Readings

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5. Interlanguage Syntax
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   8a. BICS and CALP
   8b. Restricted and Elaborated Codes
1a. Introduction to Interlanguage

As you read, answer the following questions:
• What is interlanguage?
• What is the purpose of interlanguage research?
• Do you have an interlanguage?

Key concepts –

interlanguage (IL) scholarship nonnative speakers target language (TL) second language acquisition (SLA)
phonology pragmatics second language language acquisition linguistic universals (UG)


inter-lang-ue (n.)
The type of language produced by nonnative speakers in the process of learning a second language or foreign language.

Source – http://encyclopedia.laborlawtalk.com/Second_language_acquisition#Interlanguage

Interlanguage (IL) scholarship seeks to understand learner language as a natural language with its own consistent set of rules. IL scholars reject the view of learner language as merely an imperfect version of the target language (TL). IL is perhaps best thought of as a way of understanding language acquisition. By the same token, IL work is an important subfield of linguistics. It is possible to apply an IL perspective to learner pronunciation (IL phonology), but also to language-use norms found among learners (IL pragmatics).

By describing the ways in which learner language conforms to universal linguistic norms, IL research has contributed greatly to our understanding of linguistic universals (UG) in second language acquisition (SLA).

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion.
1b. Interlanguage Research

As you read, answer the following questions:

• What is a technical definition of interlanguage?
• Why is the term interlanguage preferred over other terms? Why is this an issue?
• What is an interlanguage continuum?
• Can you place your own interlanguage(s) on an interlanguage continuum?
• What is the origin of the term interlanguage?

Key concepts –

<table>
<thead>
<tr>
<th>variables</th>
<th>interlanguage</th>
<th>internally structured</th>
<th>approximate system</th>
<th>target language (TL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pidgin</td>
<td>lingua franca</td>
<td>contact situation</td>
<td>first language (L1)</td>
<td>second language (L2)</td>
</tr>
<tr>
<td>creole</td>
<td>continuum</td>
<td>linguistic input</td>
<td>standard language</td>
<td>non-standard variety</td>
</tr>
<tr>
<td>dialect</td>
<td>systematic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source –


Interlanguage

The language system that the learner constructs out of the linguistic input to which he has been exposed has been referred to as an idiosyncratic dialect (Corder 1971), an approximate system (Nemser 1971), and an interlanguage (Selinker 1972). While these three terms differ somewhat in their emphases, it was actually the term interlanguage that entered common use, partly perhaps due to its neutrality of attitude, since the other two terms take a target language (TL)-centered perspective (Sridhar 1980). Nevertheless, all three writers seem to follow the same ideas proposed by Nemser in discussing his approximate system concept:

Our assumption is three-fold: 1) Learners' speech at a given time is the patterned product of a linguistic system, distinct from the first language (L1) and target language (TL) and internally structured; 2) Approximate systems (AS) at successive stages of learning form an evolving series AS\(^1\) .... AS\(^n\), the earlier occurring when a learner first attempts to use the TL, the most advanced at the closest approach to the TL.... 3) In a given contact situation, the ASs of learners at the same stage of proficiency roughly coincide with major variables ascribable to differences in learning experiences. (p. 116)

Thus, the concept of interlanguage might better be understood if it is thought of as a continuum between the L1 and second language (L2) along which all learners traverse (see Figure 1). At any point along the continuum (IL\(^1\), IL\(^2\), IL\(^3\), etc.), the learners' language is systematic, i.e. rule-governed, and common to all learners, any difference being explicable by differences in their learning experience.
The term *interlanguage* seems first to have been used in 1935 by John Reinecke, in his classic MA thesis, *Language and Dialect in Hawai‘i*, published by the University of Hawai‘i Press in 1969. Reinecke, the distinguished *pidgin/creole* scholar describes, for example, how in situations like that in plantation-era Hawai‘i:

>a makeshift dialect will for the most part be used as the means of communication between the several [immigrant] groups ... [which] will tend to pass into a more formal speech - still imperfect as compared with the *standard language* - as an interlanguage, until finally this more or less standardized *lingua franca* becomes the primary tongue of nearly the whole body of inhabitants. (1969, p. 115)

Reinecke always used ‘interlanguage’ to refer to a **non-standard variety** of a L1 or L2, used as a means of intergroup communication, gradually approximating the norms of the standard language of the most dominant group, usually the one with the most economic and political power.

**References**


**Questions and Notes:**

- What questions and thoughts do you have about the reading? Write them down for class discussion. 4
1c. What is Interlanguage?

As you read, answer the following questions:

• What is competence in a second language?
• What is another definition of interlanguage?
• What is important to know about interlanguage?
• Is interlanguage random or systematic?
• Are you aware of your own interlanguage development?

Key concepts –
errors          acquisition          hypotheses          linguistic competence          native-like fluency
functional      competencies        fossilization        internalized system          innate language endowment
forms           function            IL plateaus          implicit knowledge          native-like proficiency
random          stabilization        assumptions          explicit knowledge          linguistic environment
TL norms        systematic

Source – http://oak.cats.ohiou.edu/~jarvis/Discussion%20of%20Study%20Sheets%201-3.ppt

Acquiring Competence in a Second Language

Knowing an L2 well means knowing information similar to that of a native speaker of a language. This knowledge includes both implicit and explicit knowledge of the rules, functions, and use of a large set of linguistic information, which as a whole is referred to as linguistic competence (Gass & Selinker, 2001, p. 12). Given the complexity of the knowledge that must be learned, it is clear that the acquisition of that knowledge is a highly complex process.

Interlanguage Defined

The basic assumption in SLA research is that learners create a language system, known as an interlanguage (IL). This system is composed of numerous elements, not the least of which are elements from the L1 and the TL. What is important is that the learners themselves impose structure on the available linguistic data and formulate an internalized system. (Gass & Selinker, 2001, p. 12)

L2 learners are forming their own self-contained linguistic systems. This is neither the system of the L1 nor the system of the TL, but instead falls between the two; it is a system based upon the best attempt of learners to provide order and structure to the linguistic stimuli surrounding them. (Brown, 2000, p. 216)

IL refers to the separateness of an L2 learner’s system, a system that has a structurally intermediate status between the L1 and TL.

Fossilization

Central to the concept of IL is the concept of fossilization, which generally refers to the cessation of learning. Because of the difficulty in determining when learning has ceased, one frequently refers to stabilization of linguistic forms, rather than fossilization or cessation of learning. In SLA, one often sees

• What questions and thoughts do you have about the reading? Write them down for class discussion. 5
that IL plateaus are far from TL norms.

Recap: What is the nature of IL?

- A learner's IL is the learner's system of rules/ assumptions/ hypotheses about how the TL works.
- The learner's IL changes over time and with increased exposure to the TL.
- The learner's IL will contain some rules that are identical to those of a native speaker, but will differ in many respects.
- The rules/ assumptions/ hypotheses in the learner's IL may have many sources, such as the learner's L1, his/her innate language endowment, generalizations based on experience with the TL, and creative hypotheses.
- The learner's IL will become progressively more complex and native-like through increased experience in the TL, but this process isn't always directly observable on the basis of the types and numbers of errors that learners produce.
- Few learners progress all the way to native-like proficiency in all areas of the TL, although many learners do become fully functional in all domains of TL use.

Is IL random or systematic?

The learners, in acting upon their environment, construct what to them is a legitimate system of language: a structured set of rules that for the time being provide order to the linguistic chaos that confronts them. (Brown, 2000)

By the late 1960s, L2 learning began to be examined in much the same way that L1 learning had been studied: learners were looked on not as producers of malformed, imperfect language full of mistakes but as intelligent and creative beings proceeding through logical, systematic stages of acquisition, creatively acting upon their linguistic environment as they encounter its forms and functions in meaningful contexts.

References


Questions and notes:

- What questions and thoughts do you have about the reading? Write them down for class discussion. 6
Class Lecture

Advanced language users are considered by linguists to have advanced knowledge of the following six competencies and 14 skills. Do you have advanced knowledge of these competencies and skills in your L1? What about your L2?

Language competencies necessary for native-like fluency in a language:

- Organizational Competence
- Pragmatic Competence
- Grammatical Competence
- Textual Competence
- Illocutionary Competence
- Sociolinguistic Competence

Linguistic skills necessary for native-like fluency in a language:

- Vocabulary
- Morphology
- Syntax
- Phonology
- Cohesion
- Rhetorical Organization
- Idea Creation and Development
- Manipulative Ability
- Ability to Problem-Solve, Use Feedback, Learn Implicitly
- Imaginative Ability
- Sensitivity to Dialect and Language Variety
- Sensitivity to Register
- Sensitivity to Natural Language Use
- Cultural References, Figures of Speech, Idioms

Questions and notes:

- What questions and thoughts do you have about the reading? Write them down for class discussion.
1d. Fossilization

As you read, answer the following questions:

• What is fossilization?
• What causes fossilization?

Key concepts –
language learner phenomenon fossilization IL grammar

Source –

According to Selinker (1972), one of the major issues for which any description of IL must account is the phenomenon of fossilization:

Fossilizable linguistic phenomena are linguistic items, rules and subsystems that speakers of a particular native language (NL) will tend to keep in their IL relative to a particular target language (TL), no matter what the age of the learner or amount of explanation and instruction he receives in the TL.

Thus, it is not always true that a language learner, given continued exposure to the TL, will steadily grow in his or her mastery of the TL. Perhaps it is the case, as Corder (1971) suggests, that once the language learner’s IL grammar is sufficiently developed to enable the learner to communicate adequately for his or her purposes, the motivation to improve wanes.

References

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion.
1e. Interlanguage Review

As you read, answer the following questions:

- What are the roles of the first language and the second language in the development of interlanguage grammar?
- What is the difference between transfer errors and developmental errors?
- Do you currently make transfer and/or development errors?
- Why does fossilization occur?
- Is your interlanguage fossilized, or is it still developing?

Key concepts –

fossilized phoneme nonnativelike L1 acquisition phonological transfer native speakers
transfer proficiency transfer errors overgeneralize cognitive strategy developmental errors

Source –


The Study of Second Language Acquisition

In the case of first language acquisition, we may ascribe the difference between child and adult grammars to either cognitive or biological immaturity in the child. In the case of second language learning by adults, however, we cannot say that the learners are either cognitively or biologically immature. Rather, they are subject to an influence that is absent from the child's situation: the first language grammar. Let us diagram the situation as follows:

Figure 2: Influences on an Interlanguage Grammar

This diagram illustrates the fact that second language learners have a systematic interlanguage (IL) grammar – so-called because it is influenced by both the first and the second language and has features of each.

The Role of the First Language: Transfer

One of the most easily recognizable traits of a second language learner's speech is that it bears a certain resemblance to the first language. Thus, someone whose first language is French is likely to sound different from someone whose first language is German when they both speak English. Consider in this regard the following typical pronunciation of the English word have by speakers of French and German.

<table>
<thead>
<tr>
<th>English target</th>
<th>French speaker</th>
<th>German speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>have [hæv]</td>
<td>[æv]</td>
<td>[hæf]</td>
</tr>
</tbody>
</table>

Table 1: Phonological Transfer

- What questions and thoughts do you have about the reading? Write them down for class discussion.
The form produced by the French speakers reflects the fact that French lacks the phoneme /h/ while the pronunciation associated with German speakers can be traced to the fact that German includes a rule of Syllable Final Obstruent Devoicing (which changes the [v] to a [f]). The term transfer is used to describe the process whereby a feature or rule from a learner's first language is carried over to the IL grammar. Other examples can be seen in Table 2.

<table>
<thead>
<tr>
<th>L1</th>
<th>L2</th>
<th>Example</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>English</td>
<td>I espeak Espanish.</td>
<td>Spanish does not allow s + consonant sequences word-initially.</td>
</tr>
<tr>
<td>English</td>
<td>French</td>
<td>[ty] (you) → [tu]</td>
<td>English does not have the front, rounded vowel [y]. The English speaker substitutes the [u] sound.</td>
</tr>
<tr>
<td>Quebec French</td>
<td>English</td>
<td>Over dere.</td>
<td>The [ ] sound is replaced by [d].</td>
</tr>
<tr>
<td>European French</td>
<td>English</td>
<td>Over zere.</td>
<td>The [ ] sound is replaced by [z].</td>
</tr>
<tr>
<td>English</td>
<td>Spanish</td>
<td>[para] ‘for’ → [para]</td>
<td>As English does not have the tapped [ ] as an allophone of /r/, [ ] is substituted.</td>
</tr>
</tbody>
</table>

Table 2: More Phonological Transfer

The Role of the Second Language

The first language is not the only influence on the interlanguage grammar, since some properties of the IL can be traced to aspects of the L2. In the case of a German speaker who is learning English, for example, the IL grammar will contain some features of both German and English. Consider how a German speaker learning Canadian English might pronounce the word *eyes*.

<table>
<thead>
<tr>
<th>Target Form</th>
<th>Result of Final Obstruent Devoicing</th>
<th>Result of Canadian Vowel Raising</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ajz/</td>
<td>[ajs]</td>
<td>[ js]</td>
</tr>
</tbody>
</table>

Table 3: One Possible Pronunciation of the English Word *eyes* by a German-speaking Learner

Here, the learner first applies the rule of Syllable Final Obstruent Devoicing (transferred from German), changing /ajz/ to [ajs]. But the learner also has acquired some knowledge of the target language – in this case, the rule of Canadian Vowel Raising, which states that [aj] becomes [ ] before a voiceless consonant in the same syllable. Thanks to application of the Syllable Final Obstruent Devoicing Rule, the input form now ends in a voiceless consonant ([s]) which triggers Canadian Raising. This example serves to show us something about the nature of an interlanguage: it contains features of both the L1 and the L2.

The Nature of an Interlanguage

The dual nature of IL grammars is captured in the Developmental Model of SLA. According to this model, there are two types of error in an IL grammar: transfer errors and developmental errors. As we have seen, the former type of error reflects transfer from the L1. In contrast, developmental errors involve the same sort of mistakes that children make in acquiring their L1. For example, children learning English as a first language sometimes produce forms like *goed* and *breaked*, apparently overgeneralizing the

• What questions and thoughts do you have about the reading? Write them down for class discussion. 10
What questions and thoughts do you have about the reading? Write them down for class discussion.

A similar developmental error is observed in second language learners, who also **overgeneralize** rules as they acquire a grammar.

It is possible that the processes of transfer and overgeneralization in L2 learning are the result of a single **cognitive strategy** that could be informally stated as "use what you know" or "go with what you have". This predicts that the kind of errors made by second language learners will be dependent on their level of **proficiency**. Beginning learners may have nothing to draw on but their L1. More advanced learners, however, have acquired a certain amount of knowledge about the L2 and this knowledge becomes a potential source of errors. This is illustrated in Table 4.

<table>
<thead>
<tr>
<th>Level of proficiency</th>
<th>Transfer errors</th>
<th>Developmental errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>High</td>
<td>low</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Medium</td>
<td>high</td>
</tr>
<tr>
<td>Advanced</td>
<td>Low</td>
<td>low</td>
</tr>
</tbody>
</table>

Table 4: Error Patterns in L2 Acquisition

The predictions of the Developmental Model are illustrated in Figure 3. The number of transfer errors should decrease over time, whereas the number of developmental errors should be small initially but then should increase before finally decreasing.

![Graph](image)

**Figure 3: Error Patterns Predicted by the Ontogeny Model**

The IL grammar, then, is influenced by both the L1 and the L2, though the proportion of influence is dependent on the learner's level of overall proficiency. Note that advanced learners have low numbers of both transfer and developmental errors. Not all learners, however, reach this advanced stage. It is common in second language acquisition for learners to reach a plateau in their development. For example, even after many years of exposure to English, a second language learner may still produce sentences like 'I don't know what should I do' (meaning 'I don't know what I should do') in spite of hearing the grammatical version from native speakers and perhaps being corrected. When the interlanguage grammar stops changing, it is said to have fossilized.

Second language learners can exhibit **nonnativelike** characteristics in any linguistic domain, as can be seen in Table 5.

* What questions and thoughts do you have about the reading? Write them down for class discussion.
<table>
<thead>
<tr>
<th>L1</th>
<th>Example</th>
<th>Error Type</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>My wife is embarrassed. (meaning 'pregnant')</td>
<td>lexical</td>
<td>Spanish embarasada = 'pregnant'</td>
</tr>
<tr>
<td>Various</td>
<td>I live in a two bedroom department.</td>
<td>lexical</td>
<td>Sometimes the wrong word can be chosen.</td>
</tr>
<tr>
<td>Various</td>
<td>I didn't took the car.</td>
<td>morphological</td>
<td>English does not mark the past tense on both auxiliary and main verbs.</td>
</tr>
<tr>
<td>Various</td>
<td>She get ups late.</td>
<td>morphological</td>
<td>The speaker adds the agreement marker to the particle not the verb.</td>
</tr>
<tr>
<td>French</td>
<td>He drinks frequently beer.</td>
<td>syntactic</td>
<td>French places the verb before the adverb.</td>
</tr>
<tr>
<td>Various (e.g., Turkish, Arabic)</td>
<td>There's the man that I saw him.</td>
<td>Syntactic</td>
<td>Some languages allow pronouns in this position in a relative clause.</td>
</tr>
</tbody>
</table>

Table 5: Types of Errors Found in the Acquisition of English

**Questions and notes:**

- What questions and thoughts do you have about the reading? Write them down for class discussion.
2. L1 and L2 Acquisition Differences

As you read, answer the following questions:

• Is L2 acquisition the same as L1 acquisition?
• What is the fundamental difference hypothesis? Why is it controversial?
• What are some similarities between L1 and L2 acquisition?
• What are some differences between L1 and L2 acquisition?
• Are any of these similarities and differences evident in your own language acquisition process?

Key concepts –

L1ers  nativelike  syntactic  rule-governed  L2 acquisition  universal grammar (UG)
L2ers  bilinguals  fossilize  morphological  IL grammars  fundamental difference hypothesis
accent  errors

Source –


Second Language Acquisition

In contrast to bilinguals, many people are introduced to a L2 after they have achieved native competence in a L1. If you have had the experience of trying to master a L2 as an adult, no doubt you found it to be a challenge quite unlike your L1 experience.

Is L2 Acquisition the Same as L1 Acquisition?

With some exceptions, adults do not simply “pick up” a L2. It usually requires conscious attention, if not intense study and memorization, to become proficient in a L2. Again, with the exception of some remarkable individuals, adult L2 learners (L2ers) do not often achieve nativelike grammatical competence in the L2, especially with respect to pronunciation. They generally have an accent and they may make syntactic or morphological errors that are unlike the errors of children acquiring their L1 (L1ers). For example, L2ers often make word order errors, especially early in their development, as well as morphological errors in grammatical gender and case. L2 errors may fossilize so that no amount of teaching or correction can undo them.

Unlike L1 acquisition, which is uniformly successful across children and languages, adults vary considerably in their ability to acquire a L2 completely. Some people are very talented language learners. Others are hopeless. Most people fall somewhere in the middle. Success may depend on a range of factors, including age, talent, motivation, and whether you are in the country where the language is spoken or sitting in a classroom five mornings a week with no further contact with native speakers. For all these reasons, many people, including many linguists who study L2 acquisition, believe that L2 acquisition is something different from L1 acquisition. This hypothesis is referred to as the fundamental difference hypothesis of L2 acquisition.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 13
In certain important respects, however, L2 acquisition is like L1 acquisition. Like L1ers, L2ers do not acquire their L2 overnight; they go through stages. Like L1ers, L2ers construct grammars. These grammars reflect their competence in the L2 at each stage and so their language at any particular point, though not nativelike, is rule-governed and not haphazard. The intermediate grammars that L2ers create on their way to the target have been called interlanguage (IL) grammars.

Unlike children acquiring their L1, L2ers often do not reach the target. Proponents of the fundamental difference hypothesis believe that L2ers construct grammars according to different principles than those used in L1 acquisition, principles that are not specifically designed for language acquisition, but for the problem-solving skills used for tasks like playing chess or learning math. According to this view, L1ers have specifically linguistic principles of universal grammar (UG) to help them, but adult L2ers do not. In response to this position, others have noted that adults are superior to children in solving all sorts of nonlinguistic problems. If they were using these problem-solving skills to learn their L2, shouldn't they be uniformly more successful than they are?

Many L2 acquisition researchers reject the idea that L2 acquisition is fundamentally different from L1 acquisition. They point to various studies that show that IL grammars do not generally violate principles of UG, which makes the process seem more similar to L1 acquisition. These researchers also note that although L2ers may fall short of L1ers in terms of their final grammar, they may acquire rules in the same way as L1ers.

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion. 14
3. Interlanguage Phonology

As you read, answer the following:

• How do segmental and prosodic phonology differ?
• Why is markedness an important concept for L2 phonology?
• Why is research into the study of language universals important for L2 phonology?
• How are prosodic features (segmentalization, syllabification, stress assignment, intonation, rhythm, connected speech, and voice quality) evident in your L2 phonological system?

Key concepts –

<table>
<thead>
<tr>
<th>phonology</th>
<th>syllabification</th>
<th>language typology</th>
<th>prosodic phonology</th>
<th>nonnative stress pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>accented</td>
<td>unidirectional</td>
<td>stress assignment</td>
<td>phonological transfer</td>
<td>hierarchical structure</td>
</tr>
<tr>
<td>proficiency</td>
<td>native language</td>
<td>segmental inventory</td>
<td>segmental phonology</td>
<td>second language learner</td>
</tr>
<tr>
<td>unmarked</td>
<td>marked</td>
<td>phonological system</td>
<td>penultimate syllable</td>
<td>implicational universals</td>
</tr>
<tr>
<td>marked</td>
<td>phonetic transfer</td>
<td></td>
<td></td>
<td>Markedness Differential Hypothesis</td>
</tr>
</tbody>
</table>

Sources –


Interlanguage Phonology

The research in phonology that was driven by the IL hypothesis centered on the developmental nature of the learner’s IL and on investigating the universality of phonological acquisition patterns across age and language groups. Research on IL phonology in the 1980s had several focuses, which included: 1) models of phonological development, 2) theories of IL phonology, 3) acquisition of syllable structure, 4) acquisition of suprasegmentals, and 5) the varying phonological production of learners in different situations.

Language Universals

Language universals are those properties (i.e., categories and rules) that nearly all human languages have in common. The theory of language universals is intended primarily to explain L1 acquisition: universal properties of language are assumed to be innate, which frees the child from having to discover these peculiar properties in the particular language to which he or she is exposed. Not surprisingly, researchers in L2 acquisition have also been interested in language universals.

Rather than assume that languages can differ from each other unpredictably and without limit, the linguists who study language universals assume that all languages share common properties and that their surface differences might actually be quite unimportant.

The quest for language universals has taken two different paths:

• What questions and thoughts do you have about the reading? Write them down for class discussion.
1. Chomsky's (1986) model of “universal grammar” (UG) with its principles (given elements) and parameters (permitted variations), as well as Chomsky's arguments for positing an innate language acquisition device in all humans (within the brain)

2. Greenberg's (1962) typological or implicational language universals, which examine aspects of language that are common to many, and sometimes all, languages

In terms of phonology, both versions of the universal hypothesis start from the observation that given all the vocal sounds that humans could possibly produce, the languages of the world draw on a remarkably small selection of sounds and share remarkably similar structures and principles that explain how natural languages are spoken. For example, all languages have vowel sounds and consonant sounds, and within these categories there are sounds that contrast with each other in predictable ways.

Parallel to these universals about the sound systems of languages, there are related principles of phonological acquisition that predict, for example, that sound A is acquired before sound B. The most influential work regarding language universals in the study of phonological acquisition has been that of Jakobson (1941). Given Jakobson's implicational hierarchy:

\[
\text{Stops} \rightarrow \text{Nasals} \rightarrow \text{Fricatives}
\]

we can predict that a language with fricatives will also have nasals and stops (but not necessarily vice versa). Likewise, a language with nasals will also have stops (but not necessarily vice versa).

Macken and Ferguson (1987) use Jakobson's hierarchy to state universals of phonological acquisition implied by the hierarchy:

- Stops are acquired before nasals.
- Nasals are acquired before fricatives.

They note that substitutions made in the early stages of acquisition can also be predicted:

- Fricatives will be replaced by stops.

These are but a few of the linguistic features explainable by the universal hypothesis.

**Markedness Theory**

One question that has received a lot of attention in SLA research is whether some sounds are harder to acquire in a second language than others. Perhaps some sounds are simpler than others, or perhaps some sound systems are easier for speakers of a certain language to acquire. Would it be easier for a Japanese speaker to acquire English or Vietnamese? As might be expected, these are not simple issues. We cannot talk about the ease or difficulty of entire languages, but we may have something to say about individual sounds.

When linguists try to deal with the notions of ease or simplicity, they make use of the notion of markedness. Structures that are simple and / or especially common in human language are said to be unmarked, while structures that are complex or less common are said to be marked. The concept of markedness follows naturally from the concept of universals. Structures that are consistent with universals are considered unmarked, and those that are inconsistent with universals are considered marked. Marked structures are thought to be more difficult to acquire than are unmarked structures.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 16
Markedness can be viewed in an implicational sense: since voiced stops imply the presence of voiceless stops, but not vice versa, voiced stops are considered marked and voiceless stops are considered unmarked. Markedness may also be viewed in a statistical sense: property X is more marked than property Y if X is rarer than Y. Under this definition, the interdental fricative /θ/ is more marked than the alveolar fricative /s/, since /θ/ occurs in fewer of the world’s languages.

Markedness is commonly approached from the perspective of language typology, which is concerned with the comparative study of languages. Language researchers have discovered certain implicational universals of the form “if a language has x, it will also have y”. For example, if a language has nasal vowels (e.g., [a]), then it will also have oral vowels (e.g., [a]). Significant to the understanding of implicational universals is the fact that the implication is unidirectional. Thus a language that has oral vowels does not necessarily have nasal vowels. This allows us to identify [a] as less marked than [a], in accordance with the following generalization.

1) X is more marked than y if the presence of x implies the presence of y, but not vice versa.

It is interesting to ask whether IL grammars obey such implicational universals and whether this can tell us something about the question of ease and difficulty of learning.

The Markedness Differential Hypothesis investigates second language acquisition in terms of typological universals by comparing the relative markedness of structures in the L1 and the L2. Take the example of Syllable Final Obstruent Devoicing in German, which explains why a word like hund ‘dog’ is pronounced with a [t] at the end. German speakers learning English typically transfer Syllable Final Obstruent Devoicing into their IL (producing [hæt] for [hæd] ‘had’) and must learn to make the contrast between [t] and [d] at the ends of words. We might be tempted to think that the principle underlying this phenomenon is something like “it’s hard to learn to make contrasts that your L1 doesn’t make”. But when we look at another set of data we see that this is not the case.

French makes a contrast between [ ] and [ ] in places where English does not, as Table 7 indicates.

<table>
<thead>
<tr>
<th>English [ ] / [ ]</th>
<th>French [ ] / [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>sure [ ] / * [ ]</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>leash ([ ] ) /liege ([ ] )</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: The [ ] and [ ] Contrast in English and French

If it were invariably difficult for L2 learners to make contrasts that are not found in their L1, we would expect English speakers to have difficulty learning to produce [ ] at the beginning of words. But they

• What questions and thoughts do you have about the reading? Write them down for class discussion. 17
don't. English speakers seem able to learn to pronounce French words like *jaune* 'yellow' and *jeudi* 'Thursday' without trouble.

The notion of markedness can be used to explain why German speakers have difficulty making a new contrast in English, while English speakers don't have difficulty making a new contrast in French. The typological situation is as follows:

- There are languages that have a voicing contrast initially, medially, and finally (e.g., English).
- There are languages that have a voicing contrast initially, and medially, but not finally (e.g., German).
- There are languages that have a voicing contrast initially, but not medially or finally (e.g., Sardinian).

These generalizations allow us to formulate the following implicational universal.

2) The presence of a voicing contrast in final position implies the presence of a voicing contrast in medial position, which in turn implies the presence of a voicing contrast in initial position.

We can represent this universal graphically as follows:

3) initial < medial < final

C B A

The presence of A implies the presence of B (but not vice versa), and the presence of B implies the presence of C (but not vice versa). Therefore A is the most marked and C is the least marked. This markedness differential explains the degrees of difficulty exhibited by the German and English L2ers. The German speakers learning English are attempting to acquire a contrast in a universally more marked position (final), whereas the English speakers learning French are attempting to acquire a contrast in a universally unmarked position (initial).

*L2 Phonology*

Let us consider what is to be acquired in the domain of phonology. Broadly speaking, we can distinguish between segmental and prosodic phonology. **Segmental phonology** has to do with the characteristics of phonological segments, like consonants and vowels. **Prosodic phonology**, on the other hand, has to do with phonological phenomena that affect more than a single segment (e.g., syllables and stress).

*Segmental Phonology*

Languages vary in terms of the sounds in their **segmental inventory**. There is thus a good chance that an L2er will have to learn to produce and perceive some new sound when acquiring the L2.

One of the most obvious characteristics of adult L2 speech is that it is ‘accented’ as the result of **phonological** and **phonetic transfer** from the native language. This is why native speakers of English can usually distinguish French-accented English from German-accented English. Consider the following examples.

• What questions and thoughts do you have about the reading? Write them down for class discussion.
Table 6: French- and German-accented English

As both French and German lack the interdental fricative [ ], native speakers of those languages substitute a sound from their L1 where English has that sound. Generally, the learners substitute a sound that shares some features with the target sound. In the example in Table 6, the French speaker substituted a voiced alveolar (coronal) stop, while the German speaker substituted a voiced alveolar (coronal) fricative for the English voiced, interdental (coronal) fricative. Particularly at a beginning level of proficiency, L1ers pronounce words using their L1 phonological system.

A similar phenomenon can be seen in the phonology of loanwords. When a language borrows a word from another language, it makes the word fit into its own phonological system. For example, when English borrowed the word pterodactyl from Greek, it reduced the onset cluster [ pt ], which is well-formed in Greek but not in English. However, no such change was made in the word helicopter (also from Greek) since it already complied with the phonological pattern of English.

Prosodic Phonology

In addition to the segmental inventory L2ers also have to acquire the prosodic phonology of the TL. For example, they have to acquire the principles of syllabification, stress assignment, intonation, rhythm, connected speech, and voice quality. We will now briefly look at each in turn.

Syllabification.

All human languages contain syllables have the hierarchical structure in Figure 4.

```
Syllable
 /     \
Onset  Rhyme
       /     \
Nucleus Coda
```

Figure 4: The internal structure of the syllable

The languages of the world vary in terms of whether syllabic nodes can branch. Some languages (e.g., Japanese) do not allow branching onsets or codas. Ignoring some complexities, let us assume that all syllables in such languages must be CV or CVC. More complex syllables such as CCVCC are not allowed. A common phenomenon in second language learning involves modifying an L2 word so that it fits the L1 syllable structure. Consider the following words spoken by someone whose L1 is Arabic:

<table>
<thead>
<tr>
<th>English target</th>
<th>Nonnative speaker's version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant</td>
<td>pilanti</td>
</tr>
<tr>
<td>Fred</td>
<td>Fired</td>
</tr>
<tr>
<td>Translate</td>
<td>tiransilet</td>
</tr>
</tbody>
</table>

• What questions and thoughts do you have about the reading? Write them down for class discussion. 19
Arabic does not allow branching onsets or codas, so an English word like *plant* cannot be mapped onto a single Arabic syllable. A characteristic of Arabic is that illicit consonant clusters are broken up by an epenthetic [i].

With this in mind let us look at the steps that an Arabic speaker would go through in syllabifying 'plant'.

**VIEW CLASS HANDOUT**

As this example shows, we can explain why Arabic speakers pronounce English words in the way that they do by investigating the principles of syllabification in the L1. Especially at the beginning levels of proficiency the structure of the IL is influenced by the structure of the L1.

**Stress assignment.**

L2ers also have to acquire the stress patterns of the language they are trying to learn. Consider an example from Polish. Polish is a language in which word-level stress is assigned to the next-to-last syllable (regardless of syllable weight). Such principles transfer and result in one of the characteristics of a Polish accent in English: the tendency to place stress on the penultimate syllable regardless of syllable weight. In English heavy syllables tend to attract stress (e.g., *aroma*, *agenda*). The following examples illustrate a nonnative stress pattern in which the second to last syllable is always stressed.

<table>
<thead>
<tr>
<th>English target</th>
<th>Nonnative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>astonish</td>
<td>astonish</td>
</tr>
<tr>
<td>maintain</td>
<td>maintain</td>
</tr>
<tr>
<td>cabinet</td>
<td>cabiñet</td>
</tr>
</tbody>
</table>

**Intonation.**

One of the pioneering studies in the acquisition of American English intonation (Backmann 1977) used two Spanish-speaking male consultants and one native male speaker of American English as a control. Backmann demonstrated that with increased residence in the United States and better language proficiency, the more advanced Spanish speaker had modified the flatter two-tone intonation contours characteristic of his native Spanish such that his intonation in English better approximated the more highly differentiated three-tone contours typical of the American English speaker. The newly arrived Spanish speaker - with minor modifications - transferred his flatter Spanish intonation to English.

More recently Todaka (1990) compared available instrumental data on the intonation contours typical of similar utterance types in NAE and Japanese and then acoustically measured the English intonation produced by twenty Japanese speakers (ten male, ten female) studying in the United States. Todaka found that the Japanese speakers – like Backmann's Spanish speakers – erred in the direction of transferring their first-language intonation patterns to English. The Japanese speakers did this in two ways: (1) by not utilizing a broad enough pitch range in their English and (2) by not sufficiently stressing

• What questions and thoughts do you have about the reading? Write them down for class discussion. 20
and lengthening prominent stressed syllables carrying pitch changes. This difference can be illustrated as follows:

NAE speaker

This is a book.

Japanese speaker

Todaka suggests that by using a "hyper-pronunciation" training method (i.e., one that initially exaggerates pitch contours and the duration of stressed syllables in English), Japanese speakers can be taught to broaden their range of pitch and to give prominent stressed syllables the longer duration that English requires to carry the broader, more dramatic pitch changes characteristic of its intonation.

Rhythm.

As Todaka's (1990) study indicated, accurate intonation is dependent on accurate rhythm. Further interesting research has been done in this area. In one study, Chela Flores (1993) claims that rhythm, in particular the appropriate lengthening of stressed syllables and shortening of unstressed syllables in English, is the most widely experienced pronunciation challenge for speakers of other languages. After experimenting with different approaches for teaching English rhythm to Spanish speakers, Chela Flores reported that teaching typical English rhythm patterns first in isolation from lexical items or phrases, then by matching patterns to items or phrases, and finally by imposing the patterns on words, phrases, and sentences, her Spanish speakers were able to make great strides toward producing better English rhythm – especially under controlled production conditions. She concluded that extended practice would be needed for the learners to automatize these new rhythmic patterns.

Connected speech.

The ability to produce appropriately connected speech is another promising area of research involving suprasegmentals. In a study comparing the connected speech modifications of Japanese ESL learners (five intermediate and five high proficiency) with those of five American English native speakers, Anderson (1994) examined the effects of language proficiency, native language transfer, and style shifting on speaker performance. The researcher used a sentence-reading task and also elicited more spontaneous speech to investigate speaker performance in four areas: (1) alveolar flapping (in words like letter); (2) intersyllabic linking (C-C, C-V, V-V), where C equals any consonant and V equals any vowel; (3) vowel reduction in unstressed syllables; and (4) consonant cluster simplification.

For alveolar flapping, overall linking, and consonant cluster simplification there was a significant difference between the intermediate group members (who did not employ these connecting forms appropriately) and the high-proficiency group members (who approximated the performance of native speakers fairly closely). Those areas where the performance of both the intermediate and high-proficiency Japanese speakers differed significantly from that of the native English speakers all involved vowels: C-V linking, V-V linking, and vowel reduction, a tendency due in part to native language transfer.

Finally, Anderson found that all three groups produced more linking and deletion on the elicited narrative task than on the sentence reading task; however, both groups of Japanese ESL learners
exhibited fewer modifications on this task than the native speakers, who often omitted weak syllables and did rather radical restructuring of underlying phonological forms. The researcher concluded that language proficiency, native language, and style shifting are indeed factors that influence the connected speech of Japanese ESL learners.

**Voice quality.**

In addition to its vowel and consonant inventory and its characteristic stress and pitch patterns, every language has certain audible characteristics that are present most of the time when native speakers talk. This phenomenon is referred to as voice quality. Laver (1980) describes three types of voice quality settings: supralaryngeal settings (i.e., settings above the larynx that involve phenomena such as tongue position, lip rounding or spreading, presence or absence of nasality, etc.), laryngeal settings or phonation types (i.e., whether the voice can be characterized as whispery, creaky, modal/neutral, or falsetto), and overall muscular tension. He compared pitch and loudness among groups of Spanish, American English, and Japanese speakers and found that the Spanish and Japanese groups spoke with higher pitch and lower volume than did the Americans.

To control for anatomical differences among speakers, which had not been done in earlier studies, Todaka (1993) used a screening test to identify four bilingual speakers (two male, two female) of Japanese and English. Utilizing a variety of physiological and acoustic techniques, he found that both the male and female bilinguals spoke with higher pitch when speaking Japanese than when speaking English. He also found that the two female bilinguals spoke with a breathier voice in Japanese than in English but that the males did not. Todaka attributed both types of voice quality differences to the interaction of language-specific and sociocultural factors.

**Summary**

We have certainly come a long way from the oversimplified view that a learner's L1 background entirely dictates the SLA process. We have also arrived at a much more enlightened view concerning the role of the individual in this process, recognizing that extralinguistic factors also play a very large role in determining the sequence.

Current consensus regarding the acquisition of L2 phonology can perhaps best be summed up as follows:

1. Native language transfer plays a role in a learner's acquisition of the sounds of the L2, but it is only one piece of the puzzle.
2. The extent of influence that negative transfer exerts may differ from learner to learner, and may also vary depending on the type of phonetic structure (e.g., segmental or suprasegmental contrast) being acquired.
3. There are some aspects of IL phonology that parallel the L1 acquisition of children, indicating the partly developmental and partly universal nature of phonological acquisition.
4. There is variation in performance accuracy among learners, depending on whether they are conversing in more formal (i.e., control-facilitating) or informal (i.e., automaticity-facilitating) registers.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 22
To these observations we believe we can add the following, based on our research survey:

5. Whether discussed in terms of a critical period, a sensitive period, or some other label, the learner's age is a factor in phonological acquisition. Other things being equal, the earlier the learner's exposure to native speakers of the TL, the better the acquisition of phonology; the younger the adult learner, the more his or her pronunciation can be improved.

6. For the overwhelming majority of postpubescent adolescents and adults, a readily intelligible - rather than a nativelike - pronunciation is a more realistic pedagogical goal.

7. Whether we appeal to aptitude (phonemic coding ability), psychomotor skills, or other factors, it appears that acquiring phonology is qualitatively different from acquiring syntax and lexicon. Thus we have young immigrant learners of English who master pronunciation yet have serious gaps in grammar and lexicon. Conversely, there are adults who more or less master English syntax and lexicon yet who have obvious problems with pronunciation.

8. Quite apart from age, aptitude, or first language, the learner's attitude, motivation, language ego, and other sociocultural and sociopsychological factors clearly influence the degree of pronunciation proficiency achieved (or not achieved).

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion.
4. Interlanguage Morphology

As you read, answer the following questions:

• What was the overall purpose of the morpheme studies?
• Write some examples of different morphemes…
  1) correctly supplied in an obligatory context, 2) supplied but not well formed, [and] 3) omitted altogether”.
• What are possible morphemes that were included in the “morpheme acquisition order” results? Generate a list of possible morphemes.
• Using Krashen’s “Natural Order” for ESL morphemes, at which stage would you be placed?
• What are the differences between L1 and L2 developmental sequences?
• Why are the various figures provide in the selection? What are their relationships to the text?
• Using the “Developmental order for SLA” table, which of the nine morphemes listed have you acquired?

Key concepts –

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Copula be</th>
<th>L1 development</th>
<th>Hierarchical structure</th>
<th>Bilingual Syntax Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphemes</td>
<td>Auxiliary be</td>
<td>L2 syntax</td>
<td>Phrasal morphology</td>
<td>Inflectional morphology</td>
</tr>
<tr>
<td>Complexity</td>
<td>L2 morphology</td>
<td>L2 phonology</td>
<td>Interphrasal morphology</td>
<td>Complex verb phrase</td>
</tr>
<tr>
<td>L2 learners</td>
<td>L2 morphology</td>
<td>L2 phonology</td>
<td>Obligatory context</td>
<td>Developmental sequence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Morpheme acquisition order</th>
</tr>
</thead>
</table>

Sources –


L2 Morphology

The study of **L2 morphology** has a slightly different flavor than the study of either **L2 phonology** or syntax. L2 phonology has been studied for a long time, though the analyses have changed to reflect changes in linguistic theory. **L2 syntax** is a much younger field, and much of it has been influenced by current linguistic theory. By contrast, L2 morphology has been studied without any firm theoretical foundation.

**Morpheme studies**

In the 1970s, a number of studies collected data on the accuracy of **L2 learners** on a variety of morphemes. In the most influential study, Steven Krashen argued that there is a natural order of acquisition; in other words, he claimed that all learners, regardless of their L1, progress through the same stages of L2 development and in the same order (see Figure 4). This “natural order hypothesis” was based on a series of studies known as the **morpheme acquisition order** studies.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 24
Another strand of L2 morphology research drew on previous studies of L1 acquisition that had attempted to determine the order of acquisition of morphemes in **L1 development**. Adopting methodology from Brown’s (1973) study of L1 acquisition (see Table 8), Dulay and Burt (1973, 1974) sought to determine whether there was a similar order of acquisition for L2 learners of English. In their 1974 study, for example, they investigated whether children from different L1 backgrounds (Chinese and Spanish) acquired eleven different English morphemes in a similar order. The researchers used the Bilingual Syntax Measure to gather the data, eliciting samples of children’s natural L2 speech by showing them pictures (see Box 1) and asking a series of questions (e.g., *What is the man doing?*). The questions were constructed to require certain morphemes; for example, the morpheme –*ing* would be obligatory to answer the previous question since a sentence such as *The man is think* is ungrammatical.

Dulay and Burt reasoned that there was a correspondence between how accurately a morpheme was used and how early it was acquired. The researchers assigned different point values to the data, depending upon whether a morpheme was 1) correctly supplied in an **obligatory context**, 2) supplied but not well formed, or 3) omitted altogether. Based on this research, the following **L2 developmental sequence** for morphemes was found, as shown in Table 9.

![Figure 4: Krashen’s (1977) ‘Natural Order’ for ESL](image)

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ING</td>
<td>Auxiliary</td>
<td>Irregular Past</td>
<td>Regular Past</td>
</tr>
<tr>
<td>Plural</td>
<td>Copula</td>
<td>Past</td>
<td>3rd Singular</td>
</tr>
<tr>
<td>Copula</td>
<td></td>
<td></td>
<td>Possessive</td>
</tr>
</tbody>
</table>

- **Box 1: Data Elicitation Picture**

- **What questions and thoughts do you have about the reading? Write them down for class discussion.** 25
1. –*ing* the present participle affix (e.g., she is *working*)
2. Plural –*s* (e.g., bottles)
3. Irregular past (e.g., she *taught* French)
4. Possessive –*s* (e.g., a child’s toy)
5. Copula *be* (e.g., I am happy)
6. Articles (e.g., *a*, *the*)
7. Regular past (e.g., she walked *quickly*)
8. Third person –*s* (e.g., she walks quickly)
9. Auxiliary *be* (e.g., She is working)

<table>
<thead>
<tr>
<th>Table 8: Developmental Order for L1 Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. –<em>ing</em> the present participle affix (e.g., she is <em>working</em>)</td>
</tr>
<tr>
<td>2. Plural –<em>s</em> (e.g., bottles)</td>
</tr>
<tr>
<td>3. Irregular past (e.g., she <em>taught</em> French)</td>
</tr>
<tr>
<td>4. Possessive –<em>s</em> (e.g., a child’s toy)</td>
</tr>
<tr>
<td>5. Copula <em>be</em> (e.g., I am happy)</td>
</tr>
<tr>
<td>6. Articles (e.g., <em>a</em>, <em>the</em>)</td>
</tr>
<tr>
<td>7. Regular past (e.g., she walked <em>quickly</em>)</td>
</tr>
<tr>
<td>8. Third person –<em>s</em> (e.g., she walks quickly)</td>
</tr>
<tr>
<td>9. Auxiliary <em>be</em> (e.g., She is working)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 9: Developmental Order for L2 Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. –<em>ing</em></td>
</tr>
<tr>
<td>2. Copula <em>be</em></td>
</tr>
<tr>
<td>3. Articles</td>
</tr>
<tr>
<td>4. Auxiliary <em>be</em></td>
</tr>
<tr>
<td>5. Plural –<em>s</em></td>
</tr>
<tr>
<td>6. Irregular past</td>
</tr>
<tr>
<td>7. Regular past</td>
</tr>
<tr>
<td>8. Third person –<em>s</em></td>
</tr>
<tr>
<td>9. Possessive –<em>s</em></td>
</tr>
</tbody>
</table>

The research indicated similar orders of morpheme acquisition for both groups of children learning English. Since Chinese and Spanish are unrelated L1s, Dulay and Burt argued that the only way to explain the similar acquisition orders was through universal processing mechanisms. In other words, regardless of their L1 background, children would acquire the morphemes in the same sequence because of innate **universal grammar (UG)** processes.

Comparing the L1 and L2 developmental orders, there are many similarities but there are also some differences. For example, note that auxiliary and copula *be* are acquired at a relatively earlier point in L2 than in L1, and that the possessive morpheme –*s* is acquired later in L2 than in L1. To attempt to explain these patterns, we need to took a little more closely at the structures that implement **inflectional morphology**.

Children acquire *be* as a main verb before they acquire *be* as an auxiliary verb. So, children produce sentences that have only a copula verb (e.g., *He is hungry*) before they produce sentences that include an auxiliary plus a main verb (e.g., *He was working*) as shown in the trees in Figure 5.

![Figure 5: Copula Versus Auxiliary be](attachment:image.png)

- What questions and thoughts do you have about the reading? Write them down for class discussion. 26
The structure in b has an extra level of complexity in that it has a **complex verb phrase** (one VP within another). Adults, on the other hand, appear to be able to use the simple copula and auxiliary verbs quite early on. Whether this difference is because of the adult's greater ability to handle complexity in general cognitive terms or because children's linguistic systems are maturing remains a controversial and unresolved issue.

In addition, note that children acquire the three –s morphemes in the order plural, possessive, and third person in their first language. Phonetically, these morphemes have the same realization, so we can't say that the order reflects phonological complexity. The order might be explained by noting that plural is a word-level phenomenon (e.g., *dogs*), possessive is a phrase-level phenomenon (e.g., *the king of England's horse*, not *the king's of England horse*), and third person marking involves a relation between the verb and a phrase (the subject) elsewhere in the sentence (e.g., *[That man] usually thinks too much*). Like the pattern noted for the development of copula and auxiliary be, children seem to be acquiring structures in order of **complexity** as shown in Figure 6.

---

**Figure 6: Three types of /s/ affix**

In contrast, adults acquire the plural quite early, but then seem to get both the possessive and the third person marking quite late – perhaps for reasons involving processing. (When concentrating on getting the words right, we do not always have the processing capacity to produce well-formed higher-level structures.) Interestingly, the adults do not seem to find **interphrasal morphology** (like c above) more difficult than **phrasal morphology** (like b above). This may be because the adults have already acquired the grammar for their L1 and that grammar most likely has both phrase-level and interphrasal morphological phenomena. In contrast, children have to set up a **hierarchical structure** of a grammar for the first time, and could conceivably be building the structure from the bottom up (words → phrases → sentences).

In summary, we note that the order of acquisition data are intriguing in both L1 and L2 acquisition, even though we await a conclusive explanation of the facts.

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• What questions and thoughts do you have about the reading? Write them down for class discussion. 27
References

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion. 28
5. Interlanguage Syntax

As you read, answer the following questions:

- What is the Null Subject Parameter? Does your first language permit the null subject?
- What is the Verb Movement Parameter? Does your first language allow verb movement?
- What is the Subset Principle?
- How do negative and positive evidence affect acquisition?
- Can you think of an example of positive evidence that you have noticed in English?
- Can you think of an example of negative evidence that you have noticed (indirect) in English?

**Key concepts –**

<table>
<thead>
<tr>
<th>markedness</th>
<th>Subset Principle</th>
<th>negative evidence</th>
<th>indirect negative evidence</th>
<th>Null Subject Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>grammaticality</td>
<td>verb movement</td>
<td>syntactic structure</td>
<td>direct negative evidence</td>
<td>Verb Movement Parameter</td>
</tr>
<tr>
<td>null subjects</td>
<td>positive evidence</td>
<td>ungrammatical</td>
<td>grammatical utterances</td>
<td>overt grammatical subjects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>typological</td>
<td>Markedness Differential</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>universals</td>
<td>Hypothesis</td>
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</tbody>
</table>

**Source –**


**L2 Syntax**

L2 learners also have to acquire the syntax of their new language. In this section, we will look at two facets of *syntactic structure*: **null subjects** and **verb movement**.

**Null Subjects**

As we saw previously, Universal Grammar (UG) includes universal principles (that account for what all natural languages have in common), as well as parameters (that account for cross-linguistic variation). Parameters are like linguistic switches (often binary) that can be set to a particular value as a result of the linguistic input. One of the first parameters to be discussed in the generative literature was the Null Subject (or pronoun-drop) Parameter. Essentially, this parameter is designed to account for the contrast between languages like French and English, which require **overt grammatical subjects** (e.g., *He speaks French / *Speaks French*), and languages like Spanish and Italian, which allow subjects to be omitted (e.g., Spanish *El habla espanol / Habla espanol* ‘[S/he] speaks Spanish’).

1) The Null Subject Parameter:

   The subject of a finite clause (may/may not) be null.

   Languages that allow null subjects tend to have other grammatical traits associated with them. For one, they tend to allow declarative sentences with the word order Verb + Subject as well as Subject + Verb, as in the following examples from Spanish.

   • What questions and thoughts do you have about the reading? Write them down for class discussion. 29
2)  
   a. Juan llego.  
      John arrived.  
   b. Llego Juan.  
      arrived John.

Secondly, they tend to allow sentences like the following, in which a complementizer (CP) (here que ‘that’) is immediately followed by the trace (t) of a moved Wh word.

3)  
   Quien dijo usted que t llego?  
   who said you that arrived?  
   ‘Who did you say arrived?’

As the following example shows, such sentences are unacceptable in Standard English.

4)  
   *Who did you say [CP that [s t arrived]]?  
   (deep structure = you did say that who arrived)

In other words, languages like English ([–null subject]) do not allow that-trace sequences, whereas languages like Spanish ([+null subject]) do.

Studies on L2 learners of English show that Spanish speakers are more likely to judge subjectless English sentences to be grammatical than are French speakers. This is consistent with the assumption that L1 parameter settings are transferred into the IL grammar at least in the early stages. Learning a second language can be seen as involving the resetting of parameters that have different values in the L1 and the L2.

When Spanish subjects are given a task that requires them to change a declarative sentence into a question, they are more likely to produce a sentence that contains a that-trace sequence than are French subjects. For example, if Spanish subjects are given a sentence like

   [Joshua believed that his father would be late]

and have to form a question asking about the underlined element, they are more likely than French subjects to produce a sentence like

   [Who did Joshua believe that t would be late?]

This points toward the possibility that the admissibility of null subjects and the acceptability of that-trace sequences are somehow both related to the Null Subject Parameter (i.e., speakers of null subject languages are more likely to permit that-trace sequences).

There are complications, however. Remember that the study just described had the Spanish and French speakers form new sentences. Another study had both French and Spanish subjects judge the grammaticality of English sentences with a that-trace violation. Both groups were quite able to reject those sentences as ungrammatical. For some reason, there is a stronger L1 influence when learners have to form new sentences themselves.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 30
Verb Movement

One difference between French and English involves the setting of the Verb Movement Parameter.

5) The Verb Movement Parameter:
V [raises / does not raise] to Infl

Simplifying slightly, let us say that English does not allow verb movement but French does. Thus, in French the verb raises to Infl past a preverbal adverb, but in English it does not. This difference can be seen in the following sentences, in which movement of the verb over the adverb separating it from the Infl position gives a bad result in English but a good result in French.

6) a. *Marie watches often television.
   b. Marie regarde souvent la television.

Studies have shown that French speakers learning English initially assume that English allows verb raising. In order to learn English they have to reset the value of their verb raising parameter.

Markedness and the Subset Principle

Another interesting facet of a parameter-setting approach to SLA has to do with whether adult L2 learners can reset their parameters, and whether the notion of directionality of difficulty associated with the Markedness Differential Hypothesis can be captured in a parameter-setting model. The Null Subject Parameter can be used to address these questions. To understand how, we must first consider how a parameter-setting model instantiates the notion of markedness.

If we consider the two settings of the Null Subject Parameter (+/–), we can see that the different values generate different grammars, as shown in the following sentences from English and Spanish.

7) [–null subject]: I speak Spanish.
   [+null subject]: Yo hablo espanol.

Hablo espanol.

As you can see, the [+null subject] setting generates more grammatical utterances than the [–null subject] setting does. Therefore, the [–] setting is said to be a subset of the [+ ] setting. This is

• What questions and thoughts do you have about the reading? Write them down for class discussion.
represented graphically in Figure 8.

Figure 8: Subset / Superset Relation for the Null Subject Parameter

Parameter setting in such cases is guided by the **Subset Principle**.

8) The Subset Principle:
   The initial or default setting of a parameter will correspond to the most restrictive option (i.e., the option that permits the fewest patterns).

The Subset Principle stipulates that for first language learners, the initial or default setting will be the subset value (i.e., [–null subject]) in the case of the Null Subject Parameter.

Second language learners may have to reset their parameters. When attempting to reset from subset to superset or from superset to subset, there are different types of evidence available to the learner. Imagine a learner of English (who has the [–] setting) trying to learn Spanish. The learner's initial assumption will be the L1 parameter setting, which leads to the expectation that all sentences will have overt subjects. When faced with Spanish input, the learner will be exposed to grammatical utterances in the L2 that do not have overt subjects (e.g., *Hablo espanol* ['I speak Spanish'], which indicates that the L1 setting is incorrect and needs to be reset. Data like these, which involve grammatical utterances to which one is actually exposed, are referred to as **positive evidence**.

Now imagine a learner whose L1 is Spanish ([+]) who is trying to learn English ([–]). The learner's initial assumption will be that English should be [+null subject], like the L1. The learner's IL grammar will allow sentences with overt subjects and sentences without. There will be no positive evidence in the English input directed at this learner to show that the L1 parameter setting is wrong. The learner will hear sentences with overt subjects, which are sanctioned by the current IL grammar, but there will be no direct indication that sentences with null subjects are not allowed. There is no pressure to reset the parameter. In this case, the learner will have to rely on **negative evidence** (i.e., observations about what is missing or ungrammatical in the data) to reset the parameter. In particular, the learner would

- What questions and thoughts do you have about the reading? Write them down for class discussion.
either have to be explicitly told what is ungrammatical (direct negative evidence), or infer that it is ungrammatical based on the fact that no one else ever says it (indirect negative evidence).

Given that direct positive evidence is available in one case (English $\rightarrow$ Spanish), and negative evidence is required in the other (Spanish $\rightarrow$ English), we might predict that it is harder for Spanish speakers to learn the English value of the Null Subject Parameter than vice versa. In fact, the prediction is borne out. Studies have shown that it is easier for English speakers to reset to the Spanish value of the Null Subject Parameter, than it is for Spanish subjects to reset to the English setting.

Let us now consider how an approach based on typological universals would treat the same phenomenon. The possibility of null subjects implies the impossibility of overt subjects, but not vice versa.

9) overt subjects $<$ null subjects

Therefore, null subjects would be thought of as more marked, and consequently, more difficult to acquire. The Markedness Differential Hypothesis predicts that structures that are more marked typologically will cause difficulty in SLA because they are more marked. The Subset Principle, on the other hand, predicts that structures that are more marked will not cause difficulty because there will be clear evidence that the LI setting is wrong. Although only the Subset Principle seems to make the correct prediction in the case of the null subjects, further research is necessary in order to see which approach is better able to handle a wider range of data.

Questions and notes:

- What questions and thoughts do you have about the reading? Write them down for class discussion. 33
6. Developmental Sequences

As you read, answer the following questions:

• Why do language researchers study developmental sequences?
• What are some of the major findings of developmental sequences research?
• Do you think your own language is developing in a specific sequence?

Key concepts –

- negation
- systematic
- morpheme studies
- performance analysis
- verb phrase development
- transcripts
- target-like
- negative transfer
- post-verbal negation
- L1 developmental sequences
- utterances
- longitudinal study
- language-transfer error
- L2 developmental sequences

Source –


Developmental sequences

Another type of performance analysis conducted that some researchers found to be a more informative approach than the morpheme studies was the study of developmental sequences for grammatical structures. As Wode, Bahns, Bedley and Frank (1978, p. 176) expressed it:

[The problem] is the fact that the morpheme order approach misses what makes language acquisition attractive for, and subject to, developmental investigations, namely, to discover how language is processed by the child for the purpose of acquisition. This processing is reflected in the way that children analyze complex structural patterns and then reconstruct them step by step until they finally reach target-like mastery. Therefore, pre-targetlike structural patterns must be regarded as an essential part of the total process of acquiring a language. Studying developmental sequences, or the steps leading to acquisition of a particular structure, is intended to better understand the complete process of language acquisition.

Typically, investigation of developmental sequences has involved a longitudinal study in which the speech of one or more subjects is recorded and the transcripts are analyzed for particular structures. There have been many such studies conducted over the years, making it impossible to be comprehensive here. In this section, we will mention some of the early studies (Table 10) and the issues that emerged from them.

One of the first major discoveries was the degree of similarity between first language (L1) and second language (L2) developmental sequences. Ravem (1968, 1970) tracked the development of English negation and WH-questions in the speech of his Norwegian-speaking children. He reported finding strikingly similar developmental sequences to those of Brown and his associates, who studied the acquisition of these structures by children acquiring English as an L1. Milon (1974) confirmed Ravem’s findings. Examining the acquisition of negation in a study of a seven-year-old Japanese speaker learning
ESL, Milon reported that his subject produced negative utterances that were very much like those of children acquiring English as a native language. Likewise, Dato (1970), studying the acquisition of Spanish by L2ers who spoke English natively, discovered that L2ers follow a pattern of verb phrase development in Spanish similar to that of native Spanish speakers.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Focus of study</th>
<th>L1 and L2 developmental sequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravern (1968, 1970)</td>
<td>English negation and WH-questions by two Norwegian-speaking children</td>
<td>Similar</td>
</tr>
<tr>
<td>Dato (1970)</td>
<td>Spanish verb phrase development of six 6-year-old native English speakers</td>
<td>Similar</td>
</tr>
<tr>
<td>Milon (1974)</td>
<td>English negation by 7-year-old Japanese speaker</td>
<td>Similar</td>
</tr>
<tr>
<td>Wode (1976)</td>
<td>English negation of four German-speaking children aged 4-10</td>
<td>Different (due to the fact that children relied on their L1 when there was a 'crucial similarity' between English and German)</td>
</tr>
</tbody>
</table>

Table 10: Summary of Early Research of the Similarity Between L1 and L2 Developmental Sequences

Such claims of similarity between L1 and L2 developmental sequences were not without opposition, however. Wode (1974, reported on in 1978) studied the ESL acquisition of four German-speaking children aged four to ten. Wode disagreed with the claims of the equivalence between the L1 and L2 developmental sequences. Instead, he argued that there were differences, that the differences were systematic and that they were due to the children's relying on their L1 only under a structural condition where there was a 'crucial similarity'. For example, Wode's subjects exhibited a stage in their acquisition of the English negative in which the negative was placed after the verb:

* John go not to the school.

Such statements appear to be the result of negative transfer from German. While this is no doubt true, it is not the case that English disallows post-verbal negation. In English the verb be and auxiliary verbs are followed by the negative particle:

He isn't listening.
She can't mean that.

Thus, Wode argued, the language-transfer error arose since negative placement in English and German were similar enough in form to encourage the children's reliance on their L1.

As a result of the research on the L2 acquisition of English negation, a developmental sequence for ESL negation (Table 11) has been proposed. In stage 1, negative placement occurs only in utterance-initial position, while at stage 2, negative placement is made utterance-internally, but in the incorrect pre-verbal position for English. During stage 3, the L2er appropriately constructs utterances that combine an auxiliary verb and the negative particle. Only at stage 4, with the ability to analyze negative contractions, is the learner considered to have acquired the complete set of English negation rules.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 35
Yet another example of developmental sequences in ESL comes from research examining the second language acquisition of interrogatives (Table 12). In stage 1, interrogatives are made primarily by rising intonation, marked in the example above. At stage 2, interrogative utterances are made without inverting the auxiliary verb, which may actually be used or not (+/- is in the example above). During stage 3, the SL learner begins exhibiting the acquisition of inversion rules for interrogative but may use inversion rules in unacceptable contexts. Only at stage 4, with the ability to differentiate between obligatory and non-obligatory contexts, is the learner considered to have acquired the complete set of English interrogative rules.

Table 12: Developmental Sequences for Interrogatives in ESL

<table>
<thead>
<tr>
<th>Stage</th>
<th>Sample Utterance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rising intonation</td>
<td><em>He work today</em> (↑)?</td>
</tr>
<tr>
<td>2. Uninverted WH (+/- auxiliary)</td>
<td>What <em>he</em> <em>is</em> saying?</td>
</tr>
<tr>
<td>3. 'Overinversion'</td>
<td>Do you know where <em>is</em> it?</td>
</tr>
<tr>
<td>4. Differentiation</td>
<td>Does she like where she lives?</td>
</tr>
</tbody>
</table>

References


Questions and notes:

- What questions and thoughts do you have about the reading? Write them down for class discussion.
7. The Brain: SUP, CUP and Language Transfer

As you read, answer the following questions:

- What is SUP and CUP, and what are the differences between the two models?
- What is the linguistic interdependence hypothesis, and why is it an important concept for language development?
- Do you transfer specific language features in your brain from one language to another? If YES, what are some examples of this transfer?

Key concepts –

<table>
<thead>
<tr>
<th>transfer</th>
<th>surface features</th>
<th>cognitively demanding tasks</th>
<th>separate underlying proficiency (SUP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>proficiencies</td>
<td>language proficiency</td>
<td>linguistic interdependence hypothesis</td>
<td>common underlying proficiency (CUP)</td>
</tr>
<tr>
<td>bilingual</td>
<td></td>
<td></td>
<td>cognitive academic language proficiency (CALP)</td>
</tr>
</tbody>
</table>


SUP and CUP Models of Language Proficiency

SUP: The traditional view of the bilingual brain is conceptualized as a separate underlying proficiency or the "two balloon theory" that argues that languages, L1 and L2, are separate and independent from one another. This would imply that there is little if any transfer from one language to another. Hence, investing time in developing primary language will only retard or delay English acquisition. There is no scientific evidence to support this claim.

CUP: CUP stands for the common underlying proficiency model or the "one balloon theory" described by Jim Cummins that purports the argument that proficiencies that involve more cognitively demanding tasks (such as literacy, content learning, abstract thinking and problem-solving) are common across languages. The CUP model is represented by the "dual iceberg metaphor" and is the basis of the linguistic interdependence hypothesis.

Linguistic Interdependence Hypothesis: This hypothesis, represented as a "dual-iceberg," posits that every language contains surface features; however, underlying those surface manifestations of language are proficiencies that are common across languages. The dimension of language used in more cognitively demanding tasks that involve more complex language is cognitive academic language proficiency (CALP), which is transferable across languages.
As you read, answer the following questions:

- What are the key differences between BICS and CALP?
- How is CALP related to CUP?
- What does the author mean in the first selection by “Problems arise when teachers and administrators think that a child is proficient in a language when they demonstrate good social English”?
- Are you more comfortable with your BICS or CALP? How well developed are your BISC and CALP?
- What is the meaning of the situation provided at the beginning of the second selection? Why is it provided?
- What is the purpose of Table 13?
- Which of the activities in Table 13 can you do comfortably? Check the boxes.
- What are the key differences between ESL learners and L1 learners, as shown in Table 14?

**Key concepts –**

<table>
<thead>
<tr>
<th>cognition</th>
<th>cognitive development</th>
<th>native speaking learners</th>
<th>native language development</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL learners</td>
<td>mainstream classroom</td>
<td>native language literacy</td>
<td>basic interpersonal</td>
</tr>
<tr>
<td>context reduced</td>
<td>context embedded</td>
<td>academic language</td>
<td>acquisition</td>
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<td>English language learners</td>
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<td>(ELLs)</td>
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<td></td>
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<td>routine communicative</td>
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<td></td>
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<td>exchanges</td>
</tr>
</tbody>
</table>

**Source** – [http://www.everythingesl.net/inservices/bics_calp.php](http://www.everythingesl.net/inservices/bics_calp.php)

*Explaining BICS and CALP* by Judie Haynes

Classroom teachers need to understand the difference between social language and academic language acquisition. Here is a simple description of BICS and CALP as theorized by Jim Cummins.

**Basic Interpersonal Communication Skills (BICS)**

Experts such as Jim Cummins differentiate between social and academic language acquisition. Basic interpersonal communication skills (BICS) are language skills needed in social situations. It is the day-to-day language needed to interact socially with other people. English language learners (ELLs) employ BICS when they are on the playground, in the lunchroom, at parties, playing sports and talking on the telephone. Social interactions are usually context embedded. They occur in a meaningful social context. They are not very demanding cognitively. The language required is not specialized. These language skills usually develop within six months to two years after arrival in the U.S. Problems arise when teachers and administrators think that a child is proficient in a language when they demonstrate good social English.

**Cognitive Academic Language Proficiency (CALP)**

Cognitive academic language proficiency (CALP) refers to formal academic learning. This includes listening, speaking, reading, and writing about subject area content material. This level of
language learning is essential for students to succeed in school. Students need time and support to become proficient in academic areas. This usually takes from five to seven years. Recent research (see for example, Thomas & Collier, 1995) has shown that if a child has no prior schooling or has no support in native language development, it may take seven to ten years for ELLs to catch up to their peers.

**Academic language acquisition** isn't just the understanding of content area vocabulary. It includes skills such as comparing, classifying, synthesizing, evaluating, and inferring. Academic language tasks are context reduced. Information is read from a textbook or presented by the teacher. As a student gets older the context of academic tasks becomes more and more reduced. The language also becomes more cognitively demanding. New ideas, concepts and language are presented to the students at the same time.

Jim Cummins also advances the theory that there is a common underlying proficiency (CUP) between two languages. Skills, ideas and concepts students learns in their first language will be transferred to the second language.

Source –

**Situation:**
There is a student who speaks English very well. She participates orally in the class and socializes with other students. She even translates for other students. However she is doing very poorly in other content areas such as math and physical sciences.

This student has acquired BICS (Basic Interpersonal Communication Skills) but has not yet acquired CALP (Cognitive Academic Language Proficiency) needed to learn in content areas. Many second language learners are exiting ESL programs at the BICS level. Teachers need to work on CALP before these students are leaving high school. Good BICS also fool mainstream teachers, who think that a learner speaking with friends during the break is just being lazy when not doing his/her work.

BICS are Basic Interpersonal Communication Skills. These are the language skills needed for everyday personal and social communication. Second language learners must have BICS in order to interact socially and in the classroom. It usually takes students from 1-3 years to completely develop this social language. BICS are not necessarily related to academic success.

CALP is Cognitive Academic Language Proficiency and the language associated with native language literacy and cognitive development. These are the language skills needed to undertake academic tasks in the mainstream classroom. It includes content-specific vocabulary. It may take students from 5 to 7 years to develop CALP skills. CALP developed in the first language contribute to the development of CALP in the second language. So if a student has limited education in first language, the development of CALP will take even longer.

Consider the activities in Table 13 and note the language sophistication required. Most of the requirements for successful academic performance are in the cognitively demanding quadrants III and IV.

- What questions and thoughts do you have about the reading? Write them down for class discussion.
<table>
<thead>
<tr>
<th>Context-Embedded</th>
<th>Non academic or cognitively undemanding activities (BICS)</th>
<th>Academic and cognitively demanding activities (CALP)</th>
<th>Context</th>
<th>Non academic or cognitively undemanding activities (BICS)</th>
<th>Academic and cognitively demanding activities (CALP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td>II</td>
<td>Engaging in predictable telephone conversations</td>
<td></td>
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<tr>
<td>Developing survival vocabulary</td>
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<td></td>
<td>Developing initial reading skills: decoding and literal comprehension</td>
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<tr>
<td>Following demonstrated directions</td>
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<td>Reading and writing for personal purposes: notes, lists, recipes, etc</td>
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<tr>
<td>Playing simple games</td>
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<td>Reading and writing for operational purposes: directions, forms, licenses, etc</td>
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<tr>
<td>Participating in art, music, physical education and some vocational education classes</td>
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<td>Writing answers to lower level questions</td>
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<tr>
<td>Engaging in face-to-face interactions</td>
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<td>Practicing oral language exercises and communicative language functions</td>
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<td>Answering lower level questions</td>
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<tr>
<td>II</td>
<td>Engaging in predictable telephone conversations</td>
<td></td>
<td>III</td>
<td>Developing academic vocab</td>
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<tr>
<td>Understanding academic presentations accompanied by visuals, demonstrations of a process, etc</td>
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<tr>
<td>Participating in hands-on science activities</td>
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<td>Making models, maps, charts and graphs in social studies</td>
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<td>Solving math computation problems</td>
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<td>Solving math word problems assisted by manipulatives and/or illustrations</td>
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<tr>
<td>Have academic discussions</td>
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<td>Making brief oral presentations</td>
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<td>Using higher level comprehension skills in listening to oral texts</td>
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<td>Understanding written texts through discussion, illustrations and visuals</td>
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<td>Writing simple science and social studies reports with format</td>
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<tr>
<td>Answering higher-level questions</td>
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<td>III</td>
<td>Developing academic vocab</td>
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<td>Engaging in predictable telephone conversations</td>
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<td>Understanding academic presentations accompanied by visuals, demonstrations of a process, etc</td>
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<td>Solving math computation problems</td>
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<td>Solving math word problems assisted by manipulatives and/or illustrations</td>
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<td>Have academic discussions</td>
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<td>Making brief oral presentations</td>
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<td>Using higher level comprehension skills in listening to oral texts</td>
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<td>Understanding written texts through discussion, illustrations and visuals</td>
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<td>Writing simple science and social studies reports with format</td>
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<td>Answering higher-level questions</td>
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<td>IV</td>
<td>Understanding academic presentations without visuals or demonstrations</td>
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<tr>
<td>Making formal oral presentations</td>
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<tr>
<td>Using higher level reading comprehension skills: inferential and critical reading</td>
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<tr>
<td>Reading for information in content subjects</td>
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<tr>
<td>Writing compositions, essays and research reports in content subjects</td>
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<td>Solving math problems without illustrations</td>
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<td>Writing answers to higher level questions</td>
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<tr>
<td>Taking standardized achievement tests</td>
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</tbody>
</table>

Table 13: Common BICS and CALP Activities

BICS are those skills that are cognitively undemanding (quadrants I and II) and include known ideas, vocabulary and syntax. They are the aspects of communication that are used daily in routine communicative exchanges (e.g., while dressing, eating, bathing, playing, etc.). BICS represent the

• What questions and thoughts do you have about the reading? Write them down for class discussion. 40
informal aspects of social talk as well as skills that do not require a high degree of **cognition** (e.g., naming objects and actions, referring to non-existence, disappearance, rejection, and negation).

Students demonstrating BICS might recognize new combinations of known words or phrases and produce single words or short phrases. When students begin to acquire a second language, they are typically able to develop BICS within 2-3 years. Most importantly, Cummins cautioned that students should not be placed in learning situations in which a L2 is used just because they have adequate L2 BICS since students usually have much more L2 to learn before attempting academically demanding tasks.

CALP takes much longer than BICS to develop, usually about 5-7 years. CALP skills are those that are necessary for obtaining literacy and academic success. CALP enables students to have academic, analytical conversation and to independently acquire factual information. CALP is used to apply information acquired to find relationship, make inferences, and draw conclusions.

Hetty Roessingh’s comparison between ESL learners and native speaking learners in terms of the English language at their disposal, shows the challenge ESL learners face:

<table>
<thead>
<tr>
<th>ESL Learners</th>
<th>Native English Speaking Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 – 7,000 word vocabulary</td>
<td>40,000 word vocabulary</td>
</tr>
<tr>
<td>Reading speed: approximately 100 words per minute for narrative materials</td>
<td>Approximately 300 words per minute</td>
</tr>
<tr>
<td>Reading Grade equivalent: 6-7</td>
<td>Reading at grade 10 level or higher</td>
</tr>
<tr>
<td>Difficulty with writing in expository mode</td>
<td>Writing skills assumed</td>
</tr>
<tr>
<td>Familiar with standard English only</td>
<td>Familiar with a variety of dialects (Ebonics, the language of children)</td>
</tr>
<tr>
<td>Lacking experience with puns, double meanings, idioms</td>
<td>Enjoy humor based on language</td>
</tr>
<tr>
<td>The language of imagery, metaphor, symbolism, tone, bias in English will be a challenge</td>
<td>Can access abstract thought through English language</td>
</tr>
</tbody>
</table>

Table 14: Comparison of ESL Learners and Native Speaking Learners

With the awareness of these challenges, it has become evident for educators and language researchers that intervention must be provided to bridge the gap between the simultaneous acquisition of BICS and CALP for L2 learners.

**Questions and notes:**

- What questions and thoughts do you have about the reading? Write them down for class discussion. 41
8b. Sociolinguistics: Restricted and Elaborated Codes

As you read, answer the following questions:

- What is the difference between elaborated and restricted language codes?
- What is the main disadvantage that working-class people face in educational situations?
- What is the connection between elaborated and restricted language codes and SLA * HINT: This issue was discussed in the previous reading.
- Do you use restricted and/or elaborated codes in your L1? What about your L2?

Key concepts –

- working-class restricted language code social message of inclusion
- middle-class elaborated language code socially, culturally, and geographically mobile


Elaborated and Restricted Language Codes

In the late 1960s, educators began to notice that working-class grade school and high school students were not achieving as well as their middle class counterparts. In 1971, Basil Bernstein introduced the idea of elaborated and restricted language codes as a way of accounting for the relatively poor performance of working-class pupils in language-based subjects, when they were achieving as well as their middle-class counterparts on mathematical topics.

One research study involved a group of children who were shown a picture of a house and were asked to describe what they saw. Children in the working-class group said:

"It's a house. Red roof. Big. Nice."

while children in the middle-class group said:

"it is a beautiful house with a red roof and a big yard. There are five people living in the house: a father, mother, two children, and a grandmother. There is a dog and a cat in the house, too. The kitchen is big, and they have a big TV set."

The first account is an example of restricted code. The second is an example of elaborated code.

The theory is that the restricted code is very short and to the point because it depends a great deal on shared and taken-for-granted knowledge of the group of speakers. In the above example, it was difficult for the children to say much because they knew that the interviewer could also see the house so shared the information. The children saw no need to elaborate on shared information.

Not only that, but because the restricted code draws on a store of shared meanings and background knowledge, a restricted code carries a social message of inclusion, of implicitly acknowledging that the person addressed is "one of us". Its essential feature is that it works within a restricted community. In the example above, because the interviewer was not part of their social group, they did not know what to say about the house.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 42
For these two reasons, the restricted code speakers, working-class students did not or could not say much about the house in the picture. Elaborated code, on the other hand, spells everything out because the elaborative speaker feels that it is necessary that everyone understand what is said. The topic has to be elaborated because the circumstances do not allow speakers to condense the information.

Restricted code is therefore great for shared, established and static meanings. But if you want to break out to say something new, particularly something that questions the received information, you are going to have to use an elaborated code.

Researchers argue that working-class students have access to their restricted code – but middle-class students have access to both restricted and elaborated codes, because the middle classes are more socially, culturally, and geographically mobile, and therefore, have a greater and wider access to information.

Because schools and colleges are concerned with the introduction of new knowledge that goes beyond existing shared meanings, and are relatively anonymous institutions that may not share many taken-for-granted meanings in their formal structures, people in these learning institutions need to use elaborated code.

The bottom line is that if you can't handle elaborated code, you are not going to succeed in the educational system. In fact, it is often an embarrassment that many working-class students may feel when asked to express themselves in class in an elaborated-code. It is an alien form for them and they often relapse into grunts that are inaccessible to the "powers that be".

Restricted-code users often understand elaborated code because of the large amounts of time they spend watching television. However, many are unfamiliar with using it to explain complex ideas.

Questions and notes:

• What questions and thoughts do you have about the reading? Write them down for class discussion.
Glossary

academic language acquisition – learning the language required in academic settings, such as classrooms.

accent – 1) A person's accent is the way he or she speaks, with differences in the sounds that can show the place a person comes from, or their social class.

accented – if a word is accented, there is greater stress put onto one or more syllables.

acquisition – the process of gaining the ability to use features of a language as a native speaker

approximate system – a term for an intermediate system of learner language that is similar to but not equivalent to a native speaker's system; see interlanguage.

assumptions – a fact or statement taken for granted and believed to be the truth.

auxiliary be – used in a negative structure, a question or to show tense; be is used with the present participle in continuous (progressive) verbs and is also used with the past participle in the passive.

basic interpersonal communication skills (BICS) – part of a theory of language proficiency developed by Jim Cummins, which distinguishes BICS from CALP (Cognitive Academic Language Proficiency). BICS is often referred to as "playground English" or "survival English." It is the basic language ability required for face-to-face communication where linguistic interactions are embedded in a situational context (see context-embedded language). This language, which is highly contextualized and often accompanied by gestures, is relatively undemanding cognitively and relies on the context to aid understanding. BICS is much more easily and quickly acquired than CALP, but is not sufficient to meet the cognitive and linguistic demands of an academic classroom.

Bilingual Syntax Measure – a research tool used to determine a language learner's acquisition and use of specific grammatical features of language.

bilingual – concerning the ability to fluently use two languages

built-in syllabus – a term used to refer to a language user's mental system of grammatical and other language rules.

cognition – the act or process of knowing, including both awareness and judgment

cognitive academic language proficiency (CALP) – Developed by Jim Cummins, Cognitive Academic Language Proficiency (CALP) is the language ability required for academic achievement in a context-reduced environment. Examples of context-reduced environments include classroom lectures and textbook reading assignments. CALP is distinguished from Basic Interpersonal Communication Skills (BICS).

cognitive development – the emergence of the various mental abilities (such as language) that make up the human capacity for knowledge.

cognitive strategy – a mental strategy used in the process of understanding, judging, and becoming aware.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 44
cognitively demanding tasks – the range of human activities that require high levels of mental abilities, including awareness and understanding knowledge.

common underlying proficiency (CUP) – Cummins’ theory that two languages work in an integrated manner in one underlying, central thinking system. Skills that are not directly connected to a particular language, such as subtraction, using a computer, or reading may be transferred from one language to another once the concept is understood since they exist as part of the common proficiency. Skills that are specific to a language (idioms, punctuation) may be kept separate. The opposing theory is Separate Underlying Proficiency (SUP).

competencies – the whole range of knowledge that enables a person to speak and understand a language.

complexity – referring to a group of obviously related units of which the degree and nature of the relationship is imperfectly known, as in the complexity of language skills.

complex verb phrase – a verb phrase that contains more than one complete verb

connected speech – In connected speech, the usual aim is for ease of communication rather than complete accuracy. Assimilation, elision, linking, and neutralization are all skills that are used by speakers to aid that ease of communication. Sometimes speakers make adjacent sounds more like each other (assimilation), sometimes they are left out altogether (elision), and other times an unrelated sound is inserted to ease the transition from one sound to another (linking).

contact situation – a situation in which two or more cultures and language come into contact with one another, usually one more dominant than the other(s), and in the process share cultural and linguistic knowledge.

context embedded – Communication occurring in a context that offers help to comprehension (e.g., visual clues, gestures, expressions, specific location). Language where there are plenty of shared understandings and where meaning is relatively obvious due to help from the physical or social nature of the conversation.

context reduced – Language where there are few clues as to the meaning of the communication apart from the words themselves. The language is likely to be abstract. Examples: textbook reading, classroom lecture.

continuum – coherent whole characterized as a collection, sequence, or progression of values or elements varying by very small amounts. Example: the interlanguage continuum.

copula be – A copula verb is a verb that connects the subject to the complement. They are sometimes called linking verbs. Example: That book is great. (is connects the subject to the adjective that describes it.)

creole – a language that originated as a contact language and has become established as a first language in a speech community.

developmental errors – errors that occur in language acquisition and provide evidence of the learner’s attempts to create a grammatical system based on his or her hypothesis about the target language.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 45
developmental sequence – the stages of linguistic development that are relatively the same across language learners.
dialect – A dialect is a variety of a language that is spoken by a group in a particular area or of a social group or class. It can have a different accent and pronunciation, vocabulary and use different grammatical structures.
direct negative evidence – language instruction involving correction or focus on form.
elaborated language code – a way of speaking within a language group that relies on explaining concepts in great detail so that others understand clearly what is said.
English language learners (ELLS) – a term that refers to people who learn English after acquiring a first language.
errors – language mistakes made by language learners in the process of using language that result in nonnativelike use.
ESL learners – a term that refers to people who learn English after acquiring a first language.
explicit knowledge – knowledge that can be fully revealed or expressed by the learner without vagueness, implication, or ambiguity, and which leaves no question as to meaning or intent.
first language (L1) – the first language that people normally acquire in childhood.
first-language acquisition – the process of learning the first language during childhood.
first-language (L1) developmental sequences – the stages of first language development that are relatively the same across all child learners.
fossilization – a characteristic of second language learning in which the learner reaches a plateau and seems to be unable to acquire some property of the L2 grammar.
fossilize – to reach a plateau in language development and cease to improve towards native-like proficiency.
forms – referring to a grammatical, phonological, or gestural representation of a morpheme or word.
function – the useful purpose of a given linguistic item.
functional – performing or able to perform a specific language function regularly without much effort or error.
fundamental difference hypothesis – second language acquisition (L2) differs fundamentally from first language acquisition (L1).
grammaticality – describes a well-formed sequence of words, one conforming to rules of syntax.
grammatical utterance – any bit of spoken language that follows all appropriate grammatical rules that make the speech completely understandable.
heuristic – involving or serving as an aid to learning, discovery, or problem-solving by experimental and especially trial-and-error methods; eg.: heuristic techniques; also : of or relating to exploratory problem-solving techniques that utilize self-educating techniques (as the evaluation of feedback) to improve performance; eg.: a heuristic computer program.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 46
hierarchical structure – the groupings and subgroupings of the parts of a sentence into syntactic categories; the groupings and subgroupings of morphemes in a word.

hypotheses – a temporary assumption or best-guess made in order to test its logical or useful truthfulness and reality.

implicational universals – a universal of language that specifies that the presence of one trait implies the presence of another (but not vice versa).

implicit knowledge – knowledge gained through experience, usually without direct instruction or awareness, and which usually cannot be clearly revealed or expressed by the learner.

indirect negative evidence – the assumption that nonoccurring structures in the linguistic environment are ungrammatical. In other words, if a language learner never hears certain forms, the learner assumes that they are not grammatical.

inflectional morphology – the morpheme modification of a word’s form to indicate the grammatical subclass to which it belongs. Example: the –s in books marks the plural subclass.

innate language endowment – a special ability for language learning and use that some people are thought to be born with.

interlanguage – the changing linguistic system that an L2 learner is using at a particular period in his or her acquisition of a second language as s/he moves towards proficiency in the target language.

IL grammar – that part of a learner’s interlanguage that is specifically concerned with grammatical structures and rules.

IL plateau – a stage during the learning of language when the interlanguage appears to level off and does not seem to continue development towards the target language norm; a step towards fossilization.

internalized system – in linguistics, this term refers to the system of rules of the language within the person’s mind that control linguistic competence.

internally structured – a term referring to the concept that vocabulary items are stored inside the linguistic system of the brain as complex structures that connect to other vocabulary items as well as other components of language, such as morphology, syntax, and phonology. This concept contrasts with the traditional view, known as representationalism, that vocabulary items are stored within the brain as separate and discrete items, disconnected from one another and other components of the linguistic system.

interphrasal morphology – morphological rules that are responsible for relating or otherwise connecting phrases to one another. Example: in English, subject-verb agreement links the noun phrase to the verb phrase, usually though verb morphemes (compare: I walk to she walks; the plural s morpheme is an example of interphrasal morphology.)

intonation – having to do with the rise and fall of the voice pitch.

L1 – first language; the language that a person acquires from birth.

L1 development – a term that refers to the process of learning and acquiring a first language.

• What questions and thoughts do you have about the reading? Write them down for class discussion.
L1ers – a term that refers to people who speak any given first language. Example: English L1ers = people who speak English as a first language.

L1 interference – negative influences on second language production that come from a person’s system of first language linguistic rules.

L2 – second language; the language that a person acquires after the linguistic rules of a first language have already been acquired.

L2ers – a term that refers to people who speak any given second language. Example: English L2ers = people who speak English as a second language.

L2 learner – a person who is in the process of acquiring a second language.

L2 phonology – the term that refers to the developing sound system of a second language learner, a.k.a. interlanguage phonology. Central to this concept is the idea that a developing L2 phonological system is highly influenced by the phonology of the first language.

L2 syntax – the term that refers to the developing syntactic system of a second language learner. Central to this concept is the idea that a developing L2 syntactic system is affected by the syntax of the first language.

language acquisition – the complex process of learning or otherwise gaining the whole range of linguistic rules of a language, including vocabulary, morphology, syntax, phonology, and pragmatics.

language learner – any person who is in the process of learning and acquiring a language.

language proficiency – To be proficient in a second language means to effectively communicate or understand thoughts or ideas through the language's grammatical system and its vocabulary, using its sounds or written symbols. Language proficiency is composed of oral (listening and speaking) and written (reading and writing) components as well as academic and non-academic language.

language transfer error – negative influences on second language production that come from a person’s system of first language linguistic rules; see also, L1 interference.

language typology – An approach to language classification that classifies languages according to their common structural characteristics without regard for genetic relationships. Researchers of linguistic typology are concerned with the study of linguistic performance across all languages, which seeks to understand linguistic competence and find linguistic elements common to all languages.

lingua franca – a language that is used when speakers of two or more different languages come into contact and do not know each other’s languages.

linguistic competence – a term that refers to the relative ability of a person to speak and understand a language.

linguistic environment – the specific form of a language (including dialect, variety, and level of formality) that is spoken in a given environment. The specific linguistic environment has a major affect on the acquisition of a target language in that the specific language form used in the environment becomes the primary source of input for language learners.

linguistic input – all aspects of language that are utilized as input for learning by a language learner.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 48
linguistic interdependence hypothesis – the idea that if children have advanced literacy skills in their first language, they will likely achieve comparable skills in their second language. Conversely, if children have advanced speaking skills in a second language but do not have experience with academic tasks in that language, they are unlikely to acquire advanced second language literacy.

linguistic universals (UG) – structural characteristics that occur across all languages of the world.

longitudinal study – a research study that takes place over a lengthy period of time, usually for one year or more, with the intention to detect changes over time.

mainstream classroom – classes designed for native or fluent speakers of English, in which no accommodations are made for ELLs.

marked – complex or less common characteristics of languages.

markedness – a theory that classifies traits or patterns of languages as marked and unmarked.

Markedness Differential Hypothesis – the hypothesis that L2 elements that are different and more marked that the L1 elements will cause difficulty in learning.

methodology – a particular procedure or set of procedures, usually referring to research or teaching approaches.

microcosm – a community or other unity that is a typical or idea example of a larger unity.

middle-class – a social class characterized by a high material standard of living, sexual morality, and respect for property.

morpheme acquisition order – a theory that the morphemes of any given language are acquired in a particular and predictable sequence.

morpheme studies – a line of research conducted primarily in the 1960s and early 1970s that sought to uncover a universal order for the acquisition of morphemes across languages.

morphemes – the smallest unit of linguistic meaning or function in a language. Example: *sheepdogs* contains three morphemes, *sheep*, *dog*, and the function morpheme for plural, *s*.

morphological – of or related to morphemes.

native language – the language a person acquires first in life, or identifies with as a member of an ethnic group.

native-language development – a term that refers to the process of developing the language a person acquires first in life.

native-language literacy – a term that refers to the state of being competent in the first language acquired from birth.

nativelike – a term that refers to the second language competence and performance that is equal to that of a native speaker.

native-like fluency – a term that refers to linguistic fluency equal to that of a native speaker.

native-like proficiency – a term that refers to having knowledge of the rules and usage of a language equal to that of a native speaker.

native speaker – a term that refers to a person who acquired any given language from birth.

• What questions and thoughts do you have about the reading? Write them down for class discussion. 49
native-speaking learners — a term that refers to people, usually children, who are still in the process of acquiring the major aspects of the first language in life.

egregation — a term that refers to the function of a grammatical class of forms that shows the absence of a noun or any other substantive (e.g., no money), the non-performance of the action described by a verb (e.g., do not go), or the non-existence in the case of a stative verb (e.g., does own). An adverb (e.g., that was not quietly) or adjective (e.g., is not sweet) can equally be negated so that it expresses the absence of the quality or characteristic described. Negation can be used to break the linking function of a preposition so that the items governed by it are shown to be separate (e.g., was not in the yard). Negation in language functions in a contradictory way; it invokes a connection, action, modification, etc., only to then deny it. However, a negative nearly always creates a ghostly presence of the very thing it is saying is absent. This ingenious mechanism common to all languages is one of the driving forces of creativity and generators of meaning. Through it we have access to one of the primary and most fundamental of all tools for creating shades of meaning.

negative evidence — information as to the ungrammatical nature of an utterance.

negative transfer — see L1 interference.

nonnative speaker — a term that refers to a person who did not acquire a given language from birth, and, therefore, is a second language learner of that language.

nonnative stress pattern — a term that refers to the phonological stress pattern, noticeably different from that of a native speaker, that a second language speaker has for a given language.

nonnativelike — language production of a language learner that is not as fluent as a competent native speaker of the given language.

non-standard variety — a variety of language that differs from the standard dialect in systematic ways.

null subject — a term that refers to the absence of a grammatical subject in the production of a given language.

Null Subject Parameter — a cross-linguistic variation that allows some languages to drop subject pronouns, while other languages require an overt grammatical subject.

obligatory context — a term that refers to a required or mandatory situation, without exception, in which a give linguistic item in a particular language should be used.

overgeneralize — a term that refers to the overly applying a linguistic rule, particularly in situations in which the linguistic rule should not be used.

overt grammatical subject — a term that refers to the presence in an utterance of a specific, clearly present subject.

parameters — the set of alternatives for a particular phenomenon made available by universal grammar to individual languages.

penultimate syllable — the next to the last syllable in a lexical item.

performance analysis — a research activity in which the use of linguistic competence in the production and comprehension of language is examined.
phenomenon – an observable fact or event; a fact or event of scientific interest susceptible of scientific description and explanation.

phoneme – a contrastive segmental unit with predictable phonetic variants.

phonetic transfer – influences on second language speech production that come from a person’s inventory and structural rules of first language sounds.

phonological system – the complete system of a given language that connects the underlying forms of words to their phonetic forms.

phonological transfer – influences on second language phonology that come from a person’s first language phonological system.

phonology – the component of a grammar made up of the elements and principles that determine how sounds pattern in a language.

phrasal morphology – morphological rules that are responsible for relating or otherwise connecting grammatical items within a phrase to one another.

pidgin – a lingua franca with a highly simplified grammatical structure that has emerged as a mixture of two or more languages and had no native speakers.

positive evidence – grammatical utterances in the learner’s linguistic environment.

post-verbal negation – a grammatical structure which allows or otherwise requires in a give language any negation to follow the main verb.

pragmatics – the study of how context and situation affect linguistic meaning.

principles – in universal grammar, a linguistic rule that is common to all languages.

proficiencies – the whole range of knowledge and skills that a person has with a given language that are not directly associated with use.

proficiency – in linguistics, a term that refers to the knowledge and skills that a person has with a given language that are not directly associated with use, as opposed to competencies, which refer more specifically to the use of the knowledge and skills.

prosodic phonology – specifically related to the duration (length), pitch, or loudness of speech sounds.

random – lacking a definite plan, purpose, or pattern.

restricted language code – a term that refers to a variety of a language, commonly spoken by members of the working-class, that relies heavily on its speakers to share common knowledge; this term contrasts with elaborated code.

rhythm – the arrangement of spoken words alternating stressed and unstressed elements

routine communicative exchanges – a term that refers to pieces of language, commonly phrases or complete utterances, that are used regularly by a majority of a linguistic group in specific, predictable situations. Example: when two people meet, they exchange the greetings, Hello, how are you today? I’m fine, thanks, and you?

rule-governed – in linguistics, a term that refers to any aspect of language that is controlled by a rule or a set of rules.

• What questions and thoughts do you have about the reading? Write them down for class discussion.
scholarship – a term that refers to the activities or attainments of the study of advanced knowledge in a specific field.

second language (L2) – This term is used in several ways and can refer to 1) the second language learned chronologically, 2) a language other than the native language, 3) the weaker language, or 4) the less frequently used language. Second language may also be used to refer to third and further learned languages.

second language acquisition (SLA) – a term that refers to the acquisition of another language or languages after first language acquisition is under way or completed.

second-language (L2) developmental sequences – a term that refers to the theory that different linguistic aspects of a given language are acquired in a predictable order by second language learners, which may differ from the order the same aspects are acquired by first language learners of the same language.

second-language learner – a term that refers to a person who is in the process of acquiring a second language.

second-language morphology – the term that refers to the developing morphological system of a second language learner. Central to this concept is the idea that a developing L2 morphological system is affected by the syntax of the first language.

segmental inventory – a term that refers to the whole set of individual sounds of a language that are evident in a person’s language production.

segmental phonology – a term that refers to the study of individual sounds found in a given language.

separate underlying proficiency – The largely discredited idea that two languages exist separately and work independently in the thinking system. The opposing theory is Common Underlying Proficiency (CUP).

SLA – a term that refers to the field and study of second language acquisition.

social language – a term that refers to the specific language variety or speech patterns that are used by a speaker in specific social settings; a.k.a., pragmatics.

socially, culturally, and geographically mobile – a term that refers to the concept that people in the middle class have the breadth of education and experiences and are economically situated such that they are able to move into different social and cultural situations, and are able to relocate themselves without difficulty.

social message of inclusion – a term that refers to the implicit acceptance of a person into a community of speakers based on the specific language variety, code, or forms used in spoken communication.

stabilization – a term that refers to the point at which a person’s language development ceases to progress, either due to a cessation of learning or a “leveling off” of language errors.

standard language – the dialect (regional or social) considered to be the norm.

stress assignment – a.k.a., accent; the noticeable use of length, loudness, or pitch on a syllable in a word such that the syllable is more prominent than other syllables within the same word.

• What questions and thoughts do you have about the reading? Write them down for class discussion.
Subset Principle – the universal grammar law that states that the initial or default setting of a parameter will correspond to the option that permits fewer patterns.

surface features – those aspects of a language that are explicitly evident in language production.

syllabification – the process of assigning syllables to words within utterances.

syntactic – of or relating to the system of rules and categories that underlies sentence formation in all languages.

syntactic structure – a term that refers to the structure of sentences evident in the production of a given language.

systematic – a term that refers to the regularity, or rule-based nature, of linguistic aspects of a language.

target language (TL) – The language that a child is learning as a second language. For English language learners in the US, the target language is English. For native English speakers in dual language programs, the target language might be Chinese or Spanish.

TL-norms – a term that refers to standard language use by native speakers within a given language; however, this term is usually applied comparatively to the normative use of the language by a second language learner.

target-like – the relative similarity of a language learner’s spoken or written production as compared to a target-language norm.

transcripts – in linguistics, a written, printed, or typed version of a dictated or recorded speech sample.

transfer – the process by which the L1 influences the IL grammar of the learner of a second language.

transfer errors – an error made by a second language learner that can be traced to the first language.

typological universals – existing properties of language that are common to all languages.

ungrammatical – structures that fail to conform to the rules of grammar.

unidirectional – in one way; one direction, as opposed to bidirectional.

universal grammar (UG) – the innate principles and properties that pertain to all human languages.

utterance – a term that refers to common and predictable characteristics of languages.

unmarked – a term that refers to any written or spoken statement, regardless of length.

variables – in linguistics, categories that affect change or difference of a given situation or phenomenon.

verb movement – within a given language, the ability of verbs to move within sentences to achieve inflection. Example: in English, verbs commonly move to form questions (compare I can do it! to Can I do it?)

Verb Movement Parameter – a cross-linguistic variation involving whether the verb does or does not raise to inflection.

verb phrase development – a term that refers to the process by which a given language allows verb phrases to be formed for perception and production.

voice quality – term referring to the permanently present quality of voice of a particular speaker. An individual’s voice quality is based on the combination of factors such as pitch level, loudness, tempo, timbre, breathiness, tenseness, nasality, hoarseness, etc.
working-class – a social class characterized by wage (or hourly) based income, as opposed to salaried or contracted workers, who are often middle-class.

Additional terms and vocabulary:

• What questions and thoughts do you have about the reading? Write them down for class discussion.