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UNDERSTANDING VARIETIES OF THE TARGET LANGUAGE

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INTRODUCTION

There are different ways of speaking a language, and this has often been seen as a problem for language pedagogy. Discussions within this area have focused on the question of what target language variety to use as a model for the learner's productive competence, although a distinction is seldom explicity made betweeen productive and perceptual competence in these cases. In countries such as Canada and Finland, where a minority language of each country, i.e. French and Swedish respectively, is extensively taught to the majority population at school, and where these languages are at the same time national languages of another country, the question arises whether to choose the variety spoken by the minority within the country or the variety considered as standard in France and Sweden respecively.

The choice of model for the learners is equally discussed in countries where the target language is *not* spoken as a mother tongue by any group of natives. In Sweden, for example, British English has been the traditional model for learners of English. Today, however, students are given a choice between British and American English at the university level. A number of points related to choice of an English model for Swedish learners have been discussed by Tottie 1976, among other things in the light of linguistic studies of language variation.

The amount of attention the choice of target language model has been given is probably in part due to the fact that this question is a typical "within" classroom problem. It is directly related to matters of teaching.

In this paper I will concentrate on another problem that arises from the fact that there are different varieties of the target language. This problem is encountered by the learner when engaged in real communication situations. In real communication, the learner will find that the target language is spoken to

him in many ways, and for communication to take place, the learner will have to cope perceptually with all these varieties. That it is difficult to understand different varieties of a second or foreign language is of course generally acknowledged. Nevertheless, very little has been done to help the learner with these difficulties in a systematic way through teaching, and literature on second language teaching contains few disdussions of the question. I assume the reason for this lies in the fact that the problem is a typical "outside" classroom problem, especially so in courses of foreign languages given in the native country of the learner, e.g. when English is taught to Swedes in Sweden. The pupils will often not be engaged in real life communication until years later. In the teaching of a second language in the target language country, such as when Swedish is taught to immigrants, for example, the distance between the classroom and the world outside is a little bit smaller. The learners have opportunities for getting involved in target language communication immediately after and often also during the courses.

A common situation also in this case, however, is that the learner has learnt to understand the teacher's variety of the target language during course study, but finds himself having great difficulties in understanding other speakers of the target in normal communicative situations.

Four questions could be asked at this point:

What are the characteristic features of the languageteacher language, and what knowledge, explicit and implicit, can the learner construct from this model?

What kind of language variation is it the learner encounters in real target language communicative situations?

What kind of target language variation is most difficult for the learner to cope with?

How can the gap between language-teacher language and normal varieties of the target language be bridged in pedagogical practice? If we knew more about the variety of the target language that teachers typically display in the teaching situation and the spectrum of varieties used outside the classroom, we should be able to specify what materials and procedures should be needed to supply the learner with adequate training in understanding other varieties of the target.

In the following sections, I shall deal with the four questions mentioned. It should be stressed that what is said about the language-teacher language and the spectrum of varieties found in the target is not based on actual research into these questions. Rather, the exposition should be taken as a suggestion for areas which need to be dealt with to reach a better understanding of what should be done to support the learners' progress towards the target.

THE LANGUAGE-TEACHER LANGUAGE

The variety of the target language that the teacher uses in the classroom will function as the main model for the learner's productive repertoire in the target. Depending on the situation, i.e. whether the language learning occurs in a target language environment - as is the case for immigrant education - or in a native language environment, there will be other models available to different degrees. In many cases, the teacher's variety will also be the one or the only one the pupil is trained to understand (cf on this point for courses in Swedish for immigrants Josefson 1977). The teacher variety thus can be seen to have great importance for the learner's development of both productive and perceptual competence.

What, then, are the characteristic features of the teacher variety of language? The first hypothesis concerning the teacher variety is a general one. It states that the teacher's variety is optimalized, i.e. it is adjusted to the learner's developmental level to achieve maximal mutual understanding in teacher-learner communication. Then, what means are used to achieve such optimization? Below, I will enumerate a number of hypotheses about characteristics of the language

teacher variety, which may be considered as means for optimizing the communication. The hypotheses are in most cases based on observations made in a series of listening-in sessions (auditions) in classrooms where Swedish is taught to immigrants in Sweden, but also on common sense knowledge of language teaching. The results of Henzl's investigations of languageteacher language and other kinds of speech addressed to foreigners, for Czech, English and German (1973, 1979), support our hypotheses, particularly in the areas of syntax, lexicon, and phonology.

Turning then to characteristics of the teacher's variety, we may start by pointing to the obvious fact that the speech of all teachers is characterized by some regional, social and sex etc. variety of the target language. All regional varieties are represented among teachers of Swedish to immigrants, or rather, there is no constraint as to this guestion in the official documents that regulate the teaching (Läroplan i svenska för vuxna invandrare 1971, Svenska för vuxna invandrare, Allmänna mål och riktlinjer för undervisningen, 1978). The socially determined variation in speech is of course less. Only people with longer education are represented among the teachers, but the variation at this point among teachers for immigrants is certainly greater than among other groups of language teachers. The vast majority of teachers within the field are women (cf Tingbjörn 1978). Now, do these facts about the teachers' language have any consequences or bear any relation to optimization? Are certain regional, social, and sex varieties inherently easier to understand and use as models than others? Although the answers to these questions might be affirmative, I will not try to construct hypotheses in these general areas, but rather turn to more specific ones.

We can consider the teacher's variety on a number of points pertaining to various inherent aspects of language, structural and communicative. The following points will be considered:

Grammar	Turn-taking
Phonology	General conversational structure
Lexicon	Redundancy
Semantic notions	Metacommunication
Language functions	

Can we say that the *grammar* of language teacher varieties differs from that of other varieties of the language? We might hypothesize that the *grammatical register* is narrower than in normal language use. Considering interrogative structures in Swedish as an example, the (a) type of questions below seems to be preferred to the (b) type, even in situations where the (b) type would have been the appropriate choice (with literal English translations):

- (a) Vad ligger under bordet? 'What is under the table?'
- (b) Vad \u00e4r det som ligger 'What is it that is under the under bordet? table?'

Sentence (a) was uttered by one teacher when questioning about objects on a picture, i.e. when the picture was studied by both the teacher and the pupil. Later, the picture was removed and the questioning went on in the preterite about what was just seen in the picture. The following question was uttered:

(c) Vad låg under bordet? 'What was under the table?' instead of the more appropriate form

(d) Vad var det som låg 'What was it that was under under bordet? the table?'

The distinction between the two types lies in their different presuppositions as to the amount of common knowledge. Type (a) and (c) is used for example in situations where the interrogator has no assumptions as to the reply to the question.

I think this example illustrates something that might well be a general characteristic of language directed to people not in full command of the language used. Some syntactic structures are experienced by the native speaker as more complex than some other more or less closely related structures (cf Kellerman 1978). The (a) and (c) sentences above are syntactically simple,

while the (b) and (d) sentences are more complex with their clefted interrogative word. The syntactically more complex question thus seems to be avoided in favour of the simpler one, even to the cost of not being quite appropriate. This could be seen as a trait fitting in with other characteristics of foreigner talk (Ferguson 1971), even if this type is less obious than those features of foreigner talk usually mentioned, i.e. deletion of inflections, disregard of function words, etc. However, even varieties characterized by these features are heard among language teachers as noted by Nemser (1971:118). Hatch (1978:416) gives the following rather amusing examples from a native teacher of English:

(Explaining 'bath' and 'to bathe')
In your house. You ... house. A tub. You (+gesture) wash.
(Explaining how to take telephone messages)
I want speak other person. He not here. What good thing for
say now?

(Talking about individual interviews) Not other student listen. I no want. Necessary *you* speak. Maybe I say. 'What is your name?' The writing not important.

If our hypothesis about the grammar of the language teacher should turn out to be true, we can conclude that the teacher's variant is only an incomplete model for the learner's productive and perceptual competence in the target. It has, however, an optimizing effect in that the learner is confronted with a less complex variety of the target than will be encountered in real communication.

What about teacher varieties of *phonology* then? One feature that can be observed is that the teacher uses a slow and very distinct variety of the target. To do so is probably necessary in certain phases and parts of teaching. This is especially true if illiterate people are taught, since they can not use the graphic representation of the word as a base for establishment of basic forms of the target language lexical units. The problem arises if the teacher uses a slow and highly explicit pronunciation. This results in unnatural segmental and - in particular - prosodic characteristics of the utterances, and the learner does not find a model for the typical rythmical patterns of the target language. A slow and distinct pronunciation also eliminates the reductions that are made in the target language, as well as some assimilations. Thus, the learner will not find a model for these features either. Sometimes the teacher can be observed to use hypercorrect pronunciation as a result of his attempts of being maximally understandable.

To speak slowly and distinctly is an obvious way of optimizing one's speech, and again, we have a feature that makes the teacher's variety of the target easier to understand than most other varieties.

Is the teacher's *lexicon* peculiar in any way? The hypothesis is that the teacher is aware of which words can be understood by the pupils at any time in the learning process. The vocabulary used may therefore be adjusted to the learner's knowledge, and thus restricted. An interesting hypothesis according to which this adjustment follows universal principles of simplification, based on the individuals' semantic competence in their mother tongue has been proposed by Levenston and Blum (1977). Their hypothesis has later been studied in the context of language-teacher language in Blum and Levenston (1978). This study gives support to the hypothesis.

The topics that are spoken of in the classroom do of course determine what lexical items will be come across to a large extent. The topics in turn are often determined by the teaching materials used in the particular teaching situations (cf Andersen and Risager 1978), but also by the particular interests and attitudes the teacher may have. The vocabulary used in the classroom can be restricted in accordance with restricted topics of conversation. This also has an optimizing effect on the teacher-learner communication. The learners understand the vocabulary used in class, but have great difficulties in understanding the words when other topics are

dealt with.

The vocabulary used in class is also restricted in another sense. Words with certain social or stylistic values, typically slang and other colloquial words, will not be heard from the model, especially from the native teacher.

The semantic notions that are employed in the teacher's variety of the target language are of course expressed through the lexicon and the grammatical structures which have been dealt above. However, one could of course start the discussion from the point of view of semantic notions and consider to what extent a number of truly important notions are actually expressed in the language of the teacher or whether some are left out. What about the scale of certainly, for example? And, are all the notions of probability, doubt, belief, conviction, etc. represented at some time in the learner's model? One assumption is that broad notions such as *good* and *bad* are used to a greater extent than is normally the case in the target at the cost of more specific notions. What semantic notions are brought up is again to some extent determined by the teaching materials used in the classroom.

As for *language functions*, the hypothesis here is that languageteacher language is characterized by the restricted number of such functions it utilizes. Referring and directive functions are presumably overrepresented at the cost of using the language, for example, to express personal feelings or to avoid or resolve problematic situations (this latter function is among those enumerated by Robinson 1972).

We can hypothesize that the communicative interaction in the second language classroom is restricted by the *turn-taking conventions* which generally apply in classroom situations. The turn-taking is controlled by the teacher, i.e. the teacher has the power to decide who is going to be the next speaker, when a sequence starts and when a sequence can be considered finished (cf Anward 1976:108). The teacher also has the power to decide when new topics can be introduced, what new aspects on old topics can be dealt with, when in a sequence this is allowed and how they are manifested linguistically (Anward & Lundgren 1978). Since all these factors are thus restricted by the specific type of social situation that is in this case the classroom situation, there is less uncertainty in the learner/hearer as to these matters. One can consider also this feature of teacher conversation as an optimizing factor. As regards the productive competence of the learner, the special nature of the classroom situation does not give many opportunities to practice turn-taking conventions in the foreign language. This is particularly serious considering that turn-taking conventions can differ from culture to culture. The turn-taking conventions of the native language can therefor not be directly transferred to the target language.

The *conversational structure* typical of classroom situations in general is presumably also found in the teaching of Swedish for immigrants. The basic sequence of classroom communications can be stated as follows:

The teacher explains or asks something or explains with a terminating question.

The pupil answers with a very simple utterance.

The teacher evaluates the answer.

The fact that this sequence is so basic has an optimizing effect on classroom conversation. The pupils soon learn how to fulfil their role in this kind of communication. As only short and simple utterances are expected from the part of the pupil, the demands on productive and creative competence are smaller than can be expected in normal conversation.

If we take *redundancy* in a broad sense pertaining to communication rather than limiting it to structural aspects of language, the hypothesis here is that the teacher's variety is more redundant than most other varieties. The teacher often repeats what has just been said, paraphrases utterances that are not thought to have been understood by all pupils, makes use of paralinguistic means of getting the message across such as gestures and miming. The teacher also has the blackboard at his disposal where words that are difficult to perceive can be written down, and where pictures can be drawn. All this helps the meaning of an utterance to come across, but most of it is not found outside the classroom. These means of course have an optimizing effect.

Lastly, a word should be said about the *metacommunicative* explicitness found in classroom conversation. The communicative activities are very often commented upon, for example when a command is given a learner to pose a question to some other learner. These metacommunicative comments also have the effect of making classroom conversation more transparent than normal conversation, where it is seldom explicitly stated that what is uttered is meant as a question, a statement, a command, etc.

In conclusion, it seems that most of the characteristic features that may be found in language-teacher language have an optimizing effect on the conversation that takes place in classroom between the teacher and the learner. These features should be seen as a natural effect of this situation. The language teacher reacts on the situation in a natural way and adjusts his language to that of his conversational partners, i.e. the learners. He acts as a normal language user would have done, which means that his language has some features that are common to foreigner talk as we have mentioned above.

The problem is that the language teacher has a very special role to play which in some respects conflicts with that of a normal conversational partner. He must complexify his own language during the language course, so that he is always a short step ahead of his pupils.

I suspect that many teachers have great difficulties in acting in this flexible way. Some seem to use a rather stable variety in class, and when the pupils have reached this variety in their perception of Swedish, they will not develop much further through classroom training. This may be one reason why we have the gap between their ability to understand the teacher's variety of the target language and normal target language varieties. Research strategies for gaining information of language-teacher language will be outlined in very broad terms here, and should of course be worked out in detail before any investigations could start. Different strategies should be used for research on the different hypotheses put forward above.

Data could be collected by participatory observation in different kinds of language courses (auditioning, tape recording, video-tape recording - the last method is especially important when it comes to the study of extralingustic means of communication which may be characteristic of the classroom situation). Complementary data may be elicited through the use of questionnaires.

Methods for analysis and description are provided by existing models for structural aspects of language (Teleman 1974) and communivative aspects (Halliday 1973, Sinclair and Coulthard 1975).

TARGET LANGUAGE VARIATION

Now, we will consider the second question posed above. What kind of language variation is it the learner encounters in real target language communication situations?

To obtain a feasible goal for learning that might be set up in a language course, a minimal requirement would be a description of the target language that is as complete as possible. Such a description should not view this language as a homogeneous object, but take into consideration all variation that the actual learner encounters in target language communication. It is on the basis of such descriptions that it would be possible to construct teaching materials and develop procedures that could be used in a systematic way to help the learners towards the goal of normal receptive competence, i.e. also in matters of understanding varieties of the target language aiming at the competence native speakers have. (Perhaps it should be stressed that increasing perceptual competence for target language variation does not necessarily involve subjecting the learner to all varieties in existence, but rather, enabling him to become flexible or adaptable enough to cope with variants he has never come across.)

Of course, there are no such complete descriptions of any language. However, we do have three kinds of insights: (1) knowledge of the dimensions along which a language varies, (2) descriptions of fragments of the variation found in the target language (in our case Swedish), and (3) an evolving theoretical discussion of the nature of linguistic variation and the methods for describing such variation. These three areas will be briefly commented upon below.

1. Dimensions of variation

The following points specify the most obvious dimensions of variation within the target language (or any language, of course).

Region	Tempo
Social class	Articulatory distinctiveness
Social role	Medium
Social situation	Noise

A particular instance of speech can be characterized according to all these factors. Most of them should be transparent. Others need a few words of clarification. The last two points, medium and noise, are of course different from the others in that these kinds of variation do not result from the way the speaker acts, but are rather external factors which affect the speech signal. The dimensions of social role and social situation are interrelated to a higher degree than the others. By social role is here meant a more constant phenomenon that we take on as members of the society we live in. Sex differences excluding those depending on anatomical differences between the sexes - are thus considered under this point. This is of course to take one step from the empirically observable facts and base one's classification on an interpretation of the sex differences as depending on the different roles men and women play in society.

By *social situation* I understand external environmental factors in a broad sense, such as the number of people taking part in a conversation, the personal interrelationship between

the speaker and the listener, the psysical environment, etc. In short, all these are factors that are usually considered to effect speech on a scale of formality. Different types of group languages can also be considered under this heading, i.e. varieties of a language which a speaker uses more or less temporarily with a certain group of speakers.

These eight dimensions of variation, some of which are in fact extralinguistic correlates of the linguistic variation, affect different features of language and communication to different degrees.

2. Descriptions of variation in Swedish

When we think of examples of areas of linguistic variation in Swedish for which descriptions are available, the area that first comes to mind is that of regional variation. The interest in this field of language description that started a hundred years ago has given us numerous articles and monographs of various dialects and linguistic features of these dialects. Handbooks like e.g. Wessén (1969) give brief summaries of this knowledge. However, to the extent that these studies have been conducted with a view to decribing genuine and pure dialects, they have almost exclusively been studies of rural dialects. (exceptions from this do of course exist, e.g. Ingers 1957.) In other words, the varieties of Swedish described are not those usually encountered by learners of Swedish and are thus of limited value for our purposes - although they provide us with interesting specifications as to what linguistic features can be found to figure in present day regional and social variation.

On the other hand, research on Swedish urban dialects, initiated in the late sixties and modelled on the American and British research in this area, has provided us with both a substantial body of facts about the language of certain cities and, in particular, knowledge of linguistic variation within a region correlating with extralinguistic factors such as social class, sex, age, education etc. These factors, as well as that of social situation, have been the focus of work related to or involving urban dialect studies. For an overview, see Loman

(1978). Work carried out in the FUMS project at Uppsala is especially valuable from a methodological point of view for our purposes (see e.g. Nordberg 1975).

Also available in this context, are a number of studies of specific linguistic phenomena and their regional variation. A recent overview of word accent variation, for example, is given in Gårding (1977), and variation of vowel systems has been considered by Elert (1978).

With respect to *tempo*, this variable has of course effects on many different factors in the speech signal. Its constribution to the assimilation and reduction of Swedish consonant clusters has been considered in Gårding (1974). Rapid *tempo* and low degree of *articulatory distinctiveness* are parallelled by external disturbances of the speech signal in a given communication situation, for example different kinds of *noise* and filtering of the frequancy range by certain *media*. It is common knowledge that all these variables reduce the intelligibility of what is said.

This brief exemplification of what knowledge we have of language variation in Swedish has been given with the purpose of pointing to areas of variation that have been considerad in research. At the same time, I think it is fair to say that our knowledge of linguistic variation in Swedish, as in most other languages come to that, is fragmentary.

For example, we have at present no available description of how central areas of grammar and phonology vary in the three largest Swedish urban dialects - those of Malmö, Stockholm and Gothenburg - which is a lamentable situation in the present context, as these are the three places where most immigrants settle. For the Malmö dialect, we have descriptions of only a couple of features, i.e. the nature of the long stressed vowels and their diphthongization (Bruce 1970) and the word accent pattern of compounds (Bruce 1973). These patterns have also been compared to those of other dialects in southern Sweden (Bruce 1974). However, none of these studies considers the socially determined variation in these areas.

Our lack of descriptive coverage then, becomes painfully obvious when faced with concrete problems such as constructing teaching progressions for immigrants on the basis of virtually non-existent knowledge of target language variation in the area. This situation needs to be amended.

3. Methods of analysis and description of variation

The lack of descriptions of target language variation along those dimensions we might be interested in is of course unfortunate. However, we are methodologically, in a much better position today than we were let's say only ten years ago, when it comes to carrying out descriptions of linguistic variation. This is a result of the theoretical development that has taken place especially in sociolinguistics and variation theory (consult for example Labov 1969, Bailey 1973, Bailey & Shuy 1973, Trudgill 1978, Fasold & Shuy 1975, Bickerton 1975, Dittmar 1976 and Sankoff 1978).

As regards second language acquisition studies, the variationist theoretical framework has only been applied to the productive competence of learners (for phonological aspects in L. Dickerson 1975 and W. Dickerson 1976, for grammatical in Hyltenstam 1977 and Andersen 1978). It is shown in these studies that seemingly chaotic variation in the language produced by second language learners is in fact regular to a certain extent. This regularity in variation has been hypothesized to mirror the change that takes place in the development of the learner's target language competence in the same way as variation in a speech community sometimes mirrors the linguistic change that is taking place within a language (cf. Labov 1963).

The variationist theoretical framework has made it possible to discover regularities in language variation that may turn out to be particularly important for our purposes, i.e. in considerations of perceptual difficulties experienced by second language learners because of target language heterogeneity. For example, in the realization of certain phonemes, in the use of certain morphological elements, in the expression of notions like tense and aspect, etc., speakers (of the target language) can be arranged in a continuum from those using one variety of the expression element to those using another. These continua can be described quantitatively or qualitatively or both. It is important to note that these continua are linguistically defined. We can thus correlate them with extralinguistic phenomena. The statistical values of such correlations, for example between the linguistically described continuum and a social index of some kind are usually high, but a particular speaker cannot be placed in the continuum on account of his social index alone.

These descriptions are of course of greatest interest in themselves, since they give us detailed knowledge of lingustic variation and therefore, more generally, of language. What I would like to claim here is that such studies have a natural application in language learning and language teaching studies. They can be directly utilized in efforts to bridge the gap between (i) what can be perceptually accompliched in language courses where language-teacher language is allowed to be the main model for the training of perceptual competence, and (ii) what is required by the learner in real target language communication. They point to a method of teaching, based on knowledge of continual variation, which can thus systematically and successively train the learners to understand variants that are further and further apart from the model variant of the teacher.

HIERACHIES OF DIFFICULTY

So far, we have considered what we have in the way of existing knowledge of variation and theoretical frameworks for describing such variation (points 1-3 above). What we need to do now is research into what kind of variation is the most difficult for a learner to cope with. In other words, we need to find out

- (i) the varieties within a dimension that are most difficult to understand
- (ii) the dimensions of variation that are the most problematic for perception, and
- (iii) the linguistic features that contribute most to making a certain variety more or less difficult to understand - whether it is pronunciation, lexical differences, or morphological differences, for example, and at an even more detailed level, whether it is segmental or prosodic features that contribute the most, etc.

First of all, however, before we can work with any of these three points, we must be clear over what varieties we are actually comparing or presenting to groups of learners for their judgments as to difficulty, i.e. whether two varieties really differ mainly in the respect we are interested in. This entails defining or describing the kind of variation we will later test.

Of course, it is impossible to make any really detailed description of variation considering the state of affairs we have outlined above. It is possible to conceive of any number of investigations that would have to be performed to obtain the complete picture of target language variation and it is both impractical and unnecassary to wait for this work to be done.

Instead we can utilize the knowledge we already have and choose a few linguistic features for description that we are fairly sure correlate well with the extralinguistic dimensions of *region*, *social class*, *social role* etc.

As for the dimension of *social class*, for example, a number of studies have shown that this correlates well with features of pronunciation, for example variation in vowel quality. If social variation within the Malmö dialect is chosen for study, it would presumably be fruitful to study vowel qualities, especially the diphthongization, of a few speakers of the dialect, where the speakers are chosen as representative of different social strata. The order between the speakers from more

to less diphthongization would presumable correlate with the scale lower class - upper class. This hypothesis was put forward by Bruce (1970).

To take the dimension of *tempo* as another example, we have one method of determining the order of variants within this parameter which is fairly uncomplicated, and that is playing back the same speech sample at different speeds, using the technique first developed by Fairbanks et al. 1954. This enables us to increase or decrease the speed without getting a Donald Duck effect, i.e. all other features but *tempo* are left constant. A more natural way of ordering varieties within this parameter is to arrange them according to perceived rate for a group of listeners. This is of course more problematic since we have to use different speech samples from different speakers, which makes it difficult to keep other dimentions of variation constant. This difficulty applies to all ordering based on listener judgments.

Turning now to the three research questions introduced above, we can propose the following preliminary sketch of a research procedure designed to provide information on each of the points.

The first question entailed eliciting information on what varieties within a dimension are the most difficult to understand. To order the varieties as to difficulty we have to present them to groups of listeners, e.g. second language learners of Swedish. The different background characteristics of the listeners should be kept as constant as possible as well as their developmental level in the acquisition of Swedish. An ordering of difficulty for the varieties under consideration could be obtained by a number of different methods, and it would appear feasible to combine these various methods in order to obtain as reliable an overall measure of difficulty as possible. Some examples of these methods are:

- A straightforward judgment of which variety in a pair of varieties is considered most difficult to understand.

- An imitation test where the degree of correct imitation corresponds roughly to degree of difficulty in perception.
- Questions of content.

There are of course a number of problems with these various measures. For example, both the imitation test and the content test involve problems in target language production and memory and are therefore not pure tests of perception.

The second research problem has to do with discovering the dimensions of variation that are the most difficult for the learner to cope with. To solve this problem, we could, for example, use the results from the previous - intradimensional investigation and calculate the ranking order of difficulty on the basis of these. If the same kind of tests are used to measure the degree of difficulty for varieties within different dimensions, these varieties can also be ordered in relation to each other independently of which dimension they exemplify. This in turn allows us to calculate the ranking order of difficulty betweeen dimensions themselves.

The third research problem, i.e. what the different linguistic factors in variation contribute to perceptual difficulty is undoubtedly the hardest one from a methodological point of view. To prise out how and to what extent variation in phonology, morphology, lexical choice, syntactic structure and discourse strategies influence perception of the signal requires experimental studies with artificial manipulation of the speech sample. Digital methods are now available and have been utilized for example to keep the segmental features of the speech signal constant while varying prosodic features in recordings of Swedish spoken by immigrants (Bannert 1979) and also to keep the segmental features constant while varying the sentence intonation pattern in accordance with a model for four regional variants of Swedish intonation (Bruce and Gårding 1978). Speech samples manipulated in similar ways could supplement our measures of difficulty as discussed above. It should also be possible, for example, to find out the relative importance of prosodic over segmental cues for the perception of connected

speech. If the results point to what is commonly believed to be the case here, i.e. the priority of prosodic cues, this would allow us to hypothesize that varieties differing in prosodic structure, e.g. stress placement, would cause greater difficulty than varieties differing in segmental structure. Similar reasoning is applicable in the areas of syntax and phonology.

The theoretically most interesting question which these considerations lead up to and which can be seen as the main objective of an investigation into development of perceptual competence, is what happens to the learner as he progressively copes with more and more variation in the target language, i.e. how his underlying generalization as to the structure of an item changes and develops, how rules of adaptation are acquired as he learns to cope with progressively more distant varieties and what strategies of adaptation he develops.

BRIDGING THE GAP IN PEDAGOGICAL PRACTICE

A description of language-teacher language provides us with a basis on which to evaluate the effectiveness of the average language course. As a result of such evaluations we will be in a position to suggest changes in syllabus structure and teacher training. However, in suggesting such changes, it is important to keep in mind that language-teacher language fulfills many functions, not only that of being a model for the learner's own perception and production. Language-teacher language can also be evaluated in relation to goals such as communicative optimization. Anyhow, knowledge of the characteristics of language-teacher language should help us in suggesting procedures and constructing materials to amend dificits in current practice.

Obviously, any pedagagical suggestions need also to be based on data provided by the investigations into the target language variation sketched above. When we know how to arrange varieties within a dimension according to difficulty, we can use this hierarchy to construct progressions in the teaching of understanding varieties. The same can be said for the pedagogical application of data in interdimensional weighting. The perceptual training would start by considering such dimensions of variation that are easier for learners to cope with. A plausible assumption is that there are implicational relations between varieties such that mastery of an easily perceived type of variation facilitates the acquisition of perceptual competence for more difficult types.

In actual pedagogical research we can go further and investigate what dimensions of variation that could be successively combined in the training program. Should for example the medium of the telephone first be used together with fast speech and later be combined with a social variety that is experienced as difficult to understand, or should we do it the other way round?

The results of investigations of what linguistic phenomena contribute the most to difficulty would give us hints as to what the key variable features are. These features would be potential candidates for explicit treatment in teaching practice.

Everything said in this last section is also applicable to mother tongue instruction. The tolerance for variation within one's mother tongue seems to be highly different in different countries. It is my impression that there is a growing tendency in Sweden to subtitle non-standard varieties of speech on television while at the same time a wider range of speech varieties occurs in both radio and television. Many programmes are of course subtitled for the hard of hearing. Programmes in Norwegian and Danish are also subtitled for Swedish viewers despite the close similarities between the three languages. That Swedes experience such difficulty in understanding Norwegian and - even more so - Danish is a fact that in many circles is looked upon as impossible to remedy. However the research programme outlined in this paper offers a solution. Methods and materials similar to those suggested for training perception of varieties in second language learning could also be used for training comprehension

of varieties of the mother tongue and intimately related languages. This research programme would be especially valuable bearing in mind the endeavours of the Nordic governments to increase internordic understanding (Nordiska språksekreteriatet 1979). These endeavours have been intensified in recent years, partly thanks to plans for a Nordic radio and television satellite. The Secretariat for Nordic Cultural Co-operation has just held a symposium on internordic language understanding (March 1980).

A change in attitude towards certain varieties would also have an indirect effect on learner varieties of Swedish. A wider general tolerance for language variation would probably entail greater tolerance for learner varieties.

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