

The Input Hypothesis: An Inside Look¹

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ABSTRACT *The article briefly summarizes and then discusses Krashen's Input Hypothesis as presented in his Principles and Practice in Second Language Acquisition. The Input Hypothesis is considered both as a psycholinguistic and as a pedagogical model. I suggest that as a psycholinguistic model the Input Hypothesis fails to account convincingly for the widely accepted fact of fossilization (arrested L2 acquisition) in an acquisition-rich environment. As a pedagogical model the Input Hypothesis may not be directly applicable to the reality of the U.S. high school or university foreign language classes, since these are so far removed from the immersion/second language environments on which much of the theory underlying the model is based.*

Over the last several years, the foreign language teaching profession has shown growing interest in learning about oral proficiency testing: how to rate a speech sample, and also how to elicit such a sample: Language teachers who have attended training sessions have discovered that learning how to assess the oral proficiency of their students often has at least as much impact on their own *teaching* as it has on their testing. Successfully teaching to a particular outcome—in this case demonstrable ability to use the target language productively for communication—entails pursuing a coherent strategy (Omaggio, 5).

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Strategies are goal oriented. The goal that all of us implicitly share—regardless of the level at which we teach or the methodology that we practice—is that of helping our students to participate in the bilingual, bicultural world that we are lucky enough to inhabit, even as we recognize that we will not likely see the full fruits of our labors. That is, we want to help our students get started in ways that do not threaten to circumscribe their learning opportunities later on.

About every decade or so the pedagogical pendulum swings and a "new" method or approach sweeps the profession. Lamentably we often adopt new methodologies uncritically, hoping that they will succeed where current procedures (whatever they may be) apparently fail, deciding, in effect, that the devil we are about to meet must be better than the devil we already know.

In this article, I will examine critically some psycholinguistic and pedagogical positions offered by Stephen D. Krashen, which together make up a teaching strategy that he calls the Input Hypothesis (Krashen, 4). I will briefly summarize his major findings, and then comment on them.

Krashen's research leads him to make the following general claims: 1) that language acquisition is materially different from language learning, 2) that only language acquisition accounts for the spontaneous use of the target language, 3) that providing for and encouraging language acquisition rather than language learning (under his definition) must be the primary goal of instruction, and 4) that of the four skills, listening comprehension is the most important in promoting global language acquisition, and not just the acquisition of listening skills.

The first step in dealing with these claims is to

understand clearly the differences Krashen finds between what he calls language acquisition and language learning. He defines language learning as "conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them" (p. 10). Later on (p. 89) he says, "'grammar' [is] a term I will use as a synonym for conscious learning..."

We see immediately that while for most people "learning" is understood as a *process*, Krashen has defined it as a *product*. An example of his definition of language learning would be the student who could recite correctly that "in French, adjectives must agree in gender and number with the nouns they modify." Or, in Spanish that "the subjunctive mood is used in any subordinate adjectival clause, the nominal antecedent of which is either negative or indefinite."² Krashen maintains that language learning *thus defined* neither causes nor facilitates language acquisition. Given his definition, it is difficult to disagree.

Krashen does not actually define adult second language acquisition, choosing instead to characterize it as "a process similar, if not identical, to the way children develop ability in their first language.... In non-technical language, acquisition is 'picking-up' a language." (p. 10). It is my understanding that the phrase "similar, if not identical" means adult second language acquisition is more likely "identical" than merely "similar" to a child's first language acquisition. This claim is as crucial to understanding the theoretical implications of the Input Hypothesis as is the learning/acquisition dichotomy.

While space does not permit a detailed enumeration of the psychological, cognitive, and environmental differences between child L1 acquisition and adult L2 acquisition or learning, so much of Krashen's model depends on their fundamental similarity—if not identity—that we might mention a few obvious facts which suggest that these two processes might at best be characterized as analogous. For example, the mere fact that child L1 acquisition in a sense entails replacing "nothing" with "something," while adult L2 acquisition/learning entails transforming "something" into "something else" is sufficient to establish the fundamental nonidentity of both the affective and the cognitive environment within which these kinds of acquisition activities take place. In addition, an adult already knows what language is. That is, unlike the infant, the adult already knows that "talking" encodes language, unlike other sonic signals that he is sensitive to. Furthermore, the adult already has a developmentally

mature brain, and comes equipped with a culture, that is, a system within which he construes his communication. These are all advantages that adults bring to second language learning. The adult also brings a well-developed "affective filter," which may be fairly high. A pedagogy for adult L2 acquisition can only profit from taking such differences into account.

Operationally, Krashen asserts that the way to make adult L2 acquisition happen in the classroom is to access and activate exactly the same language acquisition device that small children have and unconsciously "use" in acquiring their native language. This same language acquisition device will then output "acquired competence" in the target language, just as it had done years earlier for the native language. In terms of classroom activity, he argues, this entails using the foreign language "for what it was designed for, communication." (p. 1). Thus, our number one priority as foreign language teachers is to use available classroom time for providing our students with what Krashen calls "comprehensible input," i.e. with language that our students can understand.

Having distinguished language learning from language acquisition, the next stage in assimilating the implications of Krashen's model is to understand the defining characteristics of "comprehensible input," for although all target language speech that students understand counts as comprehensible input, not all comprehensible input leads to, causes, or otherwise facilitates language acquisition. According to Krashen's hypotheses, one acquires additional L2 competence only by understanding language that contains structures and vocabulary that are "a little beyond" what has already been acquired (p. 21).

Krashen calls the current level of acquired competence, that is, the level at which an individual finds himself at any moment, "Level *i*." Comprehensible input that promotes additional acquisition must contain at least some understandable material from the next-higher hypothesized level of acquired competence, or what Krashen calls level "*i* + 1." Such input is rendered comprehensible linguistically, e.g. by the use of simplified codes and slower speech, and nonlinguistically by the use of pictures, objects, or other realia, and by the listener's general knowledge of the world.

The last variable that mediates the adult language acquisition process in Krashen's model is the "Affective Filter." This term is also not rigorously defined, but it relates to the web of attitudinal and other affective or psychological factors that help to define an individual's internal and external

perspective. People who have negative or even hostile stereotypes about the culture of the target language speakers will have a "high" affective filter. If one's affective filter is "high," or "up," then, according to the model, even comprehensible input containing $i + 1$ will fail to penetrate sufficiently to activate the posited natural language acquisition device. Conversely, if the affective filter is "low," as is the hypothesized case for people more positively disposed toward themselves, the target language, and the culture of its speakers, the comprehensible input gets through to the language acquisition device, and additional acquisition takes place, assuming that appropriate $i + 1$ is present in the signal.

We can now briefly recapitulate the essential points of Krashen's Input Hypothesis. First, only people who have *acquired competence* use a language spontaneously, fluently, and accurately. *Learned competence*, i.e. conscious knowledge of grammatical rules and structures as such, does not cause nor does it contribute significantly to acquired competence. Second, adult L2 acquisition is "similar if not identical" to child L1 acquisition, and depends on exposure to comprehensible input that contains $i + 1$, that is, structures and/or vocabulary that are "a little beyond" one's current acquired competence. Elements that have not yet been acquired are made comprehensible through storable linguistic and extralinguistic means.

But while comprehensible input is argued to be "necessary" for acquisition to take place, it is not "sufficient." In order to ensure L2 acquisition, acquirers must be presented with comprehensible $i + 1$ while their affective filter is "down" or "low." In short, the theory guarantees continued language acquisition when acquirers encounter comprehensible input containing sufficient $i + 1$, under conditions associated with a low affective filter. The fundamental argument is that students acquire structure not by *learning* structure but by concentrating uniquely on meaning. In Krashen's words, "we acquire by 'going for meaning' first, and as a result, we acquire structure." (p. 21).

Remember that it is an *input* model. It argues that we acquire primarily by what we hear and read, rather than by what we say and write, and least of all by what we know *about* the target language. Krashen himself tells us in italics that "*perhaps the main function of the second language teacher is to help make input comprehensible.*" (p. 64). Elsewhere he explains that in this model students are not required to produce speech in the target language until they are individually motivated to

do so (the hypothesized "silent period"), and that when they do begin to speak, "fluency 'emerges' over time, on its own," and "accuracy develops over time as the acquirer hears and understands more input." (p. 22).

An easy assumption to make based on a quick reading of Krashen's material or on the brief characterization of it that I have just presented is that it is enough for teachers to be fluent speakers of the target language, and to spend their classroom time producing extensive monologues. In fact, considerable fluency *is* necessary on the instructor's part, but again, it is not sufficient. Krashen says that "...the defining characteristic of a good teacher is someone who can make input comprehensible to a non-native speaker, regardless of [the latter's] level of competence in the target language." (p. 64). In short, there is no point in applauding one's own use of the target language as the medium of instruction if students do not have a clue as to what is being talked about in their classes. Such "use" of the target language counts as noise, and not as a medium of instruction.

With this general introduction behind us, we can now look more closely and identify some conditions under which *the model itself predicts failure* to acquire the target language. I stress that these predictions of failure are entirely internal to the model, and form part of the Input Hypothesis itself. An independent question is the extent to which the hypothesized conditions under which the model predicts *success* can be created in the standard high school or university language program. We will look first at the construct of the Affective Filter, and then at conditions on the nature of the comprehensible input itself.

As Krashen has noted, the presence of comprehensible input in the students' environment is *necessary*, but not *sufficient* for acquisition to take place; it is also necessary that the Affective Filter be suitably low. Thus, the first factor we identify in examining the potential for success of the Input Model is one over which we as instructors can exercise relatively little control. In the foreign language classroom, the most direct way to lower our students' Affective Filter is to provide a non-threatening environment, perhaps by not demanding premature production, but not intimidating them with counterproductive correction strategies, and by not communicating to them that our sole mission in life is to catalogue their linguistic sins. But other variables which together constitute an Affective Filter, variables such as level and type of motivation, attitude, self concept, ego permeability, degree of ethnocentricity or xenophobia, tolerance

for ambiguity, and so on, remain largely beyond our control.

Nevertheless, we can deal *cognitively* with our students' perceptions of the target culture and its speakers, reinforcing and expanding on positive and accurate impressions while amending or reinterpreting any common misinformation. At the very least we can help our students recognize the shared personal and sociological needs that bind all of us together, without allowing the focus always to settle on the differences in coping strategies that often seem to divide us (Tuttle, 7). Accurate information is a promising treatment for common knowledge, hostile perceptions, and negative stereotypes, and may contribute to lowering the Affective Filter. Although we cannot expect to sell our love and compassion for everything associated with the target language and the culture of its speakers to students who are in the class only because their parents think it is a good idea, or because some foreign language is required, or because their "significant other" is also taking the same class, we can make some positive moves in that direction.

Shifting our attention now to the matter of comprehensible input, there are enough conditions placed on its nature and substance that we will do well to make some of them explicit. A close reading of Krashen reveals at least five hedges *against* the bet that providing comprehensible input in a positive affective environment will guarantee acquisition. That is, if any of the following conditions obtain, even conceding that the input is comprehensible to the putative acquirer, the model's prediction is that acquisition will *not* take place.

1) The input may be comprehensible, but there is no $i + 1$ present because the level is too low. My own lack of ability in French is a good example of this. Any attempt on my part to communicate anything other than a greeting in French merely proves that I am incapable of sustaining a conversation. Nevertheless, the secretary of the French Department at San Diego State, until I finally confessed myself, was quite convinced that I was indeed a fluent speaker of her language. In the hundreds of greetings that we had exchanged, everything was entirely comprehensible to me, but no additional acquisition ever took place because there was no $i + 1$ in the message.

2) This condition is the contrary of the preceding. The input may be comprehensible, but there is no $i + 1$ present because the level is too high. The listener has enough vocabulary and extralinguistic cues to follow what is being said (that is what makes the input comprehensible), but the grammatical

structures and/or vocabulary that encode the meaning are too far removed from his acquired competence, that is, his Level i , to be considered $i + 1$. They may be only $i + 2$, or they may be $i +$ anything. This often happens when an instructor or other speaker is discoursing on a *content area* that is well known to the listener, and so the morphology and syntax of the target language do not penetrate because they are not necessary. That is, recognition of lexical items alone sometimes can sustain comprehension, independent of additional linguistic structure. Contrary-to-fact "if" clauses are perhaps a good example of this.

3) Closely related to the preceding point is what happens when the input is rendered comprehensible because of all the extralinguistic support structure that the instructor provides. The actual *language* in these cases becomes superfluous, and the instructor might as well be playing charades, or just holding up pictures; the students comprehend *in spite of the language*.

4) The input, while comprehensible *and* containing $i + 1$, may not be interesting to the students. Again, remember that for the model to succeed, the students must be focused on the *message* and not the form. If the message fails to catch their interest, they will not attend to it, and hence even though they may trivially understand it, it doesn't penetrate. Krashen believes that "...this requirement is not easy to meet.... It is very *difficult* to present and discuss topics of interest to a class of people whose goals, interests, and background differ from the teacher's and from each other's." "...The interest-relevance requirement is nearly impossible to satisfy in the standard American foreign language course given in the high school or college, especially when such a course is taken as a requirement." (p. 68). My own feeling differs somewhat from Krashen's on this point, in that I believe that almost any target language data—even something as mundane as learning colors or how to count—can capture and hold students' interest, provided that it be presented in a way that directly involves the students and encourages their active participation in the presentation itself.³ Thus, we might better feel challenged rather than threatened by the desirability of providing *interesting* comprehensible input in our classes.

5) Finally we come to the matter of quantity. Krashen states that the goal of formal, i.e. classroom instruction, is to provide students with a sufficient base so that they can take advantage of the informal environment of the "real world,"

and thus continue acquiring. But we simply do not know—nor does the model speculate about—how much exposure to optimal, comprehensible input is necessary for language learners to successfully make this transition from the controlled and supportive environment of the classroom to the much more impersonal and disinterested environment of the outside world. In the case of child L1 acquisition, we might well ask, "How long does it take for a child to acquire enough language to talk like a six-year-old?" This may sound like, "What color is George Washington's white horse?" but the answer is more or less "six years."

These considerations, which are entirely *internal* to the model, and which follow from Krashen's own arguments, provide a note of caution for the profession. We need to discover believable ways to cope with these problems or limitations of the model, and to ensure that our students are encouraged always to attend to the input at a level that goes deeper than mere comprehension.

External considerations are also valuable in assessing the Input Hypothesis as a possible model of foreign language instruction. Let us first make two observations about the variable of optimum exposure to the target language.

One fundamental question that we need to try to answer is, "How much Spanish, say, will a student be exposed to, assuming 1) that he or she arrives at the university knowing none, and therefore 2) takes three semesters of elementary Spanish in sections that meet five days a week for fifty minutes, 3) follows this with two three-hour intermediate conversation and review courses, and then 4) undertakes a full undergraduate major consisting of 24 semester hours of upper-division Spanish courses?" I will not specify all the arithmetic that underlies the following calculations, but their implications merit careful consideration.

Assuming that there are fifty minutes of quality exposure in every fifty-minute class, at the end of three semesters of daily Spanish classes the student will have had the equivalent of 10.41 days of exposure to the language, assuming that in a natural, i.e. "informal" environment he or she would receive 18 hours of exposure per day. The two intermediate courses would account for another 4.17 days, for a subtotal of 14.59 days in the lower-division program. By the time the student completes the 24 upper-division credits, and graduates with a bachelor's degree in Spanish, he or she will have amassed yet another 16.67 days of exposure to the language. This amounts to a grand total of 31.26 days, or essentially one month.

Note that I have been very charitable in these computations, crediting fifty minutes of quality exposure to each class meeting. Even more charitably, we can double the calculated exposure time to account for equal time out of classes preparing for the time in classes. This increases the exposure time to the language to 62.52 days, or essentially two months. The operative question now is, assuming that someone knew absolutely no Polish, how proficient might we expect him to be after having spent from July first through September first in Warsaw? I, for one, would be delighted if he came home an Intermediate (ILR 1) speaker.

It is interesting to point out that by the above calculations, the exposure time available to an adult foreign language learner taking a full college-level foreign language program—from the most elementary course through an undergraduate major—is very nearly equal to the minimum time associated with the "silent period" in the literature of child L2 acquisition. Yet, according to Carroll's study, the mean speaking proficiency level of graduating foreign language majors in the United States is in the 2/2+ range (Carroll, 1). I infer from this finding that processes other than, and in addition to straight, natural acquisition must be at work in the instructional process.

Time of exposure as a variable in accounting for language acquisition can also be viewed from a long-range perspective. All of us know non-native speakers who are entirely functional in their second or foreign language, but who are clearly not bilingual, in the strong sense of this word, nor even "near-native." Furthermore, many such people have lived literally for decades in an acquisition-rich, monolingual, monocultural environment, which by definition provides not only copious comprehensible input, but copious $i + 1$ as well. Yet, perhaps beyond acquiring additional vocabulary, their exhibited proficiency level does not change over the years. If we look to the Input Hypothesis for an account of this phenomenon, we find that the only convenient explanation for such observed "failure" to achieve native-like proficiency is to claim that the "Affective Filter" must be high.⁴ Such an account, in addition to being intuitively unconvincing, fails, I believe, either on the grounds of observational adequacy, or so extends the explanatory power of the Affective Filter hypothesis as to render it a meaningless construct. A more plausible hypothesis to account for such fossilization would be simply that such speakers find that the communicative demands they routinely make on the second language are well enough met, i.e. positively reinforced, that they no longer attend

sufficiently to the input provided. This latter perspective might well account for the hypothesized "terminal 2/2+" performance profile so often mentioned in the context of oral proficiency assessment (Higgs and Clifford, 3).

Returning to pedagogical matters, it is important to recognize that in the context of the Input Hypothesis, "interlanguage" meets absolutely every criterion of comprehensible input in a low anxiety environment (Selinker, 10). This means that as our students attempt to speak and write the target language, their necessarily flawed attempts at communication are acquirable both to themselves and to their peers, perhaps more so than are our flawless presentations in the target language. When we combine this observation with Krashen's virtual proscription of correction in the classroom, the possible results can be rather alarming.

One final point is that the majority of the research literature cited in support of the claims for the Input Hypothesis assumes a second language or an immersion environment, not a foreign language situation involving formal, classroom instruction. That is, it is most valid in considering strategies of teaching, e.g. ESL within the United States. Offering this same literature in support of a foreign language pedagogy extrapolates what is arguably true for one kind of environment into a very different environment, with few experimental data that in any interesting way account for differences in exposure time and motivation, except to suggest that the foreign language classroom can become an ideal environment for presenting comprehensible input. We must ask ourselves whether a theory that accounts for a significant range of behaviors in an immersion environment is automatically transferrable and applicable to a standard U.S. high school or university classroom.

In conclusion, I have tried to view the Input Hypothesis on its own terms, as a psycholinguistic as well as a pedagogical model. Psycholinguistically, I have suggested that the Input Hypothesis accounts best for behaviors observed in an immersion or a second language environment, and that even so, it fails to account convincingly for much commonly observed behavior, most especially in the area of fossilization and terminal performance profiles. The only account of fossilization, i.e. arrested acquisition, provided by the model is the intervention of a high Affective Filter, itself a loosely defined term in the theory. Pedagogically, I have argued that we cannot with confidence impose intact a model which assumes immersion or a second language environment, and that the latter most ac-

curately characterizes formal instruction at the secondary and postsecondary levels in the United States.

Whether formal foreign language instruction built around comprehensible input and listening comprehension is good pedagogy or not is a vital question. It is also independent of the psycholinguistic and pedagogical claims of the Input Hypothesis (Higgs, 2). But briefly, most professionals readily agree that the goal of foreign language instruction is to help second language students acquire the ability to manifest a multitude of communicative functions, over a broad spectrum of content areas in a variety of social contexts, with an acceptable degree of accuracy. To this end, the Input Hypothesis recommends flooding the classroom with comprehensible input in the form of natural language used for real communication, a recommendation that I find entirely noncontroversial, and with which I am fully in agreement. The issue is whether the rest of the model successfully motivates or otherwise accounts for the promise of this major recommendation, or whether it might be recommending the right technique for the wrong reasons.

NOTES

¹This article is adapted from the keynote address presented at the Arizona Foreign Language Association annual meeting on September 29, 1984.

²I cannot speak for students everywhere, but most of mine think that a subordinate clause must be one of Santa's helpers.

³Tracy Terrell (personal communication) also shares this latter view.

⁵Stephen D. Krashen, personal communication.

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