with others? about connected pieces of discourse (relations between sentences)? the interaction between hearer and speaker? conversational cues? Within such a perspective, the very heart of language-its communicative and pragmatic function-is being tackled in all its variability.
- This kind of research renewed interest in the performance level of language.
- Overt responses, such as hesitations, pauses, backtracking and other conversational cues, that were carefully observed by structuralists and hastily weeded out as "performance variables" by generative linguists, have now returned to the forefront.

### **Issues in First Language Acquisition**

## Competence and Performance

- *Competence* refers to one's underlying knowledge of a system, event, or fact. It is the nonobservable ability to do something, to perform something.
- Competence & language: it is one's underlying knowledge of the system of a language-its rules of grammar, its vocabulary, all the pieces of a language and how those pieces fit together.
- **Performance** is the overtly observable and concrete manifestation or realization of competence. It is the actual production (speaking, writing) or the comprehension (listening, reading) of linguistic events.

## Comprehension and Production

- These two aspects should not be confused with the competence/performance distinction; they are aspects of both performance and competence.
- In child language, most observational and research evidence points to the general superiority of comprehension over production: children seem to understand "more" than they actually produce.
- Even adults understand more vocabulary than they ever use in speech, and also perceive more syntactic variation than they actually produce.

### Nature or Nurture?

- Nativists claim that a child is born with an innate knowledge of a predisposition toward language, and that this innate property (the LAD or UG) is universal in all human beings.
- Environmental factors cannot by any means be ignored.
- For years psychologists and educators have been embroiled in the "nature-nurture" controversy:
  - What are those behaviors that "nature" provides innately, in some sort of predetermined biological timetable?
  - and what are those behaviors that are, by environmental exposure by "nurture," by teaching learned and internalized?
- Language acquisition is universal; every child acquires language. But how are the efficiency and success of that learning determined by the environment the child is in? or by the child's individual construction of linguistic reality in interaction with others?
- An interesting line of research on innateness was pursued by Derek Bickerton (1981), who found evidence, across a number of languages, of common patterns of linguistic and cognitive development.
- He proposed that human beings are "bio-programmed" to proceed from stage to stage. Like flowering plants, people are innately programmed to "release" certain properties of language at certain developmental ages. Just as we cannot make a geranium bloom before its "time," so human beings will "bloom" in predetermined, preprogrammed steps.

#### Universals

- It is a controversial area of study: the claim that language is universally acquired in the same manner, and that the deep structure of language at its deepest level may be common to all languages.
- Research on Universal Grammar continues to this day.
- One of the keys to such inquiry lies in research on child language acquisition across many different languages in order to determine the commonalities.
- *Areas of study:* word order, morphological marking tone, agreement (e.g., of subject and verb), reduced reference (e.g., pronouns, ellipsis) nouns and noun classes, verbs and verb classes, predication, negation, and question formation.

## Systematicity and Variability

- One of the assumptions of a good deal of current research on child language is the systematicity of the process of acquisition.
- From pivot grammar ... to full sentences of almost indeterminate length, children exhibit a remarkable ability to infer the phonological, structural, lexical, and semantic system of language.
- But in the midst of all this systematicity, there is an equally remarkable amount of variability in the process of learning.
- Researchers do not agree on how to define various "stages" of language acquisition, even in English.
- In both first and second language acquisition, the problem of variability is being carefully addressed by researchers.
- One of the major current research problems is to account for all this variability.

## Language and Thought

- For years researchers have examined the relationship between language and cognition.
- Behaviorists think that cognition is too mentalistic to be studied by the scientific method.
- Piaget (1972) gives an opposing position. He claimed that cognitive development is at the very center of the human organism and that language is dependent upon and springs from cognitive development.
- Vygotsky (1962, 1978) claimed that social interaction, through language, is a prerequisite to cognitive development.
- Thought and language were seen as two distinct cognitive operations that grow together. (Schinkle-Llano 1993)
- One of the champions of the position that language affects thought was Benjamin Whorf, who with Edward Sapir formed the well-known Sapir Whorf hypothesis of linguistic relativity-namely, that each language imposes on its speaker a particular "world view."
- The issue at stake in child language acquisition is to determine how thought affects language, how language affects thought, and how linguists can best describe and account for the interaction of the two.

#### **Imitation**

- It is a common informal observation that children are good imitators. So we might think that imitation is one of the important strategies a child uses in the acquisition of language.
- This is not inaccurate on a global level. Indeed, research has shown that echoing is a particularly important strategy in early language learning and an important aspect of early phonological acquisition.
- There are two types of imitation:
  - Surface structure imitation: where a person repeats or mimics the surface strings, attending to a phonological code rather than a semantic code.
  - Deep structure imitation: where a person concentrates on language as a meaningful and communicative tool.
  - \* See (Brown, 2002, pp. 38-39) for examples

#### Practice:

- Do children practice their language? If so, how? What is the role of the **frequency** of hearing and producing items in the acquisition of those items?
- A behavioristic view would claim that practice repetition and association is the key to the formation of habits by operant conditioning.
- Practice is usually thought of as referring to speaking only. But one can also think in terms of comprehension practice (the frequency of linguistic input to the child).
- Is the acquisition of particular words or structures directly attributable to their frequency in the child's linguistic environment?
- Brown and Hanlon (1970) found that the frequency of occurrence of a linguistic item in the speech of the mothers was a strong predictor of the order of emergence of those items in their children's speech.

### Input

- The role of input in the child's acquisition of language is undeniably crucial. Whatever one's position is on the innateness of language, the speech that young children hear is primarily the speech heard in the home, and much of that speech is parental speech or the speech of older siblings.
- Children react very consistently to the deep structure and the communicative function of language, and they do not react overtly to expansions and grammatical corrections. Such input is largely ignored unless there is some truth or falsity that the child can attend to.
- What many researchers have showed is that in the long run, children will, after consistent, repeated models in meaningful contexts, eventually transfer correct forms to their own speech and thus correct past mistakes.

### Discourse

- A subfield of research that is occupying the attention of an increase number of child language researchers, especially in an era of social constructivist research, is the area of conversational or discourse analysis.
- While parental input is a significant part of the child's development of conversational rules, it is only one aspect, as the child also interacts with peers and, of course, with other adults.

- While it used to be generally held that mere *exposure* to language is sufficient to set the child's language generating machinery in motion, it is now clear that, in order for successful first language acquisition to take place, *interaction*, rather than exposure, is required. Children do not learn language from overhearing the conversations of others or from listening to the radio and must, instead, acquire it in the context of being spoken to.
- While conversation is a universal human activity performed routinely in the course of daily living, the means by which children learn to take part in conversation appear to be very complex.
- How do children learn discourse rules? What are the key features children attend to? How do they detect pragmatic or intended meaning? How are gender roles acquired? These and other questions about the acquisition of discourse ability are slowly being answered in the research

A number of theories and issues in child language have been explored in this chapter with the purpose of both briefly characterizing the current state of child language research and of highlighting a few of the key concepts that emerge in the formation of an understanding of how babies learn to talk and eventually become sophisticated linguistic beings.

## In the Classroom: Gouin and Berlitz - The First Reformers

According to (Brown, 2002), Francois Gouin and Charles Berlitz were the first two reformers of "modern" language teaching. Their perspective observations about language teaching helped set the stage for the development of language teaching methodologies.

#### Francois Gouin:

See (Brown, 2002, pp. 43-44)

■ The Series Method was created, a method that taught learners directly (without translation) and conceptually (without grammatical rules and explanations) a "series" of connected sentences that are easy to understand. For instance,

I stretch out my arm. I take hold of the handle. I turn the handle. I open the door. I pull the door.

 Nevertheless, this approach to language learning was short-lived and, only a generation later, gave place to the Direct Method, posited by Charles Berlitz.

### Charles Berlitz - The Direct Method

### **Overview**

- The Berlitz Method is a variation of the Direct Method.
- The basic tenet of Berlitz's method was that second language learning is similar to first language learning. In this light, there should be lots of oral interaction, spontaneous use of the language, no translation, and little if any analysis of grammatical rules and syntactic structures.
- The *direct method*, sometimes also called *natural method*, is a method that refrains from using the learners' native language and just uses the target language.

- The direct method operates on the idea that second language learning must be an imitation of first language learning, as this is the natural way humans learn any language a child never relies on another language to learn its first language, and thus the mother tongue is not necessary to learn a foreign language.
- This method places great stress on correct pronunciation and the target language from outset. It advocates teaching of oral skills at the expense of every traditional aim of language teaching.
- According to this method, printed language and text must be kept away from second language learner for as long as possible, just as a first language learner does not use printed word until he has good grasp of speech.
- So, learning of writing and spelling should be delayed until after the printed word has been introduced
- Grammar and translation should also be avoided because this would involve the application of the learner's first language.
- All above items must be avoided because they hinder the acquisition of a good oral proficiency

### Characteristics:

Richard and Rodgers (1986) summarized the principles of the Direct Method:

- 1. Classroom instruction was conducted exclusively in the target language
- **2.** Only everyday vocabulary and sentences were taught
- **3.** Oral communication skills were built up in a carefully graded progression organized around question-and-answer exchanges between teachers and students in small, intensive classes.
- **4.** Grammar was taught inductively.
- **5.** New teaching points were introduced orally.
- **6.** Concrete vocabulary was taught through demonstration, objects, and pictures; abstract vocabulary was taught by association of ideas.
- **7.** Both speech and listening comprehensions are taught.
- **8.** Correct pronunciation and grammar are emphasized.

#### History:

- The Direct Method enjoyed considerable popularity at the end of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup>.
- It was most widely accepted in private language schools were students were highly motivated and were native-speaking teachers could be employed. Today, Berlitz language schools are thriving in every country of the world.
- However, it was difficult to apply in public education, mainly because of the constraints of budget, time, classroom size, and teacher background.
- By the end of the first quarter of the 20<sup>th</sup> century, the use of this method had declined both in Europe and the US. Most language curricula returned back to the Grammar Translation Method or to a "reading approach" that emphasized reading skills in foreign languages.
- Yet, after a period of decline, in the middle of the 20<sup>th</sup> century, this method has been revived, leading to the emergence of the Audiolingual Method.