Our presentation is about Noam Chomsky’s famous theory, Universal Grammar, also called UG for short.
Before discussing Chomsky’s theory of UG, we’d like to provide you with a brief intro to Chomsky himself. We’d like to do this partly because it may help you understand his theory of UG better and partly because he has been one of the most influential people in the field of language acquisition. Having thus been so influential, students of TESOL should be familiar with some basic facts about Chomsky.

• As of 2005, Chomsky has produced over 80 books, hundreds of articles, and thousands of speeches and interviews
• Chomsky has been hugely influential in the fields of linguistics, philosophy of the mind and human nature, and politics
• Chomsky brings a naturalistic, biologically-oriented science to all these fields in which he has made contributions
• Linguists of the Chomskyan tradition think of themselves as natural scientists

(McGilvary, 2005, pg. 1-2)
Chomsky’s work in linguistics began in 1940 with his undergraduate thesis at U. of Penn (McGilvray, 2005, pg. 12).

Belongs to the linguistic school of thought known as generative linguistics (Newmeyer, 1996, pg. 11).

Chomsky’s approach to language acquisition is often termed the Nativist Approach and is itself part of the Cognitive-Computational Tradition that reached its height of popularity in the 1960’s – 70’s (Brown, 2000, pgs. 9, 24; Johnson, 2004, pg. 11).

Chomsky introduced the world to the essential tenets of Nativist Theory in his 1965 work Aspects of Theory and Syntax (de Valenzuela, 2000, pg. 58).
So what are the essential tenets of nativist theory?

• Language acquisition is innately determined, i.e. humans are born with a genetic predisposition to systematically perceive the language around them and to use the stimuli to construct an internalized system of language

• [nativist theory makes use of the notion of the] Language Acquisition Device (LAD) [even though it is recognized that this is a hypothetical structure rather than an actual area of the brain]

• [more recently, nativist theory has come to rely upon the notion of] Universal Grammar (UG) [UG goes well beyond what was originally proposed for the LAD and expands it into a system of universal linguistic rules that are hardwired into every human being from birth]

(Brown, 2000, pgs. 24-25)
Okay, so let’s talk about UG.

Firstly, Chomsky and his followers base the existence of Universal Grammar on the observation and deduction that came to be known as the Logical Problem of Language Acquisition.

The logical problem of language acquisition refers to the gap between what can logically be learned from the available input – which is often degenerate, ungrammatical, and incomplete (the poverty of the stimulus argument) – and what is actually learned: a deep, abstract, and intuitive theory of grammar – a generative grammar of the language (Ellis, 1994, pg. 713; Johnson, 2004, pg. 32).
But what is UG?

First, let's look at what UG isn’t.

Before beginning research into this topic, I was under the impression that Universal Grammar consisted of universal commonalities between all human languages. Thus, I imagined that research in this area consisted of studying a large number of languages from different language families in order to discover “universals.” It turns out I was wrong.

Universal Grammar is not:

Typological Universals: Universal features of language that are manifest in all languages:

- all languages have nouns, verbs, vowels, and consonants
- the tendency for the negator to take a preverbal rather than a postverbal position

They are discovered from crosslinguistic comparison of a wide range of languages from different language families

(Ellis, 1994, pgs. 34, 415-17)
However, I was wrong. Universal Grammar is:

“The system of principles, conditions, and rules that are elements or properties of all human languages…the essence of human language.”
(Comsky’s Universal Grammar)

• The term Universal Grammar refers to the inherent knowledge of universal principles that humans employ when learning language, and the parameters that distinguish one language from another.
• Consists of principles and parameters, which are described using highly abstract statements relating to general properties of language.
• It is studied through in depth study of individual languages in order to identify the principles of grammar which underlie and govern specific rules.
• (yes folks, the back round consists of grammar crackers)

• The term Universal Grammar refers to the abstract knowledge of language which children bring to the task of learning their native language and which constrains the shape of the particular grammar they are trying to learn.
• For example: a language has the heads on the same side in all its phrases.
• Consists of principles and parameters, which are described using highly abstract statements relating to general properties of language.
• It is possible that at least some of the universals uncovered through typological comparisons may have basis in the abstract principals of UG

• Many generative linguists (of the same school of thought as Chomsky) now seek to test the validity of the abstract principals they have uncovered by means of crosslinguistic comparisons

• Many SLA researchers utilize both typological and UG arguments in the construction of hypotheses

(Ellis, 1994, pg. 416-17)
Let’s return to UG and its components. As stated a few slides back, Chomsky considers UG to be comprised of what he terms “principles” and what he terms “parameters.”

First, let’s look at “principles”:
• The term *principles* refers to highly abstract properties of grammar that underlie the rules of specific languages
• *Principles* are thought to constrain the form that grammatical rules can take
• Constitute part of a child’s innate knowledge of language

(Ellis, 1994, pgs. 430, 719)
Next is parameters.

• While principles function as the pool of possibilities from which a language can draw on in the construction of a grammar, parameters function to set limits on the specific options available to a particular language
• It is differing parameter settings that cause languages to be different
• A SLL must discover which parameters settings apply in the target language in order to achieve linguistic competence in the target language

Principles are common to all human beings, specific parameter settings vary from language to language.

(Ellis, 1994, pgs. 430, 718-719; Brown, 2000, pg. 214)
Chomsky makes a key distinction between grammatical competence and pragmatic competence. Pragmatic competence can be described as the relation of intentions and purposes, i.e., meaning, to linguistic output/use.

Chomsky confines language acquisition to the domain of grammatical competence only. In other words, Chomsky does not view language as speech to be used in real-life communication with others (that would be language + pragmatic knowledge). But rather, Chomsky views language as a set of pure, formal properties that are inherent in any natural language grammar.

Chomsky makes this distinction because there is such great variability in the way pragmatics play out from person to person. Further, pragmatic competence is more concerned with, to use Chomsky’s words, “knowledge of conditions an manner of appropriate use, in conformity with various purposes [than with] the knowledge of form and meaning” (quoted in Johnson, 2004, pg. 31). In other words, pragmatics gets in the way and interferes with what would otherwise be pure “core grammar.” Chomsky considers the separation of linguistic competence from pragmatic competence to be indispensable for practical reasons to the ability to uncover the pure, formal properties of the genetically preprogrammed UG. Otherwise referred to as “I” language linguistics (internalized) and “E” language linguistics (externalized) (Johnson, 2004, pgs. 30-32; Ellis, 1994, pg. 437)
• Chomsky relegates the role of the environment to that of a trigger that initiates the operation of UG.

• Once “turned on,” UG then unfolds in a genetically pre-determined way (Johnson, 2004, pg. 36)
There are four differing views relating to the availability of UG to SLA. These are as follows:

1. The complete access view
2. The no access view [also known as the Fundamental Difference Hypothesis]
3. The partial access view
4. The dual access view

(Johnson, 2004, pgs. 39-42; Ellis, 1994, pg. 453)
Flynn supports the complete access view in her Parameter-setting Model of SLA. She argues that the essential faculty for language evidenced in L1 acquisition is also critically involved in L2 acquisition. Flynn, nevertheless, acknowledges a crucial role for the L1. According to Flynn’s hypothesis, where the L1 and L2 have parameter settings that are the same or very similar, the pattern of acquisition of complex sentence structures will resemble the later stages of L1 acquisition. On the other hand, where the parameter settings differ between the two languages, the pattern of acquisition will resemble the early stages of L1 acquisition because learners will need to discover the correct parameter settings. In order for language acquisition to occur according to Flynn’s Parameter-setting Hypothesis, adult SLLs must have full access to the “switch board” on which parameter settings can be changed (i.e. UG).

Flynn and others argue three arguments in support of the complete access view:
1. L2 learners, like L1 learners, possess grammatical knowledge that could not have been learned on the basis of input only
2. L2 learners possess knowledge that is structure-dependent (i.e.
3. L2 learners exhibit the same infinite productivity of new sentences as L1 learners

(Johnson, 2004, pg. 41-42; Ellis, 1994, pgs. 453-54)
The no access view is supported by a number of theorists, including Bley-Vroman, Clahsen, Muysken, and Meisel. This position rests on two assertions. The first is that adult L2 acquisition is very different from L1 acquisition. To support this claim, theorists cite a number of characteristics of L2 acquisition that differ from L1 acquisition. These include:

1. that with respect to L2 acquisition there is a general lack of the “guaranteed success” that one sees with L1 acquisition
2. connectedly, that there is substantial variation in the degree of attainment of the L2
3. adult L2 learners can “fossilize” whereas L1 learners cannot
4. even very advanced adult L2 learners do not display the same level of intuition as to the grammaticality of sentences that native speakers do
5. children’s success in the L1 is unaffected by factors such as personality, motivation, attitude, and aptitude as adult L2 acquisition appears to be

The second assertion that the no access view rests on is that adult L2 learners resort to general learning strategies rather than UG to support language acquisition. These theorists state that L2 attainment varies so considerably across individuals because general learning strategies vary greater from person to person.

In sum, Bley-Vroman and others assert that adult L2 learners lack access to UG and that the function of the UG is replaced with the general cognitive problem-solving mechanism utilized in general learning processes.

(Johnson, 2004, pgs. 39-42; Ellis, 1994, pgs. 454)
Theorists that support a partial access view include White and Schachter. This view asserts that learners may have access to the linguistic principles of UG but not to the full range of parametric variations. Specifically, this view asserts that learners have access to UG only through the L1. In other words, learners will not be able to acquire the L2 values of parameters when these differ from the L1 settings.

(Johnson, 2004, pg. 41-42; Ellis, 1994, pgs. 454)
Lastly, Felix has advanced the dual access position using what he calls the Competition Model. According to this view, adults have continued access to UG but they also make use of a general problem solving module (such as that proposed in the no access view). This general problem solving module, in Felix’s mind, is a separate, autonomous cognitive system from UG.

The general problem solving module competes with UG in language learning vs. language acquisition. Felix asserts that the problem-solving system generally wins in adults due to developmental changes that take place around puberty. However, the problem-solving system is inadequate for processing structures beyond a certain elementary level. Only UG is capable of ensuring complete grammatical competence. Thus, according to Felix, interference from the problem-solving system in UG processing is the reason why most adults fail to attain native-speaker levels of competence.

(Johnson, 2004, pg. 41; Ellis, 1994, pgs. 454-55)
Before Chomsky’s Nativist Approach to language acquisition became popular in the 1960s, Skinner’s Behaviorism was the dominant ideology (1940s and 50s). Behaviorism and the Nativist Approach are in stark opposition to one another. One could say that where Behaviorism represents the ideas on the extreme right of the pendulum’s swing, Chomsky’s theories represent the far left swing of the pendulum.

To contrast the two ideologies:

Whereas Behaviorism was a science that focused purely on observing and describing outward, “publicly observable responses,” the Nativist Approach sought to explain what went on behind the scenes, in the individual’s mind: their motivations and the biological framework upon which their actions and motivations are built.

Thus, Skinner focused on performance (what Ferdinand de Saussure, the person who planted the first seeds of the generative revolution, called “parole” in his 1916 work) while largely ignoring competence, and Chomsky focused on competence (what Saussure called “langue”) while largely ignoring performance (to Chomsky, studies that investigate performance fall under the category of development rather than acquisition).

Further, Behaviorists believed that “any notion of ‘idea’ or ‘meaning’ is explanatory fiction” (Brown, 2000, pg. 9). Skinner believed that the speaker is merely where speech occurs, not the cause of speech. This is a non-mentalistic view of language. In contrast, the Nativist Approach has a highly mentalistic ideology with it’s focus on motivations and innate hardwiring for speech.

(Johnson, 2004, pgs. 30-36; Brown, 2000, pgs. 8-10; Escamilla and Grassi, 2000, pg. 6)
Bibliography


