Developing Academic Language: Some Hypotheses

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Abstract

This paper presents a simple hypothesis and some related sub-hypotheses. The simple hypothesis is this: We develop academic language by reading. Nearly all of the conventions of academic language, its special vocabulary, grammar and discourse style are subconsciously absorbed, or acquired, from reading texts written in the academic style that are relevant to us. If this hypothesis is true, it means a profound reorientation of the field of English for Academic Purposes.

Introduction

The field of language education today is dominated by concerns about the development of Academic Language Proficiency, the mastery of the vocabulary, grammar, and discourse style of academic, or professional language.

The usual approach is to teach these components directly, I argue here that this approach is not only incorrect, but presents students with an impossible task, and that there is a far better path: reading. I present first a brief description of the central hypothesis underlying this claim, the Comprehension Hypothesis, followed by a description of the rival “Skill-Building” hypothesis that underlies the view that academic language should be developed through direct instruction. I also present a brief summary of the arguments favoring the former.

Continuing arguments presented previously in Krashen and Brown (2007) and Krashen (2010), I then present evidence supporting two sub-hypothesis: (1) The foundation for the acquisition of academic language comes from extensive self-selected reading, and (2) The special language of academic language comes from largely from reading academic texts that the reader is deeply engaged in. I also present arguments that the direct teaching/skill-building approach has serious limitations when applied to the development of academic language.

The Comprehension Hypothesis

The hypothesis that we acquire academic language from reading is a special case of the more general Comprehension Hypothesis, which says that we acquire language when we understand what we hear or read. Comprehension of messages leads to “acquired” competence, or implicit knowledge of language, a “feel” for correctness.

The rival to the Comprehension Hypothesis is the Skill-Building hypothesis. The Skill-Building Hypothesis says that we first learn rules consciously and then practice them in output until they become “automatic”: In other words, consciously learned knowledge becomes subconsciously “acquired” knowledge. Skill-Building also holds that we can adjust our consciously learned rules when we are corrected. Thus, output plays several roles in skill-building.

I have argued that there is overwhelming support for the Comprehension Hypothesis. This support includes: (1) Method comparison studies: Comprehensible Input-based methods have been shown to be superior to those based on Skill-Building for beginning language teaching, and for intermediate, or sheltered language teaching. In addition, students in language classes (first and second) that include time set aside for self-selected reading typically make better gains in literacy than students in regular classes (Krashen, 2003, 2004, 2007). (2) Correlational studies: Studies show that those who receive more comprehensible input do better in language development. Most impressive among the correlational studies are those that use multivariate techniques, which allow us to evaluate competing...
explanations in a single analysis. The results of these studies consistently support the Comprehension Hypothesis (see below).

A strong version of the Skill-Building Hypothesis, one that claims that Skill-Building is the only way we acquire language, cannot be correct, because it has been repeatedly documented that language can be acquired from comprehensible input alone, with no direct instruction or any other form of skill-building (Krashen, 1994). In addition, the scarcity of correction and even output (people don’t write that much) places Skill-Building in danger. Also, the complexity of the system to be consciously learned is a serious threat to all strong versions of the Skill-Building hypothesis (Krashen, 1994).

This is not to say that conscious learning is never useful. Rather, the evidence shows that the use of consciously learned items is highly limited (Krashen, 2003). Some aspects of language can obviously be learned, but they must be uncomplicated, and they are not available for use unless strict conditions are met, as outlined in Krashen (1982) and other publications: The person using conscious knowledge must know the rule, be thinking about correctness (focus on form) and have time to apply the rule.

Nor is output per se useless: Speaking can invite comprehensible input through conversation, and writing can make a tremendous contribution as a means of solving problems, which means greater cognitive development. In other words, writing can make you smarter (Krashen, 2003).

**Stage One: Self-Selected Reading**

A secondary hypothesis is that there are two stages in the development of academic language. The first is a pre-academic stage that consists of massive, but not necessarily wide, self-selected voluntary reading. The reading done in this stage provides the competence and knowledge that makes academic reading more comprehensible.

Self-selected reading forms a bridge between “conversational language” and “academic language” (Cummins, 1981). This idea is confirmed by data from Biber (1988), who analyzed texts in terms of linguistic complexity, and reported that fiction fell about midway between conversation and academic texts (abstracts of technical journal papers).

**SSR studies**

Experimental studies comparing the effect of self-selected reading in the form of sustained silent reading with traditional instruction confirm that self-selected reading results in better acquisition of academic language. Students in classes that include sustained silent reading do better than those in similar classes without sustained silent reading on tests of reading comprehension, vocabulary, writing, and grammar. This is true of first and second language studies and holds for children, teenagers, and university students (Krashen, 2004, 2007).

**Multivariate analyses**

Multivariate analyses allows us to pit competing hypotheses against each other in one analysis. I illustrate the method by presenting an analysis of predictors of the ability to use the Spanish subjunctive in a “monitor-free” situation, a communicative situation in which subjects, English speakers who had studied Spanish, were not focused on form. The subjunctive is of interest to us because it is generally associated with more advanced competence, and a more “educated” style; in other words, academic language.

In table 1, the column labeled “beta” presents the strength of each predictor, uninfluenced by the others. It may be the case that two predictors might be related to each other: For example, “study” (years of formal study of Spanish”) could be correlated with “residence,” (years lived in a Spanish-speaker country) in that those who lived in a Spanish speaking country longer might have studied Spanish longer. Multiple
regression controls for this, and presents the impact of each predictor as if there were no relationship among the predictors.

The strongest predictor, by far, was “reading,” the amount of free voluntary reading done in Spanish, stronger than all other predictors including “subjunctive study,” the amount of formal study specifically of the subjunctive. It was also the only predictor to be statistically significant, as shown in the column marked “p” (a value of .05 or lower indicates that the odds of such a result happening by chance are 1 in 20 or less).

Table 1: Competence in the subjunctive in Spanish as foreign language in the US

<table>
<thead>
<tr>
<th>predictor</th>
<th>beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>study</td>
<td>0.0052</td>
<td>0.72</td>
</tr>
<tr>
<td>residence</td>
<td>0.051</td>
<td>0.73</td>
</tr>
<tr>
<td>reading</td>
<td>0.32</td>
<td>0.034</td>
</tr>
<tr>
<td>subjunctive study</td>
<td>0.045</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Spanish as foreign language in the US

Stokes, Krashen & Kartchner, 1998

Thus, comprehensible input in the form of self-selected reading defeated skill-building, as represented by “study” and “subjunctive study.” The analysis also suggests that for late-acquired aspects of language such as the subjunctive, the everyday input one gets simply by living in the country where the language is spoken, is not enough. You need to read.

The “power of (self-selected) reading” to simulate the development of academic language is confirmed in the next three multivariate analyses.

The TOEFL test is considered to be a test of academic language, specifically the academic language competence speakers of English as a second language need to have in order to study at American universities. Gradman and Hanania (1991) examined predictors of TOEFL scores among students who took the test in their own country. Table 2 presents the results of their multiple regression: The amount of pleasure reading done was a significant predictor. “Total instruction” (a representative of the Skill Building hypothesis) and the amount of speaking reported (recall that Skill-Building requires output for practicing what has been learned as well as providing a domain for error correction) were not only less effective predictors, they were in fact negative. Having a teacher who was a native speaker was a strong positive predictor, a result that demands more investigation.

Table 2. Predictors of TOEFL scores: multiple regression (EFL)

<table>
<thead>
<tr>
<th>predictor</th>
<th>beta</th>
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<tbody>
<tr>
<td>extracurricular reading</td>
<td>0.53</td>
</tr>
<tr>
<td>native speaker teacher</td>
<td>0.43</td>
</tr>
<tr>
<td>total instruction</td>
<td>-0.21</td>
</tr>
<tr>
<td>extracurricular speaking</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

From: Gradman & Hanania, 1991

The Skill-Building hypothesis did better in Constantino, Lee, Cho and Krashen (1997). Table 3 presents their multiple regression results for students who took the TOEFL in the United States. But once again, free reading did very well, as did length of...
residence in the US.

Table 3. Predictors of TOEFL scores: multiple regression (ESL)

<table>
<thead>
<tr>
<th>predictor</th>
<th>beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>free reading/books read</td>
<td>0.41</td>
</tr>
<tr>
<td>English study in home country</td>
<td>0.48</td>
</tr>
<tr>
<td>Length of residence in US</td>
<td>0.42</td>
</tr>
</tbody>
</table>

From: Constantino, Lee, Cho & Krashen, 1997

S.Y. Lee (2005) used structural equation modeling, which allows the investigator to examine more complex relationships among variables. Lee reported that the amount of free voluntary reading reported was a significant predictor of English writing performance for university students in Taiwan, and the amount of free writing reported was not, evidence in favor of the Comprehension Hypothesis and evidence against the Skill-Building hypothesis. Her analysis also provided an additional result that can be interpreted as evidence against the Skill-Building hypothesis: Those with stronger beliefs in the efficacy of instruction did not write better.

Case histories

A number of descriptive studies provide evidence for the positive role of self-selected reading in developing academic language.

The TOEFL study

In Mason (2006), six second language acquirers in Japan agreed to engage in a recreational reading program to prepare for the TOEFL. All were former students of Mason’s who had studied English as a foreign language in classes that included self-selected reading of graded readers.

Each of the five chose somewhat different reading material, according to their own interests, with favorite authors including Sidney Sheldon, Paulo Coelho, Judy Blume, and Bertice Berry. In addition, several continued to read graded readers.

Subjects read for different lengths of time, between one to four months, did not take any EFL classes or “study” English on their own during this time, and took alternate forms of the TOEFL test before and after doing the reading. The average gain was 3.5 points per week on the overall test, and improvement was seen on all three components, listening (2.2 points), grammar (3.6 points), and reading (4.6 points). This gain is about the same as one sees with a full-time TOEFL preparation class given in the United States and is consistent with the results of multivariate studies, presented earlier, that show that reading is an excellent predictor of TOEFL performance (Gradman and Hanania, 1991; Constantino, Lee, Cho and Krashen, 1997). (See also Mason, 2011, for an additional case history of an adult reader in English.)

Narrow reading

Narrow reading is the practice of reading texts by one author or about a single topic of interest, which helps ensure comprehension and natural repetition of vocabulary and grammar (Krashen, 2004). This strategy contrasts with the usual classroom approach of trying to do a “survey,” selecting texts of different genres, often written in different eras. Rather, the narrow reading strategy encourages early specialization, gradually broadening reading as interests and knowledge of what is available develop.

Evidence supporting the narrow reading idea includes Lamme (1976), who found that good readers in English as a first language tended to read more books by a single author and books from a series. The evidence also includes Cho and Krashen (1994, 1995a,b), who reported considerable enthusiasm for reading and substantial vocabulary development among adult second language acquirers who read books in the Sweet Valley series; readers rapidly moved from Sweet Valley Kids (second grade level) to Sweet Valley Twins (fourth grade level) to Sweet
Valley High (fifth and sixth grade level). Several readers in these studies had never read a book in English for pleasure before, but became fanatic Sweet Valley fans.

I suspect that many of those who have been successful in using self-selected reading to reach the point where academic texts were comprehensible have been narrow readers. I present here my case, not because it is different from others, but because I suspect it is very common among those who have acquired the academic style.

My early self-selected reading was nearly entirely comic books, which had a far deeper influence on me than anything I read at school. Nearly all were of the super-hero type, and my friends and I were well aware of the each character’s strengths and style. We debated the relative superiority of Superman versus Captain Marvel (who would win in a fight?) and we all knew that Batman deserved extra credit because he was a self-made super-hero, not born with super-powers and not given super-powers by some external agency.

From ages 9 to about 12, it was sports novels, especially baseball stories, and especially John R. Tunis, who chronicled the struggles of a mythical Brooklyn Dodgers team over a decade. The excitement was the game itself, of course, but also the personalities, the problems each player faced, and their ethical dilemmas. I reread the Kid from Tomkinsville when I was an adult, and it still had all the excitement and drama it did when I was 10.

After that, it was science-fiction, and here my reading remained narrow. I specialized in the work of Isaac Asimov, Robert Heinlein, and my favorite, Arthur C. Clarke. These authors were very prolific, but I read nearly their complete works. As was the case in elementary school, school-assigned reading made very little impact on me in high school, whether fiction or non-fiction. My real curriculum was books such as Asimov’s I Robot, Heinlein’s Have Spacesuit-Will Travel, and Clarke’s Childhood’s End. It was this reading, I suggest, that prepared me for academic reading, and I predict that when other case histories are done, they will also show a great deal of self-selected narrow reading.

Stage Two: Narrow Academic Reading

Self-selected narrow reading does not fully provide academic linguistic competence (Krashen, 2010). My claim is that it provides the linguistic and knowledge background that helps make academic reading more comprehensible. The rest of academic competence, I hypothesize, comes from doing a great deal of narrow reading of academic texts, in an area of great personal interest to the reader.

There is evidence supporting the hypothesis that most of academic linguistic competence must come from reading and not from other sources. In his analysis of text complexity, Biber (2006) reports that classroom discourse is closer to conversational language than to academic language. Nor, I suggest, does it come from reading assigned academic texts.

Again, I present my own case. My history of academic reading is, as was the case with earlier pleasure reading, narrow. The first area of academics I read on my own, for my own interest, was the work on Noam Chomsky. I decided early on in graduate school that reading the complete works of Chomsky, in chronological order, was the best way to have a firm grasp of linguistics, my field of study at the time. Reading in chronological order, in the order in which the author wrote, was the best way to have a kind of story, a narrative. I could see how grammatical theory had progressed, how Chomsky dealt with problems in the theory, and I absorbed not only much of his style but also his method of doing science.

Toward the end of my graduate career, my interests changed to brain and language. Once again, I read narrowly and chronologically, working through every study available dealing with left-right brain differences, reading the research on dichotic listening (a method of determining which side of the brain
is in use in listening to stimuli), and brain damage and aphasia, each time starting with earlier studies and working toward the present, and focusing on the work of a few researchers. For dichotic listening, it was Doreen Kimura who, without knowing it, taught me the essentials of experimental design, the careful and steady progress one can make through carrying out study after study, as well as the academic style of writing experimental reports. When I read textbooks on these topics, they simply confirmed what I had absorbed through reading the research.

When I moved to language acquisition and language education, acquiring the specific academic style of that field was a simple matter. I already had acquired a great deal of a related academic style from reading hundreds, maybe thousands, of articles in experimental psychology and medicine.

Gaining academic linguistic proficiency was thus not the result of studying “English for academic purposes”: It was the result of reading articles for my purposes. (I thank Syying Lee for making this observation.)

My case is a case of developing academic proficiency in a first language. I suspect that the sequence will be similar for second language acquirers. One other factor will, however, be present: The positive influence of the first language. Aspects of academic language are similar across languages (Cummins, 1981). Also, the knowledge gained through reading in any language will make input more comprehensible in any other (Crawford and Krashen, 2007).

**Can academic language proficiency be “learned”?**

Current approaches to developing academic language proficiency assume the correctness of the Skill-Building hypothesis: Scholars describe academic language, and these descriptions are then presented to students in textbooks and other teaching materials, and students are expected to consciously learn them.

As mentioned earlier in this paper, there are several reasons why a strong version of the Skill-Building Hypothesis cannot be correct. One that obviously applies to the development of academic language is the complexity argument.

Hyland (1996) presents an excellent example of the complexity of academic vocabulary in his thorough discussion of the complexity of “quite,” e.g. it is both a “booster” (e.g. “the results were quite phenomenal”) and a “hedge” or slight attenuation (e.g. “he couldn’t quite do it”), but after this simple generalization, things get “fuzzy,” as Hyland points out. “Quite” varies in meaning according to stress (e.g. “I QUITE like the idea of walking” (but I’d prefer not), versus “I quite LIKE the idea of walking” (and maybe I will), and whether it comes before or after the article, e.g. “a quite beautiful garden” versus “quite a beautiful garden,” the former expressing “greater commitment.”

He also notes that pedagogical grammars as well as professional linguists differ in their rules for “quite” and notes the inadequacies in their presentations.

Hyland presents data showing that second year business students at a Hong Kong university have not fully acquired the subtleties of “quite.” He acknowledges, however, that the “pragmatic complexity” of “quite” means that it cannot be taught in the usual way: “… the fact that linguists differ in their preferred accounts of its meanings and implications means that classroom activities based on textbook exercises or intuition-based grammars are unlikely to lead to a clear understanding” (p. 103).

A reasonable prediction is that those second language acquirers who have better “quite-competence” are those who have read more, especially in self-selected academic texts of personal interest.

It is easy to find other examples. Other scholars have contributed equally complex descriptions of grammar, vocabulary and text structure, recommending that we teach these descriptions to students (see, for example, Swales, 1990; Schleppegrell, Achugar, and Oteiza, 2004).
Acquisition without learning

I propose that all instances of successful acquisition of academic language are cases of acquisition without learning. I doubt that any member of the human race has ever consciously learned more than modest amounts of academic language through the study of English for Academic Purposes.

This is of course not to deny that people can consciously learn some aspects of academic language. As noted earlier, however, because of the complexity of academic language, it is likely that only a small percentage of academic competence can be consciously learned, and this knowledge is not always easy to access. A useful plan is to determine just what parts of academic language are “learnable” and can be studied with profit.

The assumption has been, however, that all of academic language can be described and then taught. This has been an axiom, not a hypothesis, and has been assumed to be true since the field of English for Academic Purposes began. Even the possibility that academic language can be acquired by reading or by other forms of comprehensible input has not been considered or mentioned in the literature. At a minimum, the hypothesis that reading can contribute should be considered, and, of course, tested empirically.

References


