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ABSTRACT

At an employer's request, a course was developed to improve the speech skills, and remediate fossilized speech, of six Asian engineers and scientists. All had spoken English for many years, and averaged 10 years of residence in the United States. These students were recorded reading a dialogue as well as in free speech. A needs assessment was performed by analyzing the recordings and by tests of grammar and listening comprehension. Based on the results, instruction focused on developing more comprehensible speech, using existing knowledge of vocabulary and structure. Emphasis was placed on suprasegmentals and certain problematic phonemes, with some work on grammatical errors. Techniques were used to stimulate student motivation to improve speech. Instruction consisted of teacher explanations and demonstrations, structured oral practice, communicative activities, and laboratory and home work with language tapes. At the end of the course, three students clearly demonstrated improvement. All students felt they had benefited from the course and petitioned to have it extended. Teaching students with fossilized speech requires a different approach, focusing more on form and paying greater attention to student motivation. Small classes, individualization, and improvement of student self-monitoring are advisable. (MSE)

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Changing Fossilized Speech: What Does It Take?

A paper presented at the TESOL Convention
San Francisco, March 1990

by
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Changing Fossilized Speech: What Does It Take?

Introduction

During this session I am going to share with you information about a course I taught to 6 highly-trained engineers and scientists, all foreign-born, all in the States for many years, and all with fossilizations serious enough to affect comprehensibility. I have taught many fossilized speakers over the years, some with success, and some not. What makes this class particularly interesting is that I had careful pre-and posttest ratings done by independent raters--a time consuming and expensive process. Also, one of the students had been a student of mine in a previous class, not designed for fossilized speakers. In that former class she had shown no noticeable improvement. In the class I am going to describe here, she made considerable improvement, more than anyone else in the class, as a matter of fact.

I am using the term "fossilization" as it is commonly used, to mean the "relatively permanent incorporation of incorrect linguistic forms into a person's second language competence" (H. Douglas Brown, p. 186). I'm assuming you all work with speakers with fossilizations and are aware of the difficulties, or you would not be at this session. The difficulty of bringing about improvement in these speakers has been recognized for a long time. In 1945, Charles C. Fries of the Michigan English Language Institute wrote: "Such students [with fossilizations] with fluency in vocabulary but with no basic control of either the

sound system or the structure, are almost without exception hopeless so far as ever achieving a satisfactory control of English is concerned" (p. 3). Perhaps some students are hopeless, but I believe that with high motivation on the part of the student and skillfull instruction and adequate time, some fossilized speakers can show quite substantial improvement and reach fairly satisfactory levels.

Course Overview

The students in the class I'm going to discuss with you today had all spoken English for many, many years. The average length of time in the States was 10 years. They had all attended graduate school in the U.S., so we can be sure they studied English for many years before coming to the States. All the students were Asians: 3 were from Taiwan, and one each from korea, Thailand, and Vietnam. All had Ph.D.'s. All but one were male.

The course was offerred at the request of a neighboring chemical corporation who wanted to "improve the speaking ability" of certain of their scientists and engineers. The course ran for 15 class sessions of 2-and-a-half hours each (a little less than a typical semester course).

At the end of the course three of the students clearly demonstrated improvement through their tape-recorded pre- and posttests. One student's scores were about the same. One student's pretest recording was defective, so a comparison could not be made. And one student's posttest scores were considerably

lower than his pre-test scores. (I will talk about why, later). I should add that all the students, whether or not their tests showed a difference, felt that they had benefited from the course and wanted a follow-up course, which was denied them.

Samples of Speech

At this time, I want you to hear portions of the pre- and posttests of the one student who improved the most. This will illustrate that I am talking about improvement of fossilized speech, not elimination. (See Appendix A for a tapescript of portions of Min's and John's tests.)

What you just heard was Part 1 of the pretest and posttest. The test consisted of 2 parts. The first part asked students to read a dialogue. The second part required free speaking on two topics. There were two forms, A and B. The dialogue in both forms was the same. The topics were different but matched: Form A asked students to compare family life and structure in their native country to that in the U.S.; Form B asked them to compare the educational systems. Form A asked them to discuss the impact of computers on modern life; Form B asked them to discuss the impact of television. Students who got Form A in the pre-test got Form B in the posttest, and vice versa.

Needs Analysis

I made careful analyses of the pretest recordings to help me decide what to focus on during the course. In addition to the tapes of spoken English, I tested them for knowledge of grammar (with the Michigan Test) and for listening comprehension

proficiency (with the CELT). The average grammar score was 89.6% and the average listening comprehension score was 88.7%. Those of you who are familiar with these tests will understand that these were very advanced learners of English. As a matter of interest, the two people who demonstrated the most improvement in speaking were the one who scored the lowest on these multiple-choice tests and the one who scored the highest. In addition to analyzing the oral pretests, I gave them impressionistic, global scores on pronunciation, fluency, grammar, and overall comprehensibility. The discrepancy between the multiple-choice test scores and the oral test scores was large.

On the basis of the tests, I decided to focus on trying to achieve production of more comprehensible speech, using for the most part their existing knowledge of vocabulary and structure. That might seem obvious, but in English classes there are so many things that can be attended to: vocabulary development, control of complex grammatical forms, listening comprehension, rhetoric, and so on. More specifically, I decided, on the basis of the pretest tapes, to focus on 1) the suprasegmentals--rhythm, stress, intonation, phrasing; 2) certain troublesome phonemes-- /e/ and /ey/, /θ/ and /ð/, /r/ and /l/, for example; 3) the pronunciation of final consonants and final consonant clusters. I thought if progress could be achieved in these areas, improved overall comprehensibility of their speech would result.

The testing formed part of what is often called "the needs analysis." In addition, I spoke several times with the

corporation's personnel department, and I asked my students to fill out a questionnaire on the first day of class.

Motivation

So, what we had were 6 students, all at advanced levels of knowledge of English and with good listening comprehension skills, but with speaking proficiency weak enough to motivate their employer to look for help. Clearly, given the length of time the students had been in the States, we can imagine that the morale of the group had to be somewhat low. Therefore, I made a particular effort to raise it and to stimulate motivation. How? These are the ways I tried to raise morale and stimulate motivation:

1. Made my respect for them obvious
2. Shared my own (and family's) language learning background
3. Presented course not as "remedial" but as "professional development" (I was fudging, here. I do believe the course was remedial)
4. Demonstrated that they would receive individualized instruction
5. Tried to make the language study always seem relevant
6. Told them the responsibility for improving was theirs
7. Assured them they would not lose their identity, they would never, never sound like Americans
8. Built confidence that they could improve: teacher's expertise, past experience, excellent language lab.

Description of the Course

We met only once a week, in the evening (this was not ideal). Classes consisted of some teacher explanation and demonstrations, for example of the English rhythm system (using Judy Gilbert's fine book, Clear Speech), of the production of certain phonemes, or (occasionally) of some grammatical points. There was structured oral practice, with careful attention to form, for example, reading sentences with content words given more time than function words. There were other kinds of class exercises to focus on form (see Appendix B for samples).

We did activities that were more communicative: selling a product related to their work; explaining how to use a piece of equipment; making oral presentations, using overhead projectors (these presentations were videotaped).

Almost every class included 40 minutes or so in the language lab. Students would work independently on Stress and Intonation, Consonants and Vowels, and teacher-made tapes (dictations, grammar, final consonants, etc). I would listen and give corrective feedback.

Each week students took a language tape home to work with during the week. These were made by combining parts of commercial tapes and teacher-made exercises. These tapes seemed to be very popular with the students.

Pre- and Posttesting

As I said, all of the students at the end of the course felt that they had benefited from it, but only three out of five did

substantially better on the recorded posttests than they did on the pretests. (Remember one student's pretest recording was defective.) The three who demonstrated improvement clearly did improve. Let me describe briefly the procedure for scoring them, and then let's listen to some pre- and posttests.

Procedure:

1. Half the students did Form A on the pretest, the other half did Form B. For the posttests, the students who had done Form A did Form B, and vice versa.
2. Neither students' names nor dates were not written on the tapes, only code numbers.
3. Two raters, experienced ESL teachers, rated the tapes using a modified version of the SPEAK test scale. They did not know when they were scoring pretests or posttests.

Now let's listen to John's pre- and posttests, Part 2. John is from Taiwan and had been here for 10 years. He got a Grammar score of 92.5% and a Listening Comprehension score of 94%. (See Appendix A for tapescript.) Now let's listen to Min's pre- and posttests, Part 2. She is from Thailand, and had been in the States for 8 years. She got a Grammar score of 87.5% and a Listening Comprehension scores of 84%.

It is interesting but not surprising that these two who showed the greatest improvement on the speaking test had scored the lowest in pronunciation and comprehensibility in the pretests.

On the other hand, one of the highest scorers on the pretest was the one person whose posttest was rated considerably lower than his pretest. Why? Possible reasons are that the scores reflected the statistical phenomenon of "regression to the mean." Another is that he had been in the country the longest, for 22 years, and was perhaps more deeply fossilized. However, I believe his tapes do demonstrate improvement, but he improved in areas that were not being evaluated. He was considerably more confident--and this led to fewer hesitations, fewer pauses, and more daring. His sentences in the posttest were more complex and longer. His lower score on the posttest reminds me of the same phenomenon in composition development: writers attempt to do more difficult kinds of writing and receive lower scores. This man whose posttest seemed to show no improvement was in fact the most enthusiastic member of the class and the most convinced of its value.

What I Would Have Liked to Have Done

The students in this course were, as I say, convinced that it had been useful, and they petitioned their personnel department to have it extended. Their request was denied. If it had been extended, I would have continued working on oral communication but would have added a writing component to the course. From past experience, I am fairly convinced that fossilized speakers can overcome some of their structural problems through writing instruction. I have a strong hunch that a sustained period of instruction in written English would have

had some effect on the spoken English of the members of this group, but my hypothesis was not to be tested.

Comparison of Course to More Typical Courses

As I mentioned earlier, one of the students, Min, had taken a course with me previously. It was a general course for quite advanced learners of English, a course which I shall call "developmental" as opposed to "remedial." Its objective was to increase the communicative competence of the participants by expanding their vocabularies, teaching them more complex grammatical structures, giving them plenty of practice listening to authentic-sounding dialogs, introducing new language functionally, giving them lots of meaningful communication opportunities.

Min attended this previous course but did not show any noticeable improvement, and I found out later that she did not think the course had been of any use to her. The course that I have been describing here clearly did help her. What were the differences? They are outlined in the following table:

<u>Developmental (General)</u>	<u>Remedial</u>
1. more emphasis on communicativeness and fluency	more emphasis on form and accuracy
2. emphasis on building vocabulary and grammatical repertoire	emphasis on correcting form of present vocabulary and grammar
3. general improvement sought	improvement sought in highly focused areas
4. curriculum designed for generalized audience	curriculum designed especially for current learners
5. attention to receptive as well as productive skills	attention to productive skills
6. control of basic phonological system and grammatical system was assumed	went back to basics

Improvement of Grammatical Structure

On the basis of the original speaking pretests, I had decided to focus on just a few grammatical errors: 1) singular/plural errors, 2) subject-verb agreement errors, 3) past tense errors. (Typical errors of Asian language speakers.) Very little class time was spent on explanations--except for articles (they were hungry for explanations)--but they worked with language tapes focusing on these items. Interestingly, an error count of the tapescripts of the pre-and posttests showed there was some improvement in these areas, but not a great deal. But there was marked improvement in sentence structure... many more well-formed sentences. How can we account for that?

My hypothesis is that it was the oral practice with the language tapes, both in the lab and at home. While I did not assign many tapes for grammatical pattern practice, the tapes I assigned for improvement of rhythm (Stress and Intonation) do in fact provide pattern practice. Students are asked to repeat over and over again phrases and simple sentences to practice stress and intonation. For example,

Mr. Johnson finished eating dinner.

Mary began playing the piano.

Dr. James started making his calls, etc. (p.62)

My conclusion is that while the explicit grammar instruction coupled with grammar drills and more meaningful practice helped somewhat, the biggest factor in the improvement of the sentence construction that the tapes reveal was an unanticipated side-

effect of the work on rhythm. This says to me that pattern practice, much out of fashion in recent years, deserves to be reinstated as a legitimate activity in language learning classes.

What Does It Take?

The title of this talk is "Changing Fossilized Speech: What Does It Take?"

Based on my experience with these students and many others, and based on my the experience of other teachers who have written about their experiences, I would say the following:

It requires from the teacher:

1. a different kind of approach from that used for teaching non-fossilized learners
2. focusing much less on communication and much more on form
3. a high degree of knowledge about our language and very skillful teaching
5. greater attention to motivating

It requires from the learner:

1. a high level of motivation
2. an ability to persevere
3. a high degree of language-learning ability
4. a willingness to change; flexibility

As far as actual classroom practices go, I would say the following seem generally accepted as necessary:

1. small classes and a high degree of individualization
3. attention to improving self-monitoring

In addition, I would add:

1. remedial work on the formation of troublesome phonemes
2. explanations of the English rhythm system
3. much supervised practice with corrective feedback
4. some explanations of grammatical structures, combined with oral drills and focusing activities, such as dictations and dehydrated sentences
5. pattern practice leading to the internalization of simple phrase and sentence patterns.

Additionally, I would like to say that the role of writing instruction in overcoming fossilizations in structure seems a promising avenue for further exploration.

In conclusion, there is no magic bullet. Helping fossilized speakers to break through to a new level requires the most skillful teaching and a willingness to use a variety of practices, as well as requiring substantial time, small-class size, and highly-motivated learners. Most of all, it requires a focus not on communicativeness, not on fluency, but rather a focus on the forms of spoken language.

Changing Fossilized Speech: What Does It Take?

References

- Brown, H. Douglas. (1987). Principles of language learning and teaching (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- English Language Services, Inc. (1967). Consonants and Vowels. New York: Collier Macmillan.
- English Language Services, Inc. (1967). Stress and intonation (Part 1). New York: Collier Macmillan.
- Fries, Charles C. (1978). Teaching and learning English as a foreign language. Ann Arbor: University of Michigan.
- Gilbert, Judy B. (1984). Clear speech. Cambridge: Cambridge University.
- Harris, David P., & Leslie A. Palmer. (1970). CELT (A Comprehensive English Language Test for Speakers of English as a Second Language). New York: McGraw-Hill.
- Rivers, Wilga M., & Mary S. Temperley. (1978). A Practical Guide to the Teaching of English. New York: Oxford.
- Selinker, Larry. (1972). Interlanguage. International Review of Applied Linguistics, 10, 219-31.
- Upshur, John, Leslie Palmer, John Harris, & Geraldine May. (1961). Michigan Test of English Language Proficiency. Ann Arbor: English Language Institute of the University of Michigan.

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Suggested Reading

- Acton, William. (1984). Changing fossilized pronunciation. TESOL Quarterly, 18, 71-85.
- Allen, Wendy, & Sue Waugh. (1986, November). Dealing with accuracy in communicative language teaching. TESL Canada Journal; special issue 1, 193-205.
- Brown, H. Douglas. (1987). Interlanguage (Ch. 9). In H. Douglas Brown, Principles of Language Learning and Teaching (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, 168-197.
- Eskey, David E. (1983). Meanwhile back in the real world...accuracy and fluency in second language teaching. TESOL Quarterly, 17, 315-323.
- Firth, Suzanne. (1987). Developing self-correcting and self-monitoring strategies. TESL Talk, 17 (1), 148-152.
- Graham, Janet G. (1981, October). Overcoming fossilized English. Paper presented at the WATESOL Convention, Catonsville, MD. (Eric Document, ED 209 024)
- Major, Roy C. (1988). Balancing form and function. International Review of Applied Linguistics, 26, 81-100.
- Morley, Joan (Ed.). (1987). Current Perspectives on Pronunciation: Practices Anchored in Theory. Washington: Teachers of English to Speakers of Other Languages.
- Peters, Ann M. (1983). The units of language acquisition. Cambridge: Cambridge University press.
- Ricard, Ellen. (1986, November). Beyond fossilization: A course in strategies and techniques in pronunciation for advanced adult learners. TESL Canada Journal; special issue 1, 243-253.
- Selinker, Larry, & John T. Lamendella. (1978). Fossilization in interlanguage learning. On TESOL '78, 240-249.
- Selinker, Larry, & John T. Lamendella. (1979). The role of extrinsic feedback in interlanguage fossilization: A discussion of "Rule fossilization: A tentative model." Language Learning, 29, (2), 363-75.
- Vigil, Neddy A., and John W. Oller. (1976). Rule fossilization: a tentative model. Language Learning, 26, 281-295.
- Weaver, James E. (1982). TESOL '82 from a testing viewpoint. TESOL AESIG Newsletter, IX, 1.
- Wong, Rita. (1987). Teaching Pronunciation: Focus on English Rhythm and Intonation. Englewood Cliffs, NJ: Prentice-Hall.

APPENDIX A

Transcript of Part 3
Pretest
Min

Well, this seem to be not a very easy topic for me. But when I can think about the impact of the television on the modern life. Some time I think they should more... they should have some more regulations (?) in the audition of the movie, that what should be showed, or what should not be showed ***. Because for example, they have a lot of the action in the T. V., seem to be *** violent that might also affect some of the young people, and also affect some of the people attitude.

And I wish that the movie... I mean the televsion have more *** in the area that what... what should not be released or been seened at home. It's also, beside that, I have the feeling about the impact of the news on the television. And I think especially, if I want to discuss about past election on November 4, I still have the feeling that if possible the media man should try to put, or try to give the idea of the candidates in the equal opportunity, which I found out that in some circumstance its have some more *** related to the candidate which might have the effect into... in the outcome of the election. I could not give any specific example, but from what I have followed the news, start on the time that close to the election days, and I have the feeling that the T. V. doesn't try to give more times to the candidates, that have a chance to speak more freedom or exchange their idea with the audience. Since beside that I think maybe the cost of advertize... advertising in the T. V. is quite expensive, in the term of some candidate... doesn't have enough financial support to back them, to be able to propose the idea and ***....

Comments:

Very poor rhythm
Very poor intonation
Very poor phrasing
Many mispronounced words
Very poor grammatical structure
Frequently incomprehensible

Scores given by raters (averaged):

Pronunciation	1.5
Fluency	2.25
Comprehensibility	1.5

Transcript of Part 3
Posttest
Min

The impact of computers on the modern culture. Some time I think back to about 20 years ago, and I found out that a lot of thing has been change because of the technology in computers. There are so many things that I'd never think that we are be able, that we can be able to do it. But because of the computer technology advance, that led us the possibility of doing a lot of thing. For example, if you want to get the idea about your mortgage payment, there's a possibility that you can get personal computers that have all the detail about the calculations and it can be used in a very convenient way, that you can put the program in and calculate out how much that you can support for each month. As always, some certain thing in the impact of computers, like for the air travelling controls, or the space shuttle, that are some of the examples that shown that it can be develop, with only the modern technologies in computers that we have in this modern time.

We can use computers to develop a type of work that might lead to use a lot of time in the past....

Comments:

- Much better phrasing
- Much better intonation
- Better rhythm
- Better sentence structure
- Fewer mispronounced words
- Considerably more comprehensible

Scores given by raters (averaged):

Pronunciation	2.25
Fluency	2.25
Comprehensibility	2.25

Transcript of Part 3
Pretest
John

The introduction of computer to the world have complete changed our life. The computer replace a lot of job. The computer can be used to process the work, generally secretary can be... secretary can easily handle. The computer can be use, user to control a car and that-uh you don't need-uh to... look the... forget it.

The introduction of the robot combine with the computer have make the life quite easy. In your house, you may find so many *** can be replaced by the computer control. When you go to in your house, you, the computer will control... the garage will open for you and the light and the kitchen microwave all will automatic turn on for you.

In the society, the computer have speed up the progress of the whole activity. In the Wall Street, the information passed is much more faster by computer than the old style telephone or telegrams. The computer can be easily to... applied to the airplane, to the space shuttle, and they shorten distance between person and person, country and country, even this planet to the outer side of the universe.

The second generation of the our life will become predominated by the use of computer. Our young children maybe have to suffering (?) there life by contro] of computer. They cannot have easy....

Comments:

Tightly retroflexed /r/
Poor phrasing
Very jerky
Very choppy rhythm
Poor intonation--very monotone
Many malformed sentences

Scores given by raters (averaged):

Pronunciation: 1.5
Fluency: 1.5
Comprehensibility: 1.5

Transcript of Part 3
Posttest
John

The television changed the life of the human being now. People get education from television. People sell material from television. People purchase the merchandise from television. They spend almost four or five hours of every day to watch television, so people stay inside and have less time to go outside to enjoy the outward activity. The children grow up by watching television, stay indoors without enjoy the fresh air of the outside world.

But some of education organization use television to pass their lessons. You can learn all different kind of technique in science, in mathematics, in social science, and all different kind of knowledges. Even people can received a degree by join the television educational systems.

However, the big difference due to the television is that the people in the world start to become...have...to become short-sighted. You will find out almost about 50% of the people start to wear glasses, just because they have been stayed watching the television, hour in the hours everyday, and day in the day, and year in the years. Due to refraction of the light, and due to the unclerness of the picture, people start to get hurt with their eye, therefore the..this television also bring the.. hurts to the healthy of the human being, but it's educated the people in their knowledge and in their mind.
The te....

Comments:

More relaxed, flexible tongue
Much better intonation
Much better rhythm
Better phrasing
Fewer malformed sentences

Scores given by raters (averaged):

Pronunciation: 2.75
Fluency: 2.5
Comprehensibility: 2.38

Dehydrated Sentences

1. I/ going/ tell/ you/ about/ new/ procedure.
2. Procedure/ big / improvement/ over/ previous/ ones.
3. We / develop/ procedure/ in/ lab/ over/ period/ two/ year.
4. New/ procedure/ design/ reduce/ cost/ and/ shorten/ turnaround/ time.
5. We/ presently/ doing/ study/ of/ effectiveness/ of / new / method.
6. Results/ our/ research / seem / show / new / method/ effective.
7. We / plan / do / further / analysis / in / near / future.
8. Development / of / new / methods / important / to / future / of / company.
9. It/ only / way / keep / ahead/ of / competition.
10. Primary / competitive / tool/ discovering / better / ways/ do/ things.

Cloze Exercise

GPC Separation Mechanism

Fill in the missing function words.

The principle behind gel chromatography _____ based on _____ varying distribution of _____ molecules being separated in _____ void volume (Space _____ the particles) and in _____ pores of the matrix. While very large molecules can only stay in _____ void volume, _____ the volume available for diffusion in _____ pores increases with decreasing molecular size, so _____ small molecules can eventually diffuse throughout _____ entire pore volume. Smaller molecules consequently travel further when passing through _____ matrix _____ large molecules. _____ adsorption effects _____ avoided, _____ substances are eluted in order _____ decreasing molecular size.