

FUNDAMENTALS OF LANGUAGE EDUCATION

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INTRODUCTION

This paper is a brief description of research and theory that underlie some current approaches to language teaching. The hypotheses presented here are research-based, but I do not present full details of the research here. Rather, I limit the research evidence to occasional representative examples and citations, indicating where more detail can be found.

CHAPTER ONE

LANGUAGE ACQUISITION

The following hypotheses summarize current theory on language acquisition (for additional details, see Krashen, 1981, 1982, 2003).

The Acquisition-Learning Hypothesis

The Acquisition-Learning Hypothesis claims that we have two independent ways of developing language ability:

1. Language acquisition is a subconscious process; while it is happening, we are not aware that it is happening. In addition, once we have acquired something, we are not usually aware we possess any new knowledge; the knowledge is subconsciously stored in our brains. The research strongly supports the view that both children and adults can subconsciously acquire languages.
2. Language learning is what we did in school. It is a conscious process; when we are learning, we know we are learning. Also, learned knowledge is represented consciously in the brain. In non-technical language, we when talk about “rules” and “grammar,” we are usually talking about learning.

Error correction helps learning, not acquisition; when we make a mistake and someone corrects us, we are supposed to change our conscious version of the rule. If a learner says, “I comes to school every day,” and the teacher says, “No, it’s ‘I come to school,’” the learner is supposed to realize (or be reminded) that the –s doesn’t go on the first-person singular but on the third-person singular. The research (and experience) tells us that error correction and conscious learning are very limited.

The Natural Order Hypothesis

The Natural Order Hypothesis claims that we acquire the parts of a language in a predictable order. Some grammatical items tend to come early while others are acquired later. The order of acquisition for first and second languages is similar, but not identical. It has been established, for example, that the –ing marker in English, the progressive (as in “John is playing the violin.) is acquired fairly

early in first language acquisition, while the third person singular –s is acquired later. The third person singular may arrive six months to a year after –ing. In adult second language acquisition, the progressive –ing is also acquired early, but the third person –s may never come. It is common to hear people who speak English as a second language very well, and yet have not acquired the third person singular –s.

An amazing finding is that the natural order appears to be immune to deliberate teaching; we cannot change the natural order of acquisition with explanations, drills and exercises. A teacher can drill the third person singular for weeks, but as the wine commercial says, it will not be acquired until its time has come.

The Monitor Hypothesis

The Monitor Hypothesis attempts to explain how acquisition and learning are used. Language is normally produced using our acquired linguistic competence. Conscious learning functions as a “Monitor” or editor. Just before we are about to produce some language using the acquired system, we sometimes inspect it in our minds and use our learned system to correct errors. This can also happen after we produce the sentence, when we self-correct.

While the Monitor can make a small contribution to accuracy, research indicates that acquisition makes the major contribution. Thus, language acquisition is responsible for both fluency and accuracy.

Some conscious knowledge of language can be helpful. Acquisition does not typically provide us with 100% of a language. There is often a small residue of grammar, punctuation and spelling rules we do not acquire, even after extensive opportunity to do so. In English, these can include the lie/lay distinction, the its/it’s distinction, and spelling demons such as “separate,” and “commitment” (how many t’s?). Because our standard for written language is 100%, these aspects of language need to be learned, but they make up a very small part of our language competence. Also, we pay a price for the modest amount of accuracy we get from Monitoring. Some research shows that when we focus on form while speaking, we produce less information, and we slow down (Hulstijn and Hulstijn, 1982).¹

The Comprehension Hypothesis

The Comprehension Hypothesis (also known as the Input Hypothesis) attempts to answer the most important question in the field of language education: How does language acquisition occur? The evidence strongly supports a simple hypothesis. We acquire language in one way: when we understand messages or obtain “comprehensible input.” We acquire language, in other words, when we understand what we hear or what we read, when we understand the message.

Comprehensible input has been our last resort in language teaching. We have tried everything else – teaching grammar rules, repetition drills, computers, etc. The Comprehension Hypothesis claims, however, that understanding messages is the only way language is acquired. There is no individual variation in the fundamental process of language acquisition.

Let us assume an oversimplified version of the Natural Order Hypothesis, that we acquire the rules of language in a simple linear order: 1,2, 3, The question of how we acquire language can be

restated as: How do we move from one rule to the next, from rule 3 to rule 4, from rule 458 to rule 459? More generally, if “i” represents the last rule we have acquired, and “i+1” the next rule we are ready to acquire, how do we move from “i” to “i+1”?

The Comprehension Hypothesis claims that we move from “i” to “i+1” by understanding input containing “i+1”. We are able to do this with the help of our previously acquired linguistic competence, as well as extra-linguistic knowledge, which includes our knowledge of the world and our knowledge of the situation. In other words, we use context. (As we will see later, extra-linguistic knowledge that we obtain through our first language can help make second language input more comprehensible.)

The evidence for the Comprehension Hypothesis can be summarized as follows:

- (A) More comprehensible input results in more language acquisition. Positive correlations have been found, for example, between length of residence in the country where the language is spoken and attainment in second language acquisition.
- (B) Teaching methods containing more comprehensible input have been shown to be more effective than “traditional” methods. This is true for both beginning and intermediate language teaching (<http://skrashen.blogspot.com/2014/08/comprehensible-input-based-methods-vs.html>).
- (C) The development of second language proficiency can occur with formal instruction and study. There are, for example, documented cases of adult immigrants developing impressive levels of second language competence without instruction. In all cases of acquisition without instruction, comprehensible input was available (eg the case of Armando, in Krashen, 2014).
- (D) The complexity of language makes it unlikely that much of language is consciously learned. Linguists tell us that they have not yet succeeded in describing all the rules of English, probably the most thoroughly described language. If students can develop a conscious mastery of a significant number of these rules, they deserve diplomas in Linguistics.

The Affective Filter Hypothesis

The Affective Filter hypothesis, proposed by Heidi Dulay and Marina Burt, claims that affective variables do not impact language acquisition directly, but prevent input from reaching what Chomsky calls the “language acquisition device,” the part of the brain responsible for language acquisition.

If the acquirer is anxious, has low self-esteem, does not consider him or herself to be a potential member of a group that speaks the language (see Smith, 1988, for a discussion of this last factor), s/he may understand the input, but it will not reach the language acquisition device – a block, the “Affective Filter,” will keep it out. The presence of the Affective Filter explains how two students can receive the same (comprehensible) input, yet one makes progress while the other does not. One is “open” to the input while the other is not.

The Compelling Comprehensible Input Hypothesis

Language acquisition requires that we understand input. This means that acquirers must pay attention to it for acquisition to occur. There is, of course, a better chance of this happening if the input is interesting, and an even better chance of this happening if the input is extremely interesting,

so interesting that we may even “forget” that it is in another language. When we get “compelling” comprehensible input, our focus is entirely on the message; we are in a state of “flow” in which our sense of time and even our sense of self is diminished (Csikszentmihalyi, 1990; Krashen, 2011). Compelling input reduces the strength of the Affective Filter.

Talking is not Practicing

Note that the theory, the collection of hypotheses presented above, maintains that speaking does not directly result in language acquisition: talking is not practicing. In fact, talking is not even necessary for language acquisition. If you practice your French out loud every morning in front of a mirror, your French will not improve. The ability to speak is a result of language acquisition, not a cause.

Speaking may help indirectly, however. It can result in conversation, a source of comprehensible input. What counts in conversation, however, is what the other person says to you, not what you say to them.

But forcing second language students to speak before they are ready, or forcing them to use grammatical structures they may have learned but have not yet acquired, can increase anxiety and thus raise the affective filter (Loughrin-Sacco, Bommarito, Sweet and Beck, 1988; Young, 1994). The amount of speaking done outside of class is not a predictor of performance on the TOEFL test, but the amount of self-selected reading is (Gradman and Hanania, 1991; see chapter two below).

CHAPTER TWO

THE DEVELOPMENT OF LITERACY: THE READING HYPOTHESIS

Current theories of literacy development hypothesize that we develop literacy the same way we acquire language, by means of comprehensible input. Smith (1988) and Goodman (1982) have presented strong evidence that we “learn to read by reading,” by making sense of what is on the page.

In addition, there is overwhelming evidence showing that self-selected reading is the major source of our competence in many aspects of literacy, including vocabulary, spelling, grammatical competence, and writing style (Krashen, 2004).

The arguments for the “reading hypothesis” parallel the arguments for the Comprehension Hypothesis, presented in the previous chapter (Krashen, 2004).

- (A) It has shown that more reading results in better literacy development. Those who say they read more and those who live in a more “print-rich” environment perform better on tests of reading comprehension, vocabulary, writing and grammar. Also, more comprehensible input in the form of listening to stories is associated with better vocabulary development (Elley, 1989; Mason, Vanata, Jander, Borsch, and Krashen, 2009).
- (B) Students who participate in in-school free reading programs such as sustained silent reading do at least as well, and usually better than, students in traditional language arts programs on tests of vocabulary and reading comprehension. The effect is clearer when programs last for more than a few weeks.
- (C) The development of literacy can occur without formal instruction and study. Here are some examples:

- There are several documented cases in the research literature of children who have learned to read and write without instruction, before starting school.
- People who have large vocabularies do not claim to have developed them through vocabulary programs. Rather, they typically acknowledge that reading has been helpful. Estimates of yearly growth in children's vocabulary, about 3000 words a year for middle class children, are far larger than the number of words school programs attempt to teach.
- It has been shown that children can spell many words they have not been taught, and that children who have a reading habit improve in spelling even when they are excused from spelling instruction.
- Research indicates that readers can pick up small but significant amounts of vocabulary and spelling knowledge from only a single exposure to unfamiliar words in context. This is accomplished without instruction and without deliberately trying to learn the new words. Researchers have argued that this small gain is enough to account for growth in vocabulary in school-age children, as long as enough reading is done.

The hypothesis that spelling comes from reading is confirmed by an experience familiar to all teachers: Our spelling temporarily gets worse when we read misspelled words. Research, in fact, confirms that "reading student essays may be hazardous to one's spelling accuracy" (Jacoby and Hollingshead, 1990; p. 357). In this study, subjects were exposed to frequently misspelled words. Some words were spelled correctly, and others spelling incorrectly. Even though they read the words only once, when the subjects took a spelling test, they performed significantly worse on the words they had seen misspelled.

(D) Many aspects of literacy are too complicated to learn. In addition to grammar, the difficulties of the rules of spelling have been documented repeatedly. Also, estimates of adult vocabulary size, ranging up to 150,000 words, show that there are too many words to learn one at a time.

As discussed in chapter one, the theory maintains that talking is not practicing. It also maintains that writing is not practicing. If you write a page a day, your writing style will not improve. Good writing style (organization, grammatical accuracy, etc.) is the result of reading, not writing. The evidence for this includes studies that show that more reading is related to better writing, and that also show that writing quantity is not related to better writing (Krashen, 1994; Lee, 2005). Studies also show that people simply do not write enough, in school or outside of school, to account for the vast amount of grammar, vocabulary, and elements of style that good writers acquire (Krashen, 1994).

Writing, however, can make profound contributions to cognitive development.

Writing and Cognitive Development

Smith (1988) has pointed out that we write for at least two reasons. First, and most obvious, we write to communicate with others. But perhaps more important, we write for ourselves, to clarify and stimulate our thinking. Writing, in other words, doesn't make you a better writer, but it can make you smarter.

As Elbow (1973) has noted, it is difficult to hold more than one thought in mind at a time. When we write our ideas down, the vague and abstract become clear and concrete. When thoughts are on paper, it is easier to see the relationship between them, and come up with better thoughts.

Readers who keep a diary or journal know all about this. You have a problem, you write it down, and at least 10% of the problem disappears. Sometimes, the entire problem goes away. Here is an example of this happening, a letter written to Ann Landers, advice columnist, in 1976 (published in the Miami Herald, July 22, 1978) reprinted in Lindermann, 1982).

Dear Ann:

I'm a 26-year-old woman and feel like a fool asking you this question, but – should I marry the guy are not? Jerry is 30, but sometimes he acts like 14...

Jerry is a salesman and makes good money but has lost his wallet three times since I've known him and I've had to help him meet the payments on his car.

The thing that bothers me the most, I think, is that I have the feeling he doesn't trust me. After every date, he telephones. He says it's to 'say an extra goodnight,' but I'm sure he is checking to see if I had a late date with someone else.

One night I was in the shower and didn't hear the phone. He came over and sat on the porch all night. I found him asleep on the swing when I went to get the paper at 6:30 a.m.. I had a hard time convincing him I had been in the house the whole time.

Now on the plus side: Jerry is very good-looking and appeals to me physically. Well – that does it. I have been sitting here with this pen in my hand for 15 minutes trying to think of something else good to say about him and nothing comes to mind.

Don't bother to answer this. You have helped more than you will ever know.

(signed) --- Eyes Opened

Writing appears to have its most powerful effects on thinking when problems are difficult. Langer and Applebee (1987) found that "... If content is familiar and relationships are well-understood, writing may have no major effect at all" (p. 131), but when the problem is challenging, writing can have a profound effect on understanding and recall. An example of this is a study by Ganguli (1989), who reported that asking college students to write three minutes per period on important concepts covered in an algebra class had a clearly positive effect on final examination performance.

An aspect of the "composing process" that appears to be particularly effective for problem-solving and thinking is revision. Sommers (1980) has confirmed that experienced writers understand that their early drafts are tentative, and that as they go from draft to draft, they come up with new ideas. Average and remedial writers don't know this. They think that all of their ideas are in their outline or first draft, and regard revision as simply making a neater version of the first draft. They do not know that in writing "meaning is not what you start out with but what you end up with" (Elbow, 1973).

CHAPTER THREE

HOW THE FIRST LANGUAGE CAN HELP

When the first language is used correctly in educational programs, it is of tremendous benefit. It can catalyze and accelerate second language acquisition. When it is used incorrectly, it is harmful. It can slow down second language acquisition. By one of life's happy coincidences, the right way of using

the first language is the easy, and the wrong way is hard way (for more details on the content of this section, see Crawford and Krashen, 2015).

We first need to consider how first language education can help second language development. Common sense seems to tell us the opposite, that the more a student hears a language, the faster it will be acquired. It turns out this is not the case. It is comprehensible input that counts.

When we give students good instruction through their first language, we give them two things. First, we give them knowledge. This can be subject-matter knowledge, or knowledge of the world in general. The knowledge that students get by means of their first language can make second language input more comprehensible. A child who has a good background in math, for example, thanks to quality education in her/his first language, will be able to understand a math class taught in the second language much better than a child who is behind in math. The first child will not only learn more math but will also make more progress in second language acquisition, because s/he will get more comprehensible input in math class.

Second, quality education in the primary language helps the student develop literacy in the second language. We can distinguish two kinds of literacy:

- (A) Basic literacy, the ability to read and write. Showing how the first language helps develop literacy is a two-step argument:
 - If, as claimed in chapter two, we learn to read by reading, by understanding what is on the page, it will be much easier to learn to read in a language you already know.
 - Once you can read, you can read. The ability to read transfers to other languages you acquire, even if the writing systems are different. And as we have seen in chapter two, reading is the way we develop other aspects of linguistic competence, eg. grammar and vocabulary.

- (B) The second kind of literacy was discussed in chapter 2, the ability to use language, especially writing, to solve problems and make yourself smarter. This kind of competence also transfers across languages. If a writer has learned that revision helps in discovering new ideas in one language, h/she will be able use revision in this way in another language (Lee and Krashen, 2003).

If these principles are correct, they suggest that quality programs for second language acquirers will have the following characteristics:

- They will provide quality subject matter teaching in the first language. This will give the second language acquirer background knowledge that will make second language input more comprehensible.
- They will help the student develop literacy in the first language, through classes that include listening to stories and that encourage self-selected reading, literacy that will transfer to the second language.
- They will supply comprehensible input in the second language, in the form of comprehension-based language classes that, as above, include stories and that encourage self-selected reading.

Strong evidence showing that these characteristics are correct is the finding that programs for language minority students in the United States that conform to these characteristics teach English very well, usually better than all-day English “immersion” programs.

After reviewing all available American comparisons of bilingual education and English immersion, McField and McField (2014) concluded that when programs provided subject matter instruction and literacy development in the first language and comprehensible input in English, and when programs were evaluated correctly, students in bilingual programs did better on tests of English reading, and the effect was considerably larger than that reported in previous analyses.

Note that those who do well without bilingual education are typically those who are well-educated in their own language. They have had subject matter instruction and literacy development in their primary language, two of the three characteristics of an effective program, and several have also had comprehensible input in the second language. For a famous example of “de facto bilingual education,” see Krashen and Ramos (2013).

Doing It Wrong

Not all bilingual programs are effective. One kind that has been shown to be ineffective is “concurrent translation,” a method in which the teacher speaks in the second language and then translates what has been said into the first language. In addition to being ineffective (Legarreta, 1979; Wong-Fillmore, 1975), this method is exhausting.

The Comprehension Hypothesis helps explain why concurrent translation doesn’t work; when teachers use concurrent translation, the student is less likely to listen to the second language, and the teacher is less likely to attempt to make the second language input comprehensible.

The generalization is simple: when we use the first language to supply background information and literacy, it helps. When we use it for concurrent translation, it doesn’t help.³

Advanced First Language Development

The arguments presented thus far are for first language development in the early stages of second language development. There are also excellent arguments for advanced first language development, for continuing to develop the first language and no reasons not to. Heritage language development promotes bilingualism, which has positive effects on cognitive development, including delaying the onset of dementia (Krashen, 2010), and has economic advantages (it is easier to do business if you know your customer’s language). Heritage language development also gives the younger generation access to the wisdom of their elders.

NOTES

1. We can apply our learned grammar rules to our output only when three very severe conditions are met: (1) when we know the rule, (2) when we have time, and (3) when we are thinking about correctness (focusing on form). Condition (1) is impossible to meet for all rules of language—many rules are extremely complex, and linguists admit that they have not described all the rules of any language. Conditions (2) and (3) are also a challenge: in oral language production we rarely have enough time to retrieve complex rules and apply

then, and when conversations get interesting we generally think about the meaning of what we are saying and what the other person is saying, rather than the form. These three conditions are fully met only when we take a grammar test (Krashen, 1981) or, as noted in the text, when we edit our writing.

2. Living in the country where the language is spoken is of greatest benefit to those who can understand at least some of what they hear and read. Beginners benefit less from living in the country. Language classrooms are of great help to beginners, because classes give them the comprehensible input that the “outside world” gives them only reluctantly. The goal of the language class is to bring students to the level where they can understand some of the input that they encounter outside of class.
3. This generalization does not exclude occasional translation of unknown words, one of several ways of making input more comprehensible.

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