linguistics
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cultures

Applied Linguistics for Language Teachers

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with a Foreword by Charles C. Fries

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FOREWORD

The struggle to apply to the problems of foreign language learning the new views of language arising out of "structural" analyses has served to shift the focus of first attention from methods and techniques of teaching to the basis upon which to build these materials. The fundamental feature of the "new approach," therefore, is not a matter of a greater allotment of time, nor of smaller classes, nor even of greater emphasis on oral practice — desirable as these may be. Before any of the questions of how to teach a foreign language must come the much more important preliminary work of finding the special problems arising out of any effort to develop a new set of language habits against a background of different native language habits. A child in learning his native language has learned not only to attend to (receptively and productively) the particular contrasts that function as signals in that language; he has learned to *ignore* all those features that do not so function. He has developed a special set of "blind spots" that prevent him from responding to features that do not constitute the contrastive signals of his native language. Learning a second language, therefore, constitutes a very different task from learning the first language. The basic problems arise not out of any essential difficulty in the features of the new language themselves but primarily out of the special "set" created by the first language habits.

Robert Lado was the first to grasp the significance of these basic facts for the building of efficient valid measures of achievement and progress in mastering a foreign language. He has during the last ten years produced a variety of tests thus built upon a careful systematic comparison of the descriptive structural analyses of two languages — the native language of a group of students and the foreign language these students were striving to master. His comparisons demanded more and more complete descriptions, including not only the narrowly linguistic features but a wide selection of the social-cultural features in which the languages operated. He found similar "blind spots" throughout the whole range of linguistic-social-cultural features — "blind spots" that must be overcome if sound intercultural understanding was to be achieved — the fundamental objective of all language teaching.

This book, arising out of his long and fruitful experience, presents a practical approach to the kind of systematic linguistic-cultural comparisons that must form the basis of satisfactory teaching materials for the "new approach."

<div align="right">Charles C. Fries</div>

PREFACE

This book presents a fairly new field of applied linguistics and the analysis of culture, namely the comparison of any two languages and cultures to discover and describe the problems that the speakers of one of the languages will have in learning the other. The results of such comparisons have proved of fundamental value for the preparation of teaching materials, tests, and language learning experiments. Foreign language teachers who understand this field will acquire insights and tools for evaluating the language and culture content of textbooks and tests, supplementing the materials in use, preparing new materials and tests, and diagnosing student difficulties accurately.

The plan of the book rests on the assumption that we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the native language and culture of the student. In our view, the preparation of up-to-date pedagogical and experimental materials must be based on this kind of comparison. It has been our experience, further, that able foreign language teachers with proper guidance can carry out such comparisons with satisfactory precision, and I assume that psychologists who know a foreign language well can do likewise.

The style of presentation is addressed primarily to the trained teacher of foreign languages. It is hoped that with proper incentive and favorable circumstances he may apply the material to the preparation of better textbooks, tests, articles, and experiments, and contribute to the general improvement of the teaching and testing of foreign languages. If he is not a trained linguist he will not be able to apply the knowledge gained from these discussions to any and all languages, but he should be able to apply it to his native language and the foreign language he teaches. The style is addressed also to psychologists and educational psychologists interested in research on foreign language learning.

The trained linguist should not be misled by the effort of the author to achieve a nontechnical style. The statements and suggestions contained in these chapters can be translated into rigorous formulas that would satisfy him. Some of the linguistic observations presented here have not been previously reported in print anywhere.

This book was begun as part of a larger volume on language and culture testing, yet to be completed. As the writing progressed it became apparent that the discussions of techniques for comparison of languages and cultures had significance for teaching and research as well as for testing. It was therefore decided to release this material as a separate publication before those parts dealing exclusively with testing could be finished.

A great deal of what is brought together here appeared in separate articles in *Language Learning, The Modern Language Journal*, and *Hispania*. Comments by readers and additional experience gained by the author have permitted a more complete understanding of the comparison of languages and cultures.

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THE NECESSITY FOR A SYSTEMATIC COMPARISON OF LANGUAGES AND CULTURES

1. Introduction: Fundamental Assumption.

1.1 The fundamental assumption guiding the preparation of teaching materials at the English Language Institute of the University of Michigan is given by Fries: "The most effective materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner."[1]

Comparisons of English and several other languages were also made in preparation for the English textbooks of the A.C.L.S.,[2] and various articles dealing with partial comparisons of languages appear in the journal *Language Learning* as a contribution to foreign language learning research.[3]

1.2 The same assumption, that in the comparison between native and foreign language lies the key to ease or difficulty in foreign language learning, was applied to the preparation of language achievement tests by Lado.[4]

1.3 A practical confirmation of the validity of our assumption has come from the work of linguists who study the effect of close contact between languages in bilingual situations. They report that many linguistic distortions heard among bilinguals correspond to describable differences in the languages involved. Extensive studies have been carried out by Haugen and Weinreich in this area.[5]

1.4 Research in the psychology of language and in language

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[1]Charles C. Fries, *Teaching and Learning English as a Foreign Language* (Ann Arbor: Univ. Mich. Press, 1945), p. 9.

[2]*Spoken English Textbooks*, ed. Martin Joos, American Council of Learned Societies. Program in English as a Foreign Language (Washington, D. C., 1954).

[3]*Language Learning*. A Journal of Applied Linguistics (Ann Arbor: Research Club in Language Learning). See Index to Vols. 1 through 5 in 5, No. 3-4 (1955).

[4]Robert Lado, "Measurement in English as a Foreign Language, with Special Reference to Spanish-Speaking Adults" (Doctoral dissertation, University of Michigan, 1951). See also articles by Lado in *Language Learning* and *The Modern Language Journal*.

[5]Einar Haugen, *The Norwegian Language in America* (Philadelphia: Univ. Penn. Press, 1953). Uriel Weinreich, *Languages in Contact* (New York: Publications of the Linguistic Circle of New York, 1953).

learning in educational psychology has not as a rule made any conscious systematic use of assumptions of importance of the native language habits in foreign language learning. Yet there is every reason to believe that real progress could be made if such assumptions were to become part of the planning in language learning research.

1.5 Implied in Fries' assumption for effective teaching materials, and as observed in bilingual studies and in testing research, is the fundamental assumption of this book: that individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture — both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives.

2. Significance for Teaching.

2.1 The teacher of foreign languages may wonder why he has to go through the painful business of comparing languages. Is it not his responsibility simply to teach a foreign language? Is it not enough that he should know that foreign language?

Not if our assumption is correct. We assume that the student who comes in contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to his native language will be simple for him, and those elements that are different will be difficult. The teacher who has made a comparison of the foreign language with the native language of the students will know better what the real learning problems are and can better provide for teaching them. He gains an insight into the linguistic problems involved that cannot easily be achieved otherwise.

In practice a teacher may be called upon to apply this knowledge under various circumstances. He may be asked to evaluate materials before they are adopted for use. He may be asked to prepare new materials. He may have to supplement the textbook assigned to his class. And he will at all times need to diagnose accurately the difficulties his pupils have in learning each pattern.

2.2 *Evaluating the language and culture content of a textbook.* On the surface, most textbooks look pretty much alike. Publishers see to it that their books look attractive and that the titles sound enticing. That is part of their business. If a teacher is professionally trained, however, he will be able to look beyond attractive illustrations and handsome printing and binding.

He should be able to see whether the book presents the language and culture patterns that form the system to be studied, and does not merely list disparate items from here and there. He should also be able to discern whether the book gives due emphasis to those patterns that are difficult because they are different from those of the native language of the students.

Some books, advertised as panaceas for easy learning of a foreign language, simply present a few patterns that are similar to the native language and spend a good many chapters, sometimes an entire volume, on them. The untrained teacher and student may get the impression that the book does simplify the learning of the language. But in reality it does not teach the foreign language; it merely entertains teacher and student in easy but unproductive activity. That weakness is immediately laid bare by comparing the two languages.

Textbooks should be graded as to grammatical structure, pronunciation, vocabulary, and cultural content. And grading can be done best after the kind of comparison we are presenting here.

2.3 *Preparing new teaching materials.* More and more the teacher is faced with the need to prepare textbooks and other teaching materials that are up to date and meet the needs of the particular students he is interested in. The most important new thing in the preparation of teaching materials is the comparison of native and foreign language and culture in order to find the hurdles that really have to be surmounted in the teaching. It will soon be considered quite out of date to begin writing a textbook without having previously compared the two systems involved.

Other advances in techniques of presentation of language and culture should not be neglected, but the linguistic comparison is basic and really inescapable if we wish to make progress and not merely reshuffle the same old materials.

2.4 *Supplementing inadequate materials.* Commonly, the teacher finds that he is given an assigned textbook that he finds inadequate both as to linguistic and cultural content. The teacher who has systematically compared the two languages will be able to prepare supplementary exercises on those patterns which are important or difficult and have been overlooked or treated inadequately in the book.

2.5 *Diagnosing difficulties.* The teacher will at all times in working with his students be faced with the need to diagnose quickly and accurately the problems troubling a student. Much misinformation and many misleading explanations can be and are given students in the attempt to help them. Knowing not only what

the pattern is, but knowing precisely what feature in that pattern is troubling the student and what different feature he is substituting can lead to a simple hint or pointer that may solve an otherwise baffling situation. The professionally trained teacher should notice not only a "foreign" accent or an "incorrect" form but a clear-cut, specific distortion of a sound, construction, or cultural pattern.

3. Significance for Testing.

3.1 A major advance has already been achieved in tests of English as a foreign language, largely as a result of the linguistic comparison of English and the native language of the student. With the results of such a comparison we know pretty accurately just what the learning problems are, and we can concentrate our ingenuity on how to test them. It so happens that language problems are very stable and specific, and we can observe our results rather well.

Language testing in the past had tended either toward rules and lists of words or, as a reaction against that extreme, toward another extreme: reading of connected passages, writing a composition, conversing, or listening to connected materials, without regard to their language content. The testing of rules and lists of words did not have many wholehearted friends, in the United States at least. It was already out of fashion, and rightly so, if for no other reason than because knowledge of rules and memorization of lists of words seemed to bear no relation to being able to speak the language and understand it or even to read it.

The reaction against rules and lists of words turned to what seemed like a "common sense" solution: the use of connected materials. The failure in the use of these lay in disregarding their language content. The number of passages and compositions that could be expressed in language are infinite, and it is easy to find a passage or a composition topic in which one might do badly even knowing the language. How well would the average reader do if asked to write a five-hundred-word composition explaining the theory of relativity even in his native language? How well would he understand a professional lecture on that topic in that same language?

The advance in English language testing came not from connected material but from concentrating on the language problems as they actually are. And we get closest to the language problems by a systematic comparison of the native language and the foreign language. The alternative attempt, to find valid problems

by the statistical treatment of connected material which is not chosen linguistically, does not seem productive. It will tend to leave out problems that are important. It will tend to include problems which are not properly language. And it involves elaborate tabulation of large amounts of materials that could be avoided. Statistical treatment has its place in the refinement of the test, not in the selection of language problems.

The application of linguistic comparison to testing seems a most promising field. There is little doubt that the results will be rewarding. The application of the techniques of linguistic comparison to cultural comparison is now being explored and has already shown positive results for testing of cultural understanding.

3.2 *Progress in testing pronunciation.* Nowhere is there a more dramatic case of progress in language testing than the one which is taking place in testing pronunciation. In less than five years the testing of pronunciation in English as a foreign language changed from the realm of intangibles to become the easiest, most accessible area of language testing. And this change is directly connected to the application of phonemic linguistic comparison to the selection of the problems to be tested.

We used to talk in vague terms about foreign accent, comprehensibility, amusing errors in pronunciation, and the like, or we avoided the problem of testing pronunciation altogether. We can now test the entire sound system of a language in a test of reasonable size, and we can score the test objectively. We can test the student's perception of the significant sound contrasts of the language through his comprehension of carefully chosen sentences. We can test that perception by asking him if two sentences he hears are the same or different. We can test his production of the significant sounds by forcing him to utter carefully chosen sentences. And we can test his pronunciation indirectly by asking him to say whether certain sounds whose symbols are omitted in a printed test are the same or different to him.

These techniques for testing pronunciation may seem the real contribution, but the fact of the matter is that they could not have been devised if we did not know quite specifically what problems we were trying to test. And even if the techniques alone had been devised, they would remain pretty ineffective unless we were able to sharpen them to get at the pronunciation problems of our students.

3.3 *On grammatical structure.* Had the study of grammar remained a matter of memorizing rules of artificial correctness,

or had it remained a matter of arguing over this or that expres-
sion as correct or incorrect, there would not be any point in
comparing two grammatical structures for testing purposes.
Grammar as grammatical structure — as patterned elements of
speech that convey meanings in a language — permits a new view
of the testing of grammar. We do not test the student on the
correctness of this or that phrase. We test him on his compre-
hension of the grammatical meaning of the sentence, or we test
his ability to express a grammatical meaning through the patterns
of the foreign language.

The view of grammar as grammatical structure opens the way
to a comparison of the grammatical structure of the foreign lan-
guage with that of the native language to discover the problems of
the student in learning the foreign language. The results of such
a comparison tell us what we should test and what we should not
test, it helps us devise test items and techniques that also look
quite acceptable from a common-sense point of view, and — this
is the important consideration — we can actually test the control
of the language on the part of the student. We have already de-
vised techniques involving sentence comprehension, continuing a
conversation, and reconstructing incomplete sentences that actu-
ally bring out specific problems in mastering the grammatical
structure of English.

3.4 *On vocabulary testing.* The vocabulary of a language is
inadequately represented by any list, even if it is a frequency list.
Some words are used primarily for grammatical functions, others
are used as substitutes for other words, and all have various
meanings and uses. Because of the large number of words in any
language, we have to select a sample for testing; we cannot use
all of them. And a sample will not be valid unless the various
kinds of words are adequately represented.

Now, the moment you select a random vocabulary sample in a
foreign language you immediately discover that some words will
be easy because they resemble native-language words, while
others will present various kinds of difficulties because they
differ from the native language in various ways. We can, there-
fore, make a further selection of the vocabulary to be used in a
test by comparing it with the native-language vocabulary of the
students. The result will be a more compact, more effective test
through selection of words that are representative of the vocabu-
lary difficulties that our student will find and through selection of
those features of meaning that will be most revealing.

3.5 *Cultural understanding.* The idea that we might be able to

test the understanding of a foreign culture objectively seems impossible to most people today. We know so little about the structure of our own culture, let alone that of a foreign one. And how can you compare cultures anyway?

Even though this is virtually a virgin field, we have already been able to describe specific patterns of behavior in a given culture and through comparison with the native culture of the student we have discovered that there are certain misunderstandings that take place again and again. Good experimental test items have been worked out from the information yielded by that partial comparison of cultural behavior, and we have every reason to believe that much more complete testing of cultural understanding can be carried out with present tools.

4. Significance for Research.

The same error that held back progress in language testing — that is, the assumption that any sample of a language represents the learning problems for that language — is holding back progress in research on the psychology of language learning. Not knowing what the learning problems are, experimenters adhere only to the externals of experimental design, and their results are either invalid or meaningless. How can we design a meaningful experiment on the effectiveness of an oral technique if we do not know specifically what the student is to learn, and what he already knows because it is the same as in his native language? Major experiments in recent years have proved inconclusive because the experimenters made no distinction between those elements of the language that really had to be learned and those that did not. Simply speaking some sentences and checking comprehension does not ensure coverage of what the student has to learn, and certainly two sentences are not linguistically the same simply because they rank the same in difficulty.

Lacking specific understanding of the language problems that merit research, some psychologists have taken refuge in mass experimentation. If we use hundreds or thousands of subjects we average out any inequalities in our data, they argue. The sad result may be that they also average out the very differences that would give the information desired. And since mass experiments are not possible without major financial support, the great possibilities of individual research are discouraged or even lost.

By using the results of linguistic and cultural comparison of the native and the foreign languages and cultures, we can pinpoint our research problems, and individuals can carry out highly significant and sorely needed experiments singlehanded.

5. Significance for General Understanding.

A good-hearted person, anxious to help toward the unification of mankind, wondered if this business of comparing languages and cultures did not tend to divide. Was it not better to ignore the differences, she thought. Were we not all the same fundamentally?

Certainly I believe that we are all one flock, that we are the same fundamentally. But because human personality has evolved a variety of ways to live, ways that we call cultures, we constantly misinterpret each other across cultures. If we ignore these cultural differences we will misjudge our cultural neighbors — as we constantly do at present — for a form of behavior that to them has one meaning may have another one to us. And if we do not know of the difference in meaning we will ascribe to our neighbors the intentions that the same behavior would imply for us, and would pass on them the same judgment as on our confreres. In fact, I am afraid that we do exactly that in most cases at present.

If, on the other hand, we know that an item of behavior has a different meaning in the other culture we will not misunderstand. And we will have a chance to understand ourselves and what we do much better as a result. We will be able to establish genuine habits of tolerance, rather than naive good intentions that crumble the first time our cultural neighbor does something which is perfectly all right in his culture but strange or misleading in ours. In visiting a foreign country we will actually be able to enter into its life and understand and be understood.

Again, in the realm of language rather than that of culture as such, the harm that we do our students by not teaching them a foreign language or by teaching it as if it were just different words from those of our own language lies in the false idea they will hold of what it means to learn a foreign language. They will never be ready to struggle to pronounce things in different sound units, different intonation, different rhythm and stress, different constructions, and even different units of meaning unless they realize that this is exactly what's involved in learning a foreign language, and that although learning those things will require effort, often dull and uninteresting, the rewards for the effort will be great.

We have explored some of the many contributions that systematic comparison of native and foreign language and culture can make to education and research. The following chapters present working techniques to carry out specific comparisons of two systems of pronunciation, grammatical structure, vocabulary, writing, and cultural behavior.

Chapter 2

# HOW TO COMPARE TWO SOUND SYSTEMS

1. Introduction.

1.1 *The phoneme*. It is important to keep in mind that the sounds of human language are more than just sound. The *p* of *pin* is exploded with a puff of air following it, whereas the *p* of *capture* is not. Those two sounds are quite different as mere sound. But in English we say they are the "same," and they are, because they function as the same unit in the sound system of English. These functioning units like English /p/ are called *phonemes* by structural linguists and usually will be enclosed in slant bars in the text.

1.2 *Phonemes are not letters*. Sometimes a letter of the alphabet may represent a phoneme, as the *p* in *pin* and *capture*, but a phoneme is never a letter; it is a unit of sound. Chinese does not have letters, yet it has phonemes. And even the letter *p* does not always represent the phoneme /p/ in English. Take for example the letter *p* in *telephone*. It certainly does not represent the phoneme /p/ there. Phonemes are units of sound that exist in all the languages we know, whether or not they have ever been written.

1.3 *Phonemic versus non-phonemic differences*. Is it not a paradox that two sounds which are different as sound, for example the *p*'s in *pin* and *capture*, are considered the "same" phoneme? It may seem so, but it is quite easy to understand if we realize that there are two kinds of differences in the sounds of a language. One kind is represented by the difference between the exploded, aspirated *p* of *pin* and the unexploded *p* of *capture*. This difference is never used in English to distinguish any two words. Even if we artificially pronounce *capture* with the *p* of *pin*, it will remain the same word. We will call that kind of difference *non-phonemic* or non-significant. The other kind of difference is represented by the phonemes /p/ and /b/ in *pin* and *bin* for example. This difference is constantly used in English to distinguish words. We call it a *phonemic* difference. All languages have hundreds or even thousands of non-phonemic differences. On the other hand, any one language has a relatively small number of phonemic distinctions.

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The clear understanding of phonemic differences is the con-
tribution of modern structural linguistics. This level of analysis,
the phonemic level, is the "new" thing in the study of the sound
systems of languages.

1.4 *A sound system.* A phoneme is a complex unit in the sys-
tem of a language. The English phoneme /p/, for example, con-
trasts minimally with /b/ in the pair *roping* and *robing* and many
others. In that particular pair, the voicing of /b/ is the dominant
feature of difference — in /b/ the vocal chords continue to vibrate
to produce voicing, while in /p/ they are silent for a split second.
The same phoneme /p/ contrasts minimally with /f/ not by voic-
ing but principally by manner of articulation in the pair *dipper:
differ.* A difference in point of articulation accompanies the con-
trast but does not decide it. The same phoneme /p/ contrasts
minimally with /t/ not by voicing or manner of articulation but by
point of articulation. Other contrasts such as /p/ and /m/, /p/
and /k/ depend on still other features of articulation. The point
is that English /p/ is part of a system of contrasts which are
peculiar to English and which operate now in one direction, now
in another. We would really need a many-dimensional model to
represent all these interacting contrasts. The phonemic field of
English /p/ might be partly represented by a figure such as the
one that follows.
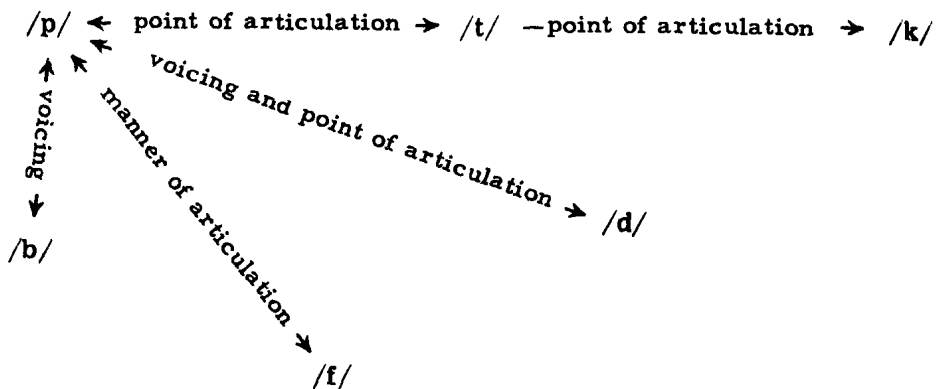
1.5 *A system of habits.* The amazing thing is that a normal
speaker of a language uses this complex system of contrasts with
great speed and the greatest of ease. He is not even aware in
most instances that he is using such a system. This feat can be
accomplished by reducing most of the operation of the system to
automatic or semi-automatic habits.

1.6 *Great strength of the system.* Probably because the use of the sound system of a language operates as a system of automatic and semi-automatic habits, it is extremely difficult to change anything in that system. There is an unbelievably strong force binding the units — the phonemes — of any language in their complex of contrasts. The adult speaker of one language cannot easily pronounce language sounds of another even though he has no speech impediment, and what is even more startling, he cannot easily hear language sounds other than those of his native language even though he suffers no hearing defect.

1.7 *Transfer of native sound system.* We have ample evidence that when learning a foreign language we tend to transfer our entire native language system in the process. We tend to transfer to that language our phonemes and their variants, our stress and rhythm patterns, our transitions, our intonation patterns and their interaction with other phonemes.

Production distortions. Thus we can understand the widely observed fact that the pronunciation of a German speaker learning English is quite noticeably different from that of a Spanish speaker learning English, and both are quite different from that of a Chinese speaker learning the same variety of English. And we understand further that the distortions in the English pronunciation of a German speaker will bear great similarity to the distortions of other German speakers, just as the distortions in the English pronunciation of a Spanish or Chinese speaker are similar to those of other speakers of the same language.

Perception blind spots. Much less known, and often not even suspected, may be the fact mentioned above that the speaker of one language listening to another does not actually hear the foreign language sound units — phonemes. He hears his own. Phonemic differences in the foreign language will be consistently missed by him if there is no similar phonemic difference in his native language. The Thai language makes a phonemic distinction between aspirated and unaspirated *p*. In English that difference is not phonemic, and as a result English speakers learning Thai usually do not hear the difference between the two *p* sounds in Thai.

1.8 *Comparison of sound systems.* We now see more clearly the need for comparing the native and the foreign sound systems as a means of predicting and describing the pronunciation problems of the speakers of a given language learning another.

Since the transfer is usually in one direction, from the native language to the foreign language, an analysis with English as the