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THE UNGUIDED LEARNING OF GERMAN BY SPANISH  
AND ITALIAN WORKERS

by

"Heidelberger Forschungsprojekt  
'Pidgin-Deutsch' "

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## 1. INTRODUCTION

The present report summarizes a study devoted to the learning of German by immigrant workers in the Federal Republic of Germany (F.R.G.) and to their knowledge of said language. It is a detailed socio-linguistic study of a relatively small sample (not representative from a strict statistical point of view) of immigrant workers from only two countries - Italy and Spain. Table 1-4 shows that these two countries no longer supply the greatest number of workers, as was still the case in the 1960s.

TABLE 1-1 - IMMIGRANT WORKERS IN THE F.R.G. ACCORDING TO NATIONALITY

Year	Italians	Spaniards	Greeks	Yugoslavs	Turks
1966	391,000	178,000	195,000	...	161,000
1971	408,000	187,000	269,000	478,000	453,000
1976	267,000	104,000	169,000	377,000	516,000

Source : Federal Labor Office (1973, 1974, 1977).

The social conditions under which foreign workers of these nationalities learn German in the F.R.G. are certainly not sufficiently different to prohibit drawing from the results conclusions valid for foreign workers in the F.R.G. as a whole - bearing in mind the fact that the social situation of the Italians, as nationals of an E.E.C. member country, and probably also that of the Spaniards, is slightly better than that of the largest group, the Turkish workers, and that, owing to this, the results of our study are possibly a little more positive than the realities they are meant to describe.

As the two Romance languages, Italian and Spanish, greatly resemble each other, but are each different from Turkish, Serbo-Croat and Greek, certain linguistic results of detail are surely due to the language of origin and hence cannot be simply extended to immigrant workers of different linguistic origin. Moreover, we feel that contrastive explanations concerning certain aspects of the German of immigrant workers can be only partial. On the other hand, much must be attributed to the general conditions under which a second language is learned in the host country. These conditions are largely comparable to those of immigrant workers in the capitalist countries, whether involving Porto Ricans in the United States (cf. Schumann, 1975) or Spaniards and Turks in the F.R.G. (cf. Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1975a : 17-24).

Our study is based on a single investigation. It must first be considered as an inventory of the knowledge of German of 48 foreign workers under dissimilar individual conditions, having remained for a greater or lesser period of time in the F.R.G. and placed in quite varied learning contexts. It is certain that the learning context can either favor or hinder the acquisition of German. But these contexts do not appear to be so different as to prohibit formulation, on the basis of the various stages of learning of the second language attained by the different individuals, of hypotheses concerning the unguided learning of German among immigrant workers.

In this sense, the present investigation can be considered as a study in relative time (study proceeding by cross-sections) which, although it does not follow directly the development in time, nevertheless manages to determine that by comparison of the various stages of learning.

A study of unguided language learning among immigrant workers in actual time (longitudinal study) would encounter the following difficulties:

- a) the process to be observed will unfold very slowly, with the possible exception of the initial phase within a very favorable learning context ;
- b) the investigator will probably have a very positive influence on the process he wishes to observe, since he will be the German individual having the most frequent contacts with informants who otherwise have only very rare contacts with Germans. The result will be a deformed image of the actual factors. To avoid at one hand the same time these problems and the uncertainties of a purely transverse study, we are proceeding at present with a second transverse study, two or three years following the first.

When one examines the general context in which the learning of German occurs among foreign workers, attention must first be drawn to the fact that second language learning in the form of appropriate instruction has virtually been non-existent heretofore in the F.R.G. Between six and ten per cent of the individuals questioned during the sociological investigations stated that they had attended courses in German (cf. Federal Labor Office, 1972, Mehrländer, 1974). But these figures say nothing of the duration, intensity and success of such instruction. At present, the "Sprachverband Deutsch für ausländische Arbeiter e.V." (the central institution founded by the West German Government in this field) subsidizes, according to its own information, courses in German with a total of approximately 10,000 participants, which corresponds to 0.6 % of the foreigners living and exercising a profession in the F.R.G. This means that the great majority of foreigners living and working in the F.R.G. have not attended and are not attending courses in German, but have been and are reduced, for learning German, to communication with the population.

The learning process resulting from such a situation is called unguided or natural. It is called natural because man by his very nature is capable of learning a foreign language if placed in an environment speaking the language and if the quality of oral data to which he is exposed is sufficient. The widely held notion that a foreign language is best learned "in the country itself" is based on this idea ; it is the pedagogic concept of "total immersion" (Dumas, Selinker, Swain, 1973). The process is called "unguided" because it does not comprise any interventions in the form of language courses. The example of children who, placed in a foreign linguistic environment, learn relatively quickly the language of the country, provided they have contacts with native children, shows that the process of unguided learning can indeed be very effective. The fact that it does not function as well in the case of foreign workers cannot be attributed merely to biological differences between children and adults, for the notion that the learning faculty diminishes with age is not uncontested - save in the field of articulation.

The great difficulties which foreign workers have in learning the language of the country of immigration must above all be attributed to the fact that the conditions of learning they encounter are entirely different

from an "optimal immersion". To the contrary, they are largely cut off from communication in the foreign language, especially during the periods when they are not at their place of work. They generally spend such periods with their family or with fellow nationals. The result is that the place of work is the one most frequently mentioned in the sociological investigations as the place where the greater part of the foreign-language knowledge was acquired (cf. table 1-2).

TABLE 1-2. KNOWLEDGE OF GERMAN : HOW ACQUIRED

Nationality	Place of work	Contacts with Germans during vacation	Language course	School	Family	Radio T.V.	Other
Italians	71	15	.	6	.	.	.
Greeks	82	7	.	4	.	.	.
Spaniards	72	9	7	7	.	.	.
Portuguese	75	10	.	.	.	.	.
Turks	73	9	8	4	.	.	.
Yugoslavs	68	9	3	13	.	.	.

Source : Federal Labor Office (1973:31).

It is perhaps no exaggeration to state that the language of immigrant workers in highly developed societies reflects the restricted conditions under which it is learned ... just as it has been shown that the development of pidgin and creole speech in colonial societies, based on the economy of plantations and imported labor (cf. Richards, 1972, Bickerton, 1975, especially pp. 165), is the result of an interaction between the language on the one hand and economic, social, pedagogic and political factors on the other.

The formation of a variety of German as a second language among immigrant workers in the F.R.G. with a structure having many formal similarities with pidgin jargons could have been avoided only if the immigrants had already received before, or at least immediately following, their arrival in the F.R.G. language training that would have given them both a basic knowledge of the foreign language and the opportunity to complete that in the course of daily communication with Germans.

Should the cessation of hiring, dating from November 1973, be lifted and the West German economy again begin to recruit labor, the institutionalization of a right to initiatory instruction should be an important legislative measure to adopt.

However, that is not the current problem, which consists instead in the fact that at the present time nearly two million salaried foreigners (not counting their families) are living in the F.R.G. They have already been there for several years and have a certain knowledge of German, as the linguistic analysis will show in detail. They have all already gone beyond the initial phase of learning, which is also the most active. Their command of the second language has, in most cases, reached a certain degree of

stability. It has "fossilized" after a number of years at a more or less advanced level, with practically no chance of ever attaining, through a process of unguided learning, to full possession of the language. It is these immigrant workers who are at the core of the Heidelberg pidgin German research project, which has as its initial hypothesis that, in order to plan efficient language instruction intended for immigrant workers, one must first have knowledge of the deficient language systems acquired without guidance, with a view to their subsequent use for language-instruction purposes.

The present report is addressed to a rather broad public recruited among instructors of foreign languages and members of educational institutions in the field of second language instruction to immigrant workers, rather than among specialized linguists. For this reason, our presentation is as informal and untechnical as possible. This is also reflected in our terminology, which we wished to be understandable by anyone. It has not always been easy to explain complicated facts simply. That was our chief concern in the chapters that follow. It has been accomplished only at the cost of certain compromises. Hence what follows will contain no detailed discussion of publications on second language learning, nor any technical and theoretical presentation of the tools used for the linguistic description. It is true that our theoretical position on second language learning by immigrant workers clearly emerges from our report without any necessity for citing many names. For those wishing to familiarize themselves in detail with the bases of our descriptive processes, technical operations of analysis and discussion of the current state of research in the field of second language learning, we recommend perusal of our publications (Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1975a, 1976, 1977 ; Klein 1974 and Dittmar/Rieck, 1977). Even more than the quotations from these publications in the following chapters suggest, they form the basis of this report. But apart from this background, the fact should be stressed, first, that the present version sets forth results which go beyond those of earlier works (especially in the analysis of word order and of prepositions). Secondly, it provides an insight into the interaction of various linguistic and social factors and elucidates the complex nature of their interconnections.

Exposition of these facts constitutes a documentation of the current state of research on the language of foreign workers in the F.R.G. ; it has been produced, for the first time, by the Heidelberg research group. The second chapter studies the unguided learning of a second language, by delimiting it as distinguished from guided learning.

Study of the unguided learning of a second language seems called for not only in the case of foreign workers but from the standpoint of research logic as well. Chapter 3 explains how the Heidelberg research is organized. In it we describe the sample studied, the techniques employed for obtaining the linguistic and social data, and our experiences with these techniques.

The size of chapter 4 shows in advance that it is to be considered as the core of our report. In it we set forth, by use of the grammar of varieties, the results of the linguistic study of 48 varieties of language of Italian and Spanish workers. Inventorying of the syntactic constituents encountered in the subjects' expressions is followed by a description of certain selected aspects in the field of word order. Following these large-scale analyses, detailed analyses are found dealing with lexico-semantic (modal verbs and prepositions), phonological, or morphological aspects, chiefly relating to limited samplings of speakers.



Chapter 5 then establishes the relation between the linguistic and social data. In it are isolated, in terms of their importance, the variables that seem to direct the unguided learning of German. To conclude, in chapter 6, we draw from our research on the language of immigrant workers several conclusions concerning the institutionalization of language courses and their practical realization. These recommendations are determined by the linguistic and social situation of foreigners in the F.R.G. But since the linguistic policies of European countries employing relatively large numbers of immigrant workers differ but little from each other - save in the case of Sweden - it would be desirable for these recommendations to be applied in the other countries as well. For however different the immigration of workers from one country to another, the socio-political repercussions are far more homogeneous than is generally believed.

## 2. UNGUIDED LANGUAGE LEARNING AND THE LANGUAGE OF FOREIGN WORKERS

### 2.1 The importance of unguided language learning

Despite considerable efforts, the language instruction intended for foreign workers in the F.R.G. has thus far been ineffectual, chiefly for two reasons, one of which is of a more political nature (1) and the other a more scientific nature (2).

(1) Up to now, it has not been possible to obtain from the competent political and economic authorities the establishment of systematic and regular instruction of German. Following a few positive developments, the situation has, to the contrary, deteriorated since 1974, owing to economic developments. Altering this state of affairs should be the object of political efforts.

(2) There exist no language courses adapted to the specific language problems of foreign workers. Scientific efforts should aim at remedying this state of affairs.

Point (1) is dealt with in the introduction and the final chapter. This chapter will be devoted to a detailed treatment of point (2). In our opinion, well-founded language instruction is not conceivable without prior study of the unguided learning of a second language (hereinafter shortened to "language learning") by foreign workers, that is to say, what they learn through their daily contacts with Germans in their social context (unguided language learning is here opposed to guided language learning via instruction). The study of unguided language learning is essential for three reasons :

1. Foreign workers already acquire through their contacts with Germans linguistic knowledge of rather unequal quality. Language instruction should take this into account : guided language learning should in such case complement the unguided learning. This has positive and negative aspects : on the one hand, certain knowledge already acquired has no further need to be transmitted ; on the other hand, certain phenomena have been incorrectly learned ; language instruction must then attempt to correct them.

2. What foreign workers learn without guidance gives us important indications regarding the nature of their communication needs. It is highly unlikely that they learn through their social contacts very many things that they do not require in order to communicate. That obviously does not mean that they have no need for all that they do not learn. Hence the study of unguided language learning does not set the instruction goals, but helps to do so.

This contribution is the more important as we have very few criteria for determining pedagogical objectives (perhaps contrary to the situation for the teaching of foreign languages at universities).

3. Independently of the problems peculiar to foreign workers, the bases for the teaching of foreign languages must be considered as quite inadequate, despite innumerable studies on the subject. Such instruction is based more on practical experiments and on unverified ideas born of other disciplines (such as the psychology of learning, pedagogy, contrastive linguistics), than on reliable scientific research on the manner in which foreign languages are learned, the factors that determine this process, and how it could be influenced.

This last point is of the greatest importance ; hence we shall deal with it in greater detail.

## 2.2 A few general conditions concerning the study of language teaching

Anyone studying a language reaches his ideal (but not necessarily actual) objective when his linguistic behavior is indistinguishable from those whose mother tongue it is ; in that respect he has a certain latitude, for the language of natives reveals, as is well known, differences of social origin. The linguistic behavior of the language learner must be situated within this space of relative freedom. Very few reach this ideal objective, although it is not ideal in the sense of being inaccessible. In practice, the idea is to approach it as closely as possible. Hence language learning can be understood as a process during which an individual - the one learning - acquires a certain repertory of behavior. This is an oriented process ; it leads from a certain initial stage, from an initial conduct, toward a certain target behavior, though deviations from the "straight line" are occasionally manifested. The progression of this process may be quite variable. That depends on a certain number of factors. The task of the study of language learning consists in identifying these factors, determining their influence on the language-learning process and describing in detail the unfolding of this process.

The process of language learning can be influenced to a certain degree. The influence may be direct, i.e., it may bear on the direction and speed of development. It may also be indirect, in the sense of an action on the factors participating in the determination of language learning, for example, by exercise of the auditive faculty and of memorization, by stimulating motivation, etc. I call language instruction these two types of influence which in practice are generally found together. Different conditions must be fulfilled in order for them to be effective. In particular the following four :

1. The above-mentioned task of the study of language learning must be defined more precisely : so long as the respective influence of the various factors is not known, nor how they may foster or hinder learning of the target behavior, language teaching will remain an art which some possess perfectly thanks to their experience and talent. But it cannot be said that the methods rest on sound scientific bases.

2. From bases determined in this manner, methods must be devised to permit optimal intervention.

3. The target behavior must be described precisely. In this field, the current results of research are quite insufficient, unless we deliberately disregard large parts of linguistic behavior and consider as sufficient the linguistic standard codified in such grammars as the Duden or Grevisse. Using that method, one naturally has a very imperfect grasp of the natives' actual linguistic behavior, which the one learning ought to approach as nearly as possible.

4. All this must be applied to actual cases, that is to say, instruction units must be conceived and the educational material developed.

These conditions are interlinked in a certain manner : thus the fourth point also implies the second and third ; the second point in turn implies the first ; that is, in order to give optimal form to interventions, one must know the regularities of the process in which one aims to intervene. Hence the first condition must be considered as logically taking precedence from the standpoint of research. It is what we shall now study.

### 2.3 Analysis of language learning

Anyone studying a foreign language becomes capable after a certain time of making statements which resemble to a greater or lesser degree those of the target language. Another formulation of the same fact would be to say that one speaks a certain variety of target language. This is because, as a general rule, a target language is not homogeneous but consists of a certain number of dialectical, social or situational varieties which speakers of the language appreciate quite diversely. The current "linguistic status" of the one learning the language also constitutes such a variety, even though most native speakers consider it bizarre or deficient ; but that is a matter of appreciation by the speakers. From the linguistic standpoint, what is involved here is a variety, on the same basis, for example, as a sociolect. It is characteristic of a variety that it normally represents only a transitional stage. The language learner first acquires it and later abandons it for another variety which, as a general rule, is nearer the target language. The process of language learning as a whole can therefore be conceived as a passage through a series of different varieties possessing among themselves certain similarities and directed toward a given variety, the target variety. As a general rule, the latter is never attained, but the process stops somewhere before, although between the "final variety" attained by the language learner and the target variety (i.e., what in principle he was supposed to attain, or sought to attain), there always exist differences.

The form of these varieties and the manner in which they are traversed depend on a great many factors, for example on the duration of learning, on the intensity of social contacts, on the mother tongue, on all the specific individual conditions peculiar to the language learner, and, in guided language learning, also on the type of instructions, etc. Hence from the extra-linguistic standpoint, an entire set of well-defined factors corresponds to the different varieties. Let us suppose, to illustrate what has just been said, that three of these factors exist (in reality they are naturally much more numerous) :

1. Motivation, comprising three degrees of intensity :  $m_1$  = strong,  $m_2$  = average,  $m_3$  = weak ;
2. The duration of learning :  $t_1$  = 6 months,  $t_2$  = 12 months,  $t_3$  = 18 months,  $t_4$  = 24 months ;
3. The mother tongue of the one learning the language, e.g.  $l_1$  = Spanish,  $l_2$  = French.

Hence what we will have is a total of  $3 \times 4 \times 2 = 24$  combinations of possible factors, for example  $(m_1, t_1, l_1)$  = a strongly motivated Frenchman having studied for 2 years. To these combinations 24 varieties correspond, not necessarily all different : it is possible that after 2 years a strongly motivated Spaniard may speak as well as a Frenchman of average motivation after 2 years. From the standpoint of terminology it would perhaps be better to speak of potential varieties.

All these varieties are naturally closely interrelated : identical in many respects, they differ in others. In principle, there are various possibilities for describing these similarities and dissimilarities. The process that we devised and used for these purposes is the grammar of varieties (cf. on this subject Klein, 1974). This is a relatively accurate process rather well suited to the analysis of relatively numerous data.

## 2.4 The grammar of varieties

The two central concepts of the grammar of varieties are the space of varieties and the probabilist grammar. Simplifying, one might say that a space of varieties is an ordered set of varieties that one wishes to study. The 24 varieties mentioned above are an example of such a space of varieties (with 3 dimensions, corresponding to the 3 different factors). Obviously one cannot know in advance which will be the factors that must be reproduced, but on the basis of the results of research thus far obtained and of heuristic suppositions, one can formulate certain hypotheses in this regard and hence define one's spaces of varieties in consequence. In principle, one can choose an arbitrary number of factors, even if they seem only slightly relevant to language learning, for example the sex or height of individuals. Any such choice will obviously make the corresponding space of varieties more complex and hence complicate empirical research. For the practical requirements of our report, it is useful to represent the spaces of varieties in linear fashion, even if they have several dimensions. As concerns the example mentioned above, this linearity is obtained quite simply by numbering the 24 varieties from  $V_1$  to  $V_{24}$ . Obviously, this order does not correspond to an order in time. The second concept is that of "probabilist grammar". Different types of such a grammar exist. In our study we use a grammar formulated in an explicit manner (an extra-contextual grammar or a transformational grammar are examples of this). We shall now restrict the probability of application of these rules, that is, we shall associate with each rule a value that determines the probability of its applying. Of all the grammars, the extra-contextual are the ones best suited to this operation. In such a grammar, certain rules may alternately apply. These are rules whose left part is identical. Such a grammar might contain, for the nominal group (NP), the following rules :

NP  $\longrightarrow$  N  
 NP  $\longrightarrow$  Det N  
 NP  $\longrightarrow$  Det Adj N

that is, a nominal group can be rewritten either as a simple noun (Vater), or as a noun preceded by a determinant (der Vater), or as a noun preceded by a determinant and an adjective (der mude Vater). All these alternate rules can be combined in a single block of rules (e.g., by placing them between parentheses) :

N  $\longrightarrow$   $\left\{ \begin{array}{l} N \\ \text{Det } N \\ \text{Det Adj } N \end{array} \right\}$

such blocks may consist of two, three, or more rules. It is practical to allow also the case of a block of rules comprising only a single rule.

If, in the course of the derivation of a sentence, we encounter the symbol of the left part of a block of rules (in our example NP), one of the rules of the block must be applied. (If there is only one, that one will be applied). The application of these rules can change from one variety to the other. To take account of this fact, one associates with each rule of a given block a certain probability, expressed by means of an actual number contained between 0 and 1. "0" means "never applies" and 1 "always applies"; the intermediate values designate the intermediate cases. With a given block one then associates the probability 1, for one of its rules must apply, and one apportions this probability total amongst the various rules of said block.

This enables us to describe accurately the process of language development, for said process is precisely characterized by the fact that certain rules are at first non-existent (i.e., have the probability 0). They appear only slowly or, occasionally, suddenly. In certain cases, they may again disappear (when "false generalizations" occur), etc. We shall illustrate this by means of a simple example. To do so, we shall add two other rules to the three given above: NP — Det N Adj and NP — Det N adv. The first generates structures such as "der Vater müde", which are not found in the varieties peculiar to native speakers; the second generates structures such as "das Mädchen dort". Let us say that we have six varieties of learning ( $V_1, \dots, V_6$ ) which we assume for reasons of convenience to correspond to a succession in time. We should then obtain, for example, the following fragment of a grammar of varieties:

	$V_1$	$V_2$	$V_3$	$V_4$	$V_5$	$V_6$	$V_t(\text{target})$
NP → N	0.9	0.6	0.3	0.2	0.2	0.2	0.1
NP → Det N	0.1	0.3	0.3	0.3	0.3	0.3	0.4
NP → Det Adj N	0	0	0	0	0.4	0.4	0.4
NP → Det N Adj	0	0.1	0.3	0.4	0	0	0
NP → Det N Adv	0	0	0.1	0.1	0.1	0.1	0.2

This is an exact representation of an entire set of developments. In the beginning, in  $V_1$ , one finds only simple nominal groups: most often (probability 0.9) nouns; less frequently, nouns preceded by a determinent. In  $V_2$ , more complex nominal groups become more frequent; the first adjectives appear, first placed post-nominally, which is "false" in comparison to the target variety  $V_t$ . This development continues in  $V_3$ : simple nominal groups become increasingly rare, whereas (false) constructions with modifier increase; at the same time, a new construction appears, this time correct, but playing only a secondary role.  $V_4$  brings only minor changes.  $V_5$  shows only a single change, but one of great importance: the "correct" rule for positioning the adjective in the nominal group has been understood: the adjective is no longer found save in the prenominal position. Obviously, this transition may also occur gradually. Its exact description would not pose any additional problem. Finally, in  $V_6$ , nothing has changed. The target variety appears to have been attained, in so far as our study permits us to judge.  $V_6$  may still differ slightly in several regards from the target variety  $V_t$ . This means that in the language of natives the probability values can be 0.1, 0.4, 0.4, 0, 0.2, but that a non-native will never attain them.

This example is naturally not very differentiated, but it clearly illustrates the principles of probabilistic grammar. These same principles can be applied to phonological, morphological or lexical rules, even if they are of another type, e.g., transformational (cf. on this subject Klein, 1974, chap. 5).

The grammar of varieties makes it possible, at least in the grammatical field, to describe with precision both the language development during learning and the manner in which this development depends on certain factors constituting the space of varieties. Were such a study actually realized, one would naturally be obliged, before collecting and analyzing the data, to formulate a hypothesis concerning the pertinent factors for language development, that is to say, one would have to determine an appropriate space of varieties.

## 2.5 Determining the space of varieties

Two things are important here. First, the factors considered important and thought to be observable must be determined. Second, such factors must somehow be operationalized. The two problems are closely connected.

Selection of these factors constitutes a hypothesis concerning the pertinent determinants of language learning. Any such hypothesis is obviously not formulated at random. Its formulation is based partly on existing publications and our own preliminary research and partly on common sense. The present state of research in the field of concern to us is unsatisfactory. It is replete with contradictory suppositions and opinion - which would not be so bad in itself - but, in addition, the results of research are irreconcilable. In order to systematize all this somewhat, it seems to us advisable to adopt here a viewpoint a bit different from the usual one. Language learning depends, among other things, on two sorts of factors : (1) a certain number of individual conditions and (2) the contribution of statements of the target variety to serve as the basis for developing a certain variety of learning in terms of the given individual conditions. Hence these two factors can be divided into two distinct groups :

1. The factors corresponding to the individual conditions of the subjects.  
We shall call these "bias factors".
2. The factors which as a whole constitute the context of learning.  
We shall call these "contextual factors".

We have reasons to believe that in particular age, interest, social origin, mother tongue, educational level and, contingently, knowledge of other foreign languages are part of the first group. That list is obviously not complete. The factors belonging to the context of learning are essentially the nature, duration and intensity of the statements of the target language, plus the manner in which these are presented, e.g., (a) in natural situations, as in the case of unguided language learning, (b) in the form of more or less elaborately simulated actual conditions, for example, by playing roles or, withdrawing even farther from reality, by projecting slides accompanied by the appropriate texts, or, finally, in the form of a unilingual presentation, with no audiovisual aids ; (c) in mediatized fashion, that is, by no longer presenting statements in the foreign language, but descriptions of them, e.g., in the form of grammatical rules. Naturally, this mediatized presentation never occurs alone : also part of the contextual factor are certain imponderables, such for example as "the teacher's commitment", "the attractiveness of the linguistic material presented", "social pressure", etc., all of which, as everyone knows, can play an important role. But these are very difficult to operationalize. Hence, from the standpoint of method, it is more advisable to concern oneself first with the other factors, to see how far one can progress in that manner.

We have just outlined the theoretical framework of our research, which naturally is limited to the study of unguided learning and of the factors intervening in it. And it appears from such research that there indeed emerge certain ratios between some of the factors we adopted by hypothesis and the actual development of learning. This will be the material of the two following chapters.

Our research is limited for the time being to subjects more than 18 years of age ; they represent most of the subjects of interest to us here, and the learning of a second language is infinitely harder for them than for children.

### 3. COLLECTION AND PREPARATION OF DATA IN THE HEIDELBERG STUDY

In this chapter we present the methods which were used to collect the linguistic and social data for documenting the foreign workers' process of learning German, to select informants, and to prepare the data for purposes of analysis. We shall first deal with the data-collecting techniques.

#### 3.1 Collection of data

For collecting data, we used two complementary techniques : interviews and active observation. Interviewing has the following advantages :

1. possibility of determining in advance the population of persons to be interviewed ;
2. possibility of interviewing a great many individuals in a short space of time ;
3. ease of recording interviews on magnetic tape ;
4. speed in obtaining data on the social situation of those interviewed.

On the other hand, the following drawbacks were observed :

- the interview constitutes an invasion of the informant's private life ;
- the interview is reduced to a single and brief contact, asymmetrical in nature.

In favor of active observation, it can be said that it permits direct study of the patterns of action and interaction subject to daily routine. On the other hand, it has the following drawbacks :

1. difficulty of defining sample data to be collected ;
2. difficulty of formulating important occurrences in an adequate language of observation ;
3. limitation of the possibilities of recording on magnetic tape.

To compensate for the disadvantages of these two procedures, we decided to use them both.

Active observation was used in the milieu relating to production (mechanical constructions, canning industry), leisure pursuits (cafés) and the administration (Service of Foreign Nationals). Over a period of four weeks, we observed the linguistic and non-linguistic behavior of foreigners, both among themselves and in interaction with Germans. As it was usually impossible to make recordings on magnetic tape, the linguistic behavior of foreigners could be documented only inadequately (written notes). The study of the language of foreign workers hence relates, in what follows,

only to the interviews involving high-quality recordings of the linguistic behavior. A detailed report on the results of active observation will be found in our "Heidelberger Forschungsprojekt 'Pidgin-Deutsch'" (1975a : 60-111). The interviews and active observation are nevertheless linked in the sense that six of those interviewed were also subjected to active observation at their place of work. The linguistic behavior of these informants hence was documented in respect of a rather vast set of situations.

Given the advantages mentioned above, we based our study of the learning of German among foreign workers on the linguistic data gathered through interviews. The socio-linguistic interview was used on the one hand to gather social data which should help to explain the linguistic properties of statements, and on the other hand to obtain good-quality recordings of conversations as natural as possible. This means that the interview cannot be reduced to a schematic questionnaire, but must be conducted as an informal conversation, in the guise of "continuous interviews", by adopting a guiding line that is not too restrictive.

### 3.2 The sample

We started with the principle that the recordings to be studied must not exceed 100 hours. Basing ourselves on an average duration of two hours per interview, we established the number of individuals to be interrogated at 48. This sample is represented in equal parts by Italians and Spaniards, two thirds of whom are men and one third women; this more or less corresponds to the proportion of women among foreign workers as a whole (cf. Federal Labor Office, 1972/73 : 27). The length of residence in Germany constitutes an additional criterion for determining the sample. The initial division into four quite precise intervals could not be maintained, since the dossiers used for determining the sample (Labor Office files, private and unofficial dossiers) did not contain information relative to the total length of residence of the informants. Hence the initial intervals had to be broadened : 12 informants had been in the F.R.G for less than 2.7 years ; 12 between 2.8 and 4.3 years ; 12 between 4.4 and 7.0, and 12 for more than 7.0 years.

The following table shows the composition of the sample, according to nationality, sex, and length of residence:

TABLE 3-1 : HEIDELBERG PROJECT SAMPLE

Length of residence		Italians		Spaniards		$\Sigma$
		men	women	men	women	
<2,7	years	4	2	4	2	12
2,8-4,3	years	4	2	4	2	12
4,4-7,0	years	4	2	4	2	12
>7,0	years	4	2	4	2	12
$\Sigma$		16	8	16	8	48
		24		24		



To permit comparisons despite the limited dimension of the sample, we made the following few changes :

1. only salaried individuals exercising a predominatly manual activity were chosen as informants ;
2. the beginnings of learning of the second language must not have occurred in childhood or adolescence ;
3. learning of the second language must have been done in so far as possible in an unguided manner ;
4. the dialectical influences must remain constant, i.e., informants must have spent most of their stay in the F.R.G. in the Heidelberg region.

### 3.3 Interviews with foreign informants

In general, an interview consists of three parts :

1. establishing contact and explaining the purposes of the interview ;
2. a directed conversation with the informant conforming to the guiding line adopted ;
3. a conversation at random and intensified contacts after the interview.

The guiding line should enable investigators to have the conversation bear on a subject of major interest to foreign workers, such, for example, as (a) their origin, their individual and social situation in their country of origin, (b) their move to the F.R.G., (c) the situation at their place of work, (d) housing and family, (e) leisure pursuits, (f) accidents and illnesses, and (g) their intentions regarding return to the country of origin (cf. also "Heidelberger Forschungsprojekt 'Pidgin-Deutsch'" 1975a : 54). In general, an interview lasts from two to four hours. It was conducted by two or three collaborators of the research group, one of whom attempted to orient the conversation as naturally as possible toward the subjects chosen. Immediately following the interview, a sitation report was prepared in which the observations for conducting the interview were noted, dealing with communication and interactive behavior.

In what follows, we should like to examine briefly a few of the experiences encountered during interviews with the foreign informants. We found ourselves confronted by the following problems especially :

1. the social distance between workers and intellectuals resulted in an assymetrical communication situation ;
2. owing to the bad experiences that numerous workers had had with Germans, we sometimes encountered a mistrust that we were not always able to overcome ;
3. given the sometimes very limited knowledge of German of the subjects interviewed, communication could prove so difficult that we were obliged, in order to clear up misunderstandings, to resort to the mother tongue of the subject.

A very important experience involves making contact with the informant. It determined whether the interview would succeed or fail. Most often, we began the interview in the informant's tongue, to show clearly that we were trying to place ourselves at his level. Making contact with couples having private lodgings offered lesser difficulties. But when the wife

was at home alone, an interview was most often impossible, and we had to make another appointment in which the husband was to participate. Making contact with the responsible authority at centers ("foyers") where foreign workers are collectively housed was particularly difficult ; owing to their isolation and their bad experiences with Germans, they were most often very mistrustful and, in addition, very disinclined to discuss their linguistic problems with us. It was only after repeated contacts requiring the exercise of great patience that we managed to interview them.

### 3.4 Interviews with German workers of the Heidelberg area

In addition to the interviews with Italian and Spanish workers, we also gathered linguistic data from among the German workers of Heidelberg. The purpose was to determine the variety of language used by German workers of the same social class as the foreign workers in communicating with the latter in everyday situations. This variety of language is to be considered as the "target variety" toward which the various pidgin varieties converge, and hence can be linked to the linguistic varieties of the foreign workers.

As we are primarily concerned with the German of foreign workers, we first began by interviewing only five German workers ; later on, this number was increased to twelve. The following are the criteria which guided our selection of German informants :

1. employment at Heidelberg enterprises employing many foreign workers ;
2. apportionment by sex and age corresponding to that of the foreign workers;
3. use in speech of the Heidelberg dialect.

The interviews were conducted by two collaborators from our research group who speak the local dialect. Hence they could be conducted in dialect. In addition to the goals pursued in our interviews with foreign workers, i.e., collecting linguistic and social data on the speakers, we wished to obtain information regarding problems of communication and the learning of German by foreign workers, as viewed by their German colleagues.

The social distance between workers and intellectuals also played a role in these interviews, whereas no language problem arose.

An important result of the interviews with the Heidelberg workers is to find that all the individuals interrogated had contacts at the office with foreign workers, but not during their free time (cf. on subject section 5.2.2). All the informants used the expression "rückwärts sprechen" ("to talk backwards"), which designates both the pidgin of the foreigners and the pidginized (and very simplified) variety of German (the register of foreigners). All the individuals interrogated stated that it was only through this form of language that communication between Germans and foreigners became possible, but that it was of little use to foreign workers for learning German.

### 3.5. Preparation of data

Following the interview, one of the investigators listens to his recording and prepares a listening report in which he notes the social data concerning the informants (age, length of residence, contact situation, etc.). At the same time, he selects passages that are to be transcribed phonetically. Per interview, there is a total of 15 minutes

of transcribed text. For this purpose, one selects, if possible, accounts by informants which are sufficiently long and coherent. This is intended on the one hand to permit the transcription of statements as natural as possible and, on the other hand, the exclusion of ellipses frequently encountered in question-and-answer sequences (e.g., investigator : Und sind auch Deutsche dort ? (And are there Germans there too ?) - informant : Halb Deutsche, halb Ausländer ungefähr. (Half Germans, half foreigners, approximately), ellipses which run the risk of deforming results. But coherent narrations can be obtained only with advanced speakers. As concerns the other informants, we found ourselves obliged to transcribe also a certain percentage of short answers and to use them for analysis. The system of phonetic transcription that we used is closely patterned after the German phonemic system. Contrary to the International Phonetic Alphabet (IPA), it can be typewritten. The doubling of a vowel indicates that it is long. No special symbol was used to indicate the degree of openness in the event the opposition "open-closed" is accompanied by the opposition "short - long". The vowel qualities which differ from the standard pronunciation of German can be noted by use of the additional signs : ", " (more open and "." (more closed).

The following list does not provide a complete inventory of the signs used ; it indicates only the signs whose meaning is very different from the corresponding signs in the IPA :

Heidelberg phonetic notation	IPA
w	v
β (or B)	ʒ
q	ŋ
˙	ʔ
c	ə

In addition, we use the following special signs :

( )	signs setting off comments
/	sign setting off passages in orthographic notation
+	pause in the discourse
E	sound indicating a hesitation
-	placed above a vowel, this sign indicates that it has been nasalized
/	indicates a very deviant tonic accent
&	sound semantically uninterpretable
"..."	direct discourse

Since, owing to its widespread diffusion, we are going to use the IPA in the following chapters for transcribing the discourse of our informants, we reproduce below a passage transcribed by use of the Heidelberg phonetic notation. This is a passage from an interview with Francisco C. (SP-22, II-643-671), in which he speaks of the partial or total unemployment among his colleagues and of the financial problems this entails. He compares the present situation of economic recession, in which numerous means are employed to encourage or force the departure of immigrant workers, to the situation during the period of expanding economic development, when foreign workers were received with "joy" by "the Germans" (lines 6 ff.) and when they were allowed

to leave only with regret. Francisco C. observes that when the capitalist has a lot of work he brings in workers ; when he has little work he turns them out. And Francisco C. wonders why this is so.

SP-22 III 643-671 (I = informant)

- 1 oite fil kolHga kuodsawáito, niq arwáito, pasia. acwaisam bcsaalc, awaisám, arwansi marko fiosi fáni. du guke mopl. aincainc kolHga, filai cswai kinda doislai, o niq kinda, arwansi marko bcsale ainc tah. miito bcsaalc, cstrom bcsaale, wasa bcsaalc, wHspa bcsaalc, woo gál? +
- 5 (lacht) 8c 8c igaal, kolHga. 8c 8c igaal. Hrs dqq prHqo, /quando venimos los extranjeros/, ,,hoau'', /los alemanes/, (singend) ,,houaoua priimes, priimaa!'' oite alás seisH. hoite filaiq alH kolHga focc. Hs Hgaal, kolHga. hoite alH kolHga focc: ,,hqq, priimaa!''
- 10 is aincsiidsi, hH, 8c 8c 8c ainc kolHga focc /Espana/, csprHqo: ,,ii nii mHHC doilaq.'' csprHqo bai dia: ,,iq fiic jarc, fúmf jarc, /seis/ jarc doilaq, niq frau, ima,s,alainc, ima,s,alainc, fiil mHito alainc.'' Hgaal duu o andrc igaal. ainc kolHga prHqo: ,,ii foc /Espana/. ''biiroo prH- biiroo komc, prHqo: ,,niq bcsaalc.''
- 15 ,,warun niq bcsaalc?'' ,,nai, duu focc, niq bcsaalc, /Espana/ bcsaalc!'' hoite duu prHqo: ,,guuten,tael guuten moegán!'' biiroo, maistra, ,,iq morgán o tsán tagc mHHC, ii niq mHHC doilaq, focc /Espana/.'' ,,guu, priimaa, daqkc.'' komc biiroo, biiroo besalc. warun niqigal pitcigaal
- 20 aincsiidsi o cwaisiidsi? cswaisiidsi duu prHqo: ,,foc'', niq gál, oite duu prHqo: ,,foc'', alás gál. + fástHán? 8c is igaal, sis alH fiil komplikasjonH. duu ainc patrooq, fiil arbáite, qqq guu; niq fiil arbáite, niq mHHC guu. baruq niq mHHC guu hoite Hgaal andrc jaar?
- 25 Hgaal! dHs Hgaal. jaa, jaa.

Phonetic transcriptions of the passages from interviews constitute the initial data for linguistic analysis at several levels : syntactic, lexical, morphological and phonological. Extracts of interviews in Heidelberg phonetic notation with Italian and Spanish workers are to be found in "Heidelberger Forschungsprojekt 'Pidgin-Deutsch'" (1975a: 135-146).

#### 4. THE LEARNING BY FOREIGN WORKERS OF A FEW GRAMMATICAL AND SEMANTIC ASPECTS OF GERMAN

This chapter sums up the most important results of the linguistic study of the varieties of learning of foreign workers. Description of the syntactic aspects plays a predominant role in it. Part 4 of the present chapter testifies to the increasing importance that we attribute to the semantic aspects. On the other hand, we make do with samplings for phonology and morphology, but that obviously does not mean we attach less importance to these fields. Our presentation is informal. A detailed report on the technical aspects of our descriptions is to be found in Klein (1974) and in Heidelberger Forschungsprojekt (1975a; 1976a: Chapters III and IV). In it we also deal in detail with the studies concerning the language of the learning subjects and with description of the varieties. Selection of the fields which seem particularly propitious for the linguistic study of the varieties of learning suffers from the contradiction existing between the goal - a would-be scientific study - and its practical feasibility. The problems of analysis result especially from the peculiarities of the subject to be described : the varieties of learning. These are the problems that we shall deal with first.

#### 4.1 A few characteristics of the language of foreign workers

At the outset, it can be said that the language of foreign workers is even less homogeneous than the "German" or "French" of native speakers. It is true that these languages are divided into numerous dialects and socio-sociolects. But each of these varieties is to begin with a full-fledged language from the functional standpoint.

The varieties of the foreign workers' language, on the other hand, are characterized by their status as a second language and by the process of their learning. At the extreme, they break down into as many varieties as there are subjects, for each subject, according to the influences of his mother tongue, of the context of learning and of his individual efforts, has a very reduced

The varieties of learning represent a spectrum of greater or lesser linguistic deviations from the target variety. But given that the learning subjects frequently have in common their origin, mother tongue, milieu and social contacts, the hypothesis of our study appears rather plausible, namely, that in their relations with the natives and among themselves foreign workers develop specific forms of linguistic communication ("norms") which make it possible to describe the levels of command of a second language peculiar to a given group. Hence we employ here the term varieties of learning to designate the various states of linguistic knowledge peculiar to given groups of subjects learning a second language. These varieties are defined by their deviation from the language of native speakers at the various linguistic levels. For studying second language learning as a dynamic process toward the target language, the role of the mother tongue, the mode of learning are of special importance. For the result of the learning will depend on these factors. We seek not only to describe, but also, in so far as possible, explain this result.

As adult speakers, the foreign workers are already in full possession of their mother tongue. They have not only learned the rules of grammar, but their language also serves them as an individual, cultural and social means of orientation. These two aspects of a language, language as a system of rules and as a diversified means of orientation, are simultaneously learned by the child. But as distinguished from the language learning of a child, the mother tongue plays a special role in the learning of a second language. For the subject learning a second language, acquisition of the mother tongue and of the patterns of action and orientation related to it have been completed. Hence it is not surprising that in order to learn a second language the subject should resort to patterns of his mother tongue. This can be useful to him in the sense that he is more conscious of the rule of his mother tongue than children are, and can call on such knowledge contrastively while learning the second language. On the other hand, the fact that the rules of the mother tongue are deeply rooted automatisms which interfere with the second-language rules to be acquired can have a negative influence on the learning process. This effect should be all the more strongly felt in that the foreign workers usually arrive in the F.R.G. without any prior linguistic knowledge and very rarely attend German courses. The unconscious resort to the mother tongue during the unguided learning of German is all the more understandable in that familiarity with the second language is very limited. It follows from these reflections that influence of the mother tongue on the varieties of learning lessens in proportion as deviation from the target language diminishes.

Although little is known of the manner in which one learns a foreign language, it can be assumed that an adult learns a second language differently from a child. It appears that in a sufficiently stimulating environment that fosters integration, children quickly overcome the stages of agrammaticality and inacceptability in acquiring a second language and completely assimilate the target language (within the limits of the margin mentioned in chapter 2) ; this is very rarely the case with adults.

Children learn probably more easily and more rapidly, and thus numerous studies maintain that the younger one is the more easily one will learn a second language.

This supposition is explained as follows. The learning process - from the "zero point" to a very advanced stage of language learning - appears to unfold as follows : during communication, the learning subject develops hypotheses concerning the rules of the second language and produces statements whose adequacy depends on that of the hypotheses. Hence the learning process is one of optimization : false hypotheses are eliminated in favor of correct ones. With children, this optimization appears to progress rather mechanically - hence one also speaks of a mechanism of language learning. Adults can certainly attain the same goal as a child. But owing to the fact that with adults learning is much susceptible to slowing down, stagnation and regression than with children, we can conclude that the context of learning is of paramount significance. To the extent that the optimization does not automatically and mechanically occur, the degree of command of the second language depends on the nature of the context of learning :

- (a) on the frequency and intensity of communication with natives,
- (b) on the properly formed character of the statements the subject hears,
- (c) on correction of the incorrect statements produced by the subject,
- (d) on the contributions by natives during communication which favor learning, e.g., by arousing in the subject a personal interest in regular improvement of his second language learning.

The context of learning is the more important in that foreign workers generally learn German without guidance. In acquiring it they are essentially reduced to their own efforts during daily contacts with natives, since explicit correction through instruction in the second language is generally lacking. However, it can be said that equally good learning results could be obtained through natural contacts - possibly even better than through instruction, if the social context as a whole were more favorable to learning. But in the case of most foreign workers, this influence on the learning of German is rather negative.

Their stay in the F.R.G. is considered as a "temporary exile" by part of the foreigners. They have emigrated, compelled by their material situation, with the idea of returning to their native country as soon as possible and with as much money as possible. They are very interested in maintaining their national and cultural identity. Hence contacts with natives are of only secondary importance to them. Another increment of the foreigners - those who have been living for more than ten years in the F.R.G. and have children attending German schools - is more oriented towards a permanent stay in the host country. They seek contact with Germans, but social, cultural and emotional barriers most often oppose this.

Although social conditions are certainly different in each particular case, sociological studies (cf. Barris and Mehrländer, 1974) as well as our own observations in the fields of "work" and "leisure" contacts (Heidelberger Forschungsprojekt 'Pidgin-Deutsch' 1975a : chapters 4 and 5) reveal that good contacts during leisure hours are

clearly the exception and not the rule. Contacts at work are characterized by (a) overt or latent tensions between German and foreign workers and (b) the sort of work (e.g., moving-band production, as opposed to hotel work) and (c) the work environment.

Where personal and private contacts are the case, our studies reveal relatively advanced knowledge of German (cf. the case studies in Heidelberger Forschungsprojekt 1975a : chapters 4 and 5). They show that in case there is a favorable learning context, adults can achieve rather complete command of the second language without guidance. But, aside from these exceptions, the contact situation must be considered as rather perturbed, especially in respect of the situation at the place of work. This state of affairs appears to be due to the fact that the ethnic situation at the place of work was not freely chosen by the German workers, but imposed by the management of the enterprise. The result is that necessary communication during work between the ethnic groups occurs, but that, most often, it does not occur in "freer" situations (during work-breaks or time off). Thus one of the factors fostering learning of a second language generally does not exist : personal contacts linked to a willingness to correct errors explicitly.

The aim of communication between Germans and foreigners during work is indeed that of achieving mutual comprehension. The fact that German should be the vehicle for such communication is the result of the existing majority relationship. As neither of the two groups understands the language of the other in communicating, the minority must conform to the majority. Words and expressions required for the immediate performance of actions are those which are learned in rudimentary fashion. There is no time, during work contacts, for grammatical instruction or for correcting linguistic errors. Hence a mode of communication must be found spontaneously, i.e., without any major preparations. The solution to this problem appears to consist in normative simplifications of German. The foreigner is obliged to resort to such simplifications, for he has no precise knowledge of the words, nor of the grammatical rules. To facilitate matters for him, the Germans often reduce their statements to the mere informative level. This means that a German, in addressing to a foreigner with only limited linguistic knowledge the following question : "Um wieviel Uhr ist der gestern der Unfall an der Maschine passiert ?" (At what time yesterday did you have the accident with the machine ?), will choose the following simplified formulation : Wieviel Uhr Unfall Maschine gestern ? (What time accident machine yesterday). The simplified sentence contains the basic semantic information : TIME - YESTERDAY - ACCIDENT. The significant core of the sentence is the question concerning the time of a happening. The quantifier wieviel marks the interrogation ; Maschine is an additional place indicator.

It can be assumed that by the use of these simplifications, Germans seek to facilitate the communication problems of foreigners, and that should not be regarded as an expression of their disdain. It is above all an economic mode of communication. The German selects the chief information and strips it of everything secondary. This facilitates decoding for the foreigner, i.e., distinguishing at a given moment between what is important and what is less so. Thus the interlocutors create, by means of normative simplifications, a relatively simple and often even quite stable basis for communication.

Hence progress in the learning of German depends on the form in which statements in the foreign language are presented to the foreigner. A work pidgin, internalized by dint of routines, only cements a given level of linguistic knowledge. This does not mean that there are not, in addition, plenty of Germans who use complete and acceptable sentences, thus offering foreigners improved opportunities for learning. Linguistic simplifications by Germans, also often referred to as their register for foreigners, represent only one of the reasons why most foreign workers never reach a level of more than rudimentary knowledge of the second language.

The phenomenon is characterized by ultimate cessation of the learning process at a certain level of linguistic knowledge, referred to as fossilization. It appears to be closely linked to daily routines. It is assumed that linguistic competence in the second language no longer develops among subjects from the moment it suffices to meet their communication requirements. As the contacts of foreign workers with Germans are limited in most cases to working hours, the learning of the second language runs the risk of becoming fossilized very easily when the knowledge acquired suffices for correct performance of assigned tasks. Moreover, numerous workers show no interest in improving the bases of their knowledge of German, for they intend soon to return to their country of origin.

The aspects dealt with thus far clearly show that among foreign workers the learning of a second language is subject to different conditions from those applying to intellectuals. To be sure, learning by the foreigner is also characterized by individual differences in initiative and aptitudes, as well as by the difference in learning conditions. But socio-economic factors are those which, more than any other, by strongly influencing the contacts with natives, determine learning by foreigners. We shall deal in chapter 5 with other sociological causes explaining the great diversity in the varieties of learning. In what follows, we shall ask which linguistic properties of the varieties of learning necessitate special explanations and how such varieties can be described.

#### 4.2 Description of the varieties of learning : Problems and fields selected

The means used to describe the varieties of learning of foreign workers will vary in terms of what we wish to explain and in terms of the quality of the analytical methods available. A basic purpose of any linguistic analysis will be to describe the linguistic means possessed by the learning subject at a given moment in the second language. An inventory of these means can be compiled from the phonological, morphological, syntactic, lexical and semantic standpoints by describing, in respect of a given linguistic level, all the elements from each of these standpoints. In this way, a comparison of the varieties of learning becomes possible. A second phase of the research involves explaining which factors determine the specific linguistic aspects of a given variety of learning. Among extra-linguistic factors, the frequency and intensity of contacts with natives, the nature of statements the subject has heard, the length of residence, the type of activity, age, type of housing, etc. are obviously of great importance. As we wish to separate those from the linguistic factors, we shall not deal with them until the next chapter.

Clarification of the following questions is particularly pertinent from a linguistic standpoint :

- (a) What are the linguistic reasons explaining why a subject chooses from among concurrent possibilities a certain element rather than another for incorporation in his variety ?
- (b) What strategies are employed by the subject to express his will at all costs with limited linguistic means ?



As concerns the first point, within the framework of the present chapter we can only assume the conditions permitting an answer to these questions, by determining the syntactic and semantic deviation between the varieties of learning and the target variety on the one hand ; on the other hand by indicating in respect of each stage of learning which linguistic elements exist or are missing and to what extent they deviate from the target variety. We assume here temporarily that the learning subjects model their existing behavior on the target language. The fact that something has not been learned can then be explained by a certain lack of pertinence from the standpoint of communicative activity and function.

Another problem arises relating to certain deviations from the target variety, which, in principle, are encountered at each linguistic level. They essentially concern two phenomena :

- (1) The use of an element not existing in the target variety (e.g., the production of phonemes of the target language by the use of phonemes of the source language).
- (2) Use of elements of the target language in a sense differing completely from the standard of native speakers.

The existence of this type of deviation in the variety of learning can, among other reasons, result from interferences by the mother tongue or from formation by the subject of hypotheses concerning the rules of German at a certain stage of learning. It is in the field of phonology that interferences by the mother tongue can most clearly be discerned (cf. Rieck, 1975 and section 6 of the present chapter). This is more difficult from the other linguistic standpoints in which a purely empiric identification of interferences is not possible. Such interferences will then have only a hypothetical status. For example, one has a few rather plausible indications concerning a subject's preference for a certain syntactic construction ; it can be attributed to interferences by the mother tongue. Other indications suggest that what is involved in such case is a specific learning strategy or a dialectical expression of the target variety, unknown in the university milieu.

The difficulties we have just listed led us, in the following descriptions, to assign to this type of explanation the status of hypotheses. We shall resort to contrastive arguments especially for the explanation of certain phonological processes and of word order. They apparently play a special role in respect of the surface structure of statements by learning subjects. On the other hand, such reasoning frequently proves purely speculative for the study of semantic aspects. For our attempts at semantic explanation of the use of certain modal verbs and certain prepositions, we shall assume rather that they involve strategies of learning which repeat elements frequently heard during communication with Germans. These strategies then lead them to an over-generalized and too frequent use of such elements. Such strategies are closely linked to the scope of the inventory of elements and rules in the subject's possession. If his repertory of words and rules is small, the subject will be compelled to designate different objects, facts or properties by the same word (for example, he may use kaputt for anything defective or not corresponding to a certain standard). Likewise, he will have to use a single rule to express temporal or modal aspects of the statement or action, which aspects native speakers express by different rules. The strategic use of a word or rule in a much broader sense than such word or rule usually has in the target language is called over-generalization ;

that is to say that the use of a word or rule is applied to other fields without differentiation and in disregard of semantic limitations. The result of such over-generalization can be called semantic blurring : what it involves is a loss of specificity of meaning.

It is not easy to identify such learning strategies. Great frequency or unsuitability of their use is what draws attention to this phenomenon. In this context it is particularly important to find which words and rules are lacking in a given learning variety and to determine the numerical frequency of those present. By comparing from this angle the learning varieties and the target varieties, one can first determine deviations in a purely linear manner. For the syntactic description of the learning varieties, we began by so doing. During establishment of the deviations between learning varieties and target varieties, we observed that certain subjects used certain rules much more often than natives. We interpreted this sort of indications, resulting from numerical reports, as semantic procedures characteristic of the learning varieties, and we studied them also. The study of modal verbs and of prepositions hence reveals, alongside the purely syntactic description, semantic aspects of over-generalization. We are currently conducting investigations in this field by having our Spanish informants provide us with spontaneous German-to-Spanish and Spanish-to-German translations containing a heavy concentration of certain syntactico-semantic variables. In so far as possible, we shall take account in our report of the initial impressions we have gathered from these translations. Their systematic study remains to be done.

Our description stresses syntax and semantics. We slanted our study toward these fields, and especially toward syntax, in the belief that such a study is of fundamental importance to the formulation of language instruction. From the linguistic viewpoint, phonology and morphology are obviously of equal importance. But for establishing and maintaining basic comprehension, the syntactic and semantic aspects appear to us to take precedence.

Naturally, it would have been desirable to reach conclusions relative to the most urgent problems attending unguided second language learning, such as the phenomena of shunning, substitution and over-generalization underlying learning strategies, actual verbal needs in the course of daily communication, and the success or failure of spoken acts in the social context. We have examined these problems to the extent possible in our Heidelberger Forschungsprojekt "Pidgin-Deutsch" (1975a : 60-111). But here the linguist is confronted with the frequently contradictory requirements of the goal sought and the feasibility of analysis. If we require our scientific observations to conform to the current state of our discipline and to be empirically verifiable, then the limits of our investigation are traced for us by the explicit analytical methods currently available. For the study of syntax, morphology, phonology and partly also of semantics, linguistics has explicit methods of description. Thus, if what we should like to achieve is not always possible, that is due above all to the fact that we chose not to create confusion by speculating on phenomena which, under present circumstances, still elude sufficiently precise scientific description.

First, a few additional remarks : for methodological reasons, we separate the levels of syntactic, semantic, morphological and phonological description. In reality, these levels are obviously mutually interdependent, according to the learning variety level. Anyone with only a few words at his command will tend to over-generalize. Subjects in the opposite situation are more prone to differentiated use. The smaller

their repertory, i.e., the shorter their statements and the fewer differentiating constituents they comprise, the less they will be able to apply syntactic, semantic and morphological rules. This principle is especially important for our quantitative analyses. If a subject's statement consists on the average of only 2 or 3 constituents, he can choose between only 2 or 3 positions for placing his words. On the other hand, a subject whose statements comprise an average of 7 constituents has a choice of 7 positions. Hence restrictions at a given level are accompanied by restrictions at another. It follows from the interdependence of the different levels that we must also subject the quantitative distributions obtained from the learning varieties to a qualitative linguistic interpretation.

The starting point of our study is an inventory of the elementary syntactic constituents of the learning varieties of 48 Spanish and Italian workers. The studies on word order and semantic, phonological and morphological aspects relate to it in various ways. First, the corpus of 100 sentences per informant, used as the basis for syntactic analysis, is also the starting corpus for the other descriptions. We have made use of additional occurrences solely in the case of prepositions and phonology. The study of word order is closely linked to that of the analysis of the structure of constituents (syntagmatic structure). As the description of the constituents of the sentence is extra-contextual, it must be supplemented by a positional analysis. The latter therefore constitutes a "correction factor" for the non-positional analysis of the structure of constituents (syntagmatic structure).

This analysis is also fundamental from another aspect. The results of the description of the elementary syntagmatic structure of learning varieties were used to classify the 48 Spanish and Italian subjects in terms of their syntactic level. Such a classification is useful for two reasons : on the one hand, it makes possible a precise determination of the respective deviations of the subjects from the target variety. In addition, it serves as a basis for classifying subjects into groups having relatively similar linguistic properties. The hierarchic classifying of subjects was done as follows (we are greatly simplifying ; the process itself is very precise) : one assigns to each subject a syntactic "profile" which consists of a characteristic value summarizing the values relative to the expression of a few syntactic rules particularly important to the development of learning. A strong correlation is evidenced between the rules used for establishing the profiles : the subjects, for example, who use no verb in the sentence do not use pronouns and cannot form subordinate clauses.

On the basis of this hierarchic classification of subjects according to their level, we have formed groups of subjects whose levels have common properties. For our analyses, we use an initial division into four groups (I to IV) of 12 speakers each. Group I, respectively 1, then corresponds to the lowest linguistic level ; group IV, respectively 8, to the highest level, i.e., the one nearest the target variety. It is obvious that division into 8 groups permits more differentiated observations than division into 4 groups. However, the division depends on the quantitative data and the possibility of interpreting them. The division into groups appears to us justified for two reasons : on the one hand, the learning conditions among numerous subjects resemble each other. Hence these conditions can be considered as specific to a given group. And, on the other hand, in language teaching one also works with groups defined by a level of comparable knowledge. That is why the observations concerning group aspects seem to us particularly useful for the practice of instruction.

#### 4.3 Inventory of the syntactic constituents of the sentence

We shall set forth here, most often informally, the analysis of the syntagmatic structure to which the varieties of German of 48 immigrant Spaniards and Italians and those of a reference group of Germans were subjected. We shall place greater emphasis on setting forth the results than on the analytical process, a detailed technical description of which is to be found in Heidelberger Forschungsprojekt "Pidgin-Deutsch" (1976) and in Dittmar and Rieck (1977).

##### 4.3.1 The process of analysis

The recorded discourse of the subject is first transcribed by means of a system developed in the Heidelberg research project<sup>(1)</sup>. Then in succession a body of 100 sentences was extracted - that is, verbal units having a complete meaning - from informants' discourse of varying length. These sentences were subjected to syntactic analysis by use of the grammar of varieties presented in chapter 2. This grammar, specially developed for the requirements of the present study, contains approximately 100 rules. It is a syntagmatic component comprising extra-contextual rules patterned after the standard model of the transformational generative grammar (Chomsky, 1965). By analyzing the 100 sentences of a given informant with this grammar, one obtains a set of one hundred probability values which indicate, in respect of said informant's variety, the relative frequencies of the application of rules. This is illustrated exemplarily by the matrix on page 16. The fragment of a grammar, mentioned there, consists of 5 rules. Each of the six hypothetical varieties ( $V_1$  to  $V_6$ ) is therefore characterized by five rules.

The aggregate probabilities associated with the rules of the variety of a given informant can be considered as his syntactic "profile". Complete analysis of the 48 varieties hence provides us with 48 syntactic profiles that we can compare point by point. For such a comparison of the command of syntactic rules to be fruitful, it is essential, as we have shown in 4.1, to classify informants according to their degree of syntactic development. In principle, it is possible to establish for each rule a classification of the informants. But such an approach does not enable us to evaluate clearly the aggregate syntactic knowledge of the subject. For that reason, we developed a process (which we cannot describe here) that attributes to each of the 48 informants a characteristic syntactic value, also known as the syntactic index. It consists of the probability values of eight syntactic rules. These rules are those which reflect most clearly the different development stages of the informants and which, in addition, can be considered as especially important for German syntax. (The formal procedure for reducing the complex matrix of data to eight rules differentiating development is described in detail in Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1976: 144-149). These eight rules describe the following syntactic phenomena of the sentence :

1. Presence vs. absence of the subject
2. Presence vs. absence of the verb
3. Complexity and differentiation of the verb group
4. Complexity of the complements of the verb in the predication framework

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(1) We shall subsequently use this notation to reproduce the subjects' discourse. For details of the transcription, cf. p. 26.

5. Degree of pronominalization
6. Nature and complexity of the nominal predicates
7. Expression of the determinant in the nominal syntagma
8. Expression of adverbial syntagmas.

We have observed that a strong correlation exists between these rules. This is corroborated by the fact that these rules are apparently learned in a specific order in the course of second language acquirement. That means, for example, that to a certain stage of the learning of the German verb group there corresponds a certain stage of pronominalization and of the expression of adverbial constituents.

Hence the first important result of our study is that unguided learning of the syntactic properties of the second language is not done in a completely idiosyncratic manner, but that the various stages in the learning correspond to a relatively specific framework. It appears that certain syntactic properties of a language have a strong influence on the way it is learned. This means, for the teaching of German to immigrant workers having already reached a certain level of unguided learning, that one must not expect appreciable differences in the learning of certain syntactic phenomena at a given level of linguistic knowledge. The relation between a given stage of learning and a certain pattern of present and absent syntactic constituents, shared by all subjects, also justified the division already mentioned of subjects into groups ; these constitute the basis for the report of our results.

#### 4.3.2 ~~Examples~~ of texts for the learning levels of the various groups of reference

We shall first sketch, for the syntactic fields selected, the stages reached by immigrant workers in the unguided learning of German syntax by comparing the characteristic values of the groups of learning subjects and the characteristic values of the German speakers of their entourage. Thereafter we shall give an overall view of the current state of the learning of German syntax peculiar to each of these groups.

The syntactic analysis of the learning varieties is to be understood as an inventory of the linguistic resources, often deficient, possessed by the immigrant workers never having had the benefit of instruction in the second language, in the field of syntax. The values of German speakers from the same work environment, always given as a reference, then indicate the direction followed in learning syntactic rules during the unguided learning process, and the direction to be aimed for in language teaching. Comparison of the groups among themselves (and) with native speakers reveals which are the syntactic properties that develop relatively quickly and which are those acquired only at relatively advanced stages of learning. The "transverse section" of a given level of learning indicates at what point instruction at a certain level should intervene. The analysis also shows which syntactic rules are rarely or never used by the German speakers, but are found among Italian and Spanish subjects, particularly those in the lower groups.

A - The subject : with few exceptions, the subject of a German sentence must be expressed explicitly, which is not the case in Italian and Spanish. It is true that in the dialects of southern Germany, the verb and its subject pronoun often merge so strongly that perception of the subject pronoun, and hence also its learning, may be rendered quite difficult for foreigners.

Table 4-1 shows to what extent the Spanish and Italian immigrant workers use a rule belonging to a learning variety (formation of the sentence without an explicit subject), or to what extent they already use the rule of the target language.

TABLE 4-1 : RELATIVE FREQUENCY OF EXPRESSION OF THE SUBJECT

Group	Sentences without subject	Sentences with subject
I	0.47	0.53
II	0.39	0.61
III	0.34	0.66
IV	0.12	0.88
HD	0.01	0.99

(Group I : the least advanced in the learning of German syntax; group IV : the most advanced ; HD : German speakers from the Heidelberg area).

The values correspond to the probabilities of use of the two rules by a given group. (Cf. in this connection chapter 2). It can be observed that the rule of explicit expression of the subject is used, even in speech, practically without exception (probability 99 %) by the German speakers. This also applied to the most advanced foreign subject of the sample (the values for this subject, who belongs in group IV, are not shown in the table). This subject speaks a variety of German practically no longer distinguishable from the local dialect. All the other immigrant workers tested, and particularly the subjects in groups I to III (75 % of the sample of foreigners), who construct more than a third of the German sentences without an explicit subject, have an insufficient knowledge of this rule. Although the failure to express a subject identical to that of a preceding sentence does not necessarily prevent comprehension of the text, violations of this quasi-mandatory rule of the target language are perceived as a characteristic trait of the language of foreigners. In other instances, absence of the subject can also influence negatively the understanding of a sentence.

VB - Predication and verb group : In general, every German sentence must also contain a verb. Table 4-2 shows that the German speakers (HD) exclusively use predications comprising a verb or copula. The four most advanced subjects of group IV attain the same percentage as the Germans (100 % of predications comprising a verb or a copula) ; the other speakers in group IV follow the rule to a very large extent.

TABLE 4-2 : RELATIVE FREQUENCY OF PREDICATIONS WITH AND WITHOUT A VERB

Group	Predications without verb	Predications with verb
I	0.59	0.41
II	0.30	0.70
III	0.23	0.77
IV	0.04	0.96
HD	0	1.00

The relatively high percentage of predications without verb in groups II and III and the very high percentage in group I show that the learning of verbs is particularly difficult in unguided second language learning. And when verbs are used, it is noted that the repertory of lexical elements available is often extremely limited, with the result that the same verbs are used frequently and thus undergo a considerable extension of meaning. An analysis, currently in progress, of all the verbs used by the foreign informants, and study of the spontaneous translations mentioned earlier, should provide more precise data on this question.

The high percentage of predications without verb and without copula is explained by the absence of the copula, although only a few very frequent forms in the target variety are involved here. This clearly shows that high frequency of an element in the language of contact individuals does not necessarily result in the automatic learning of said elements during unguided second language learning.

TABLE 4-3 : RELATIVE FREQUENCY OF THE USE OF THE COPULA IN RELATION TO THE TOTAL NUMBER OF PREDICATIONS CONTAINING A VERB OR A COPULA

Group	Predications with copula
I	0.03
II	0.04
III	0.14
IV	0.23
HD	0.19

Table 4-3 shows that among the German speakers, approximately one sentence out of five contains a copula. Comparable values are observed among the most advanced foreign subjects. The somewhat higher average of group IV is apparently due to a phenomenon of over-generalization of the rule (with values as high as 36 %), that is, the copula is used to form predication which would have been expressed in a more differentiated manner by the use of a verb. We can conclude from this that these subjects apparently do not know a sufficient number of verbs, but that the copula enables them to formulate acceptable predications.

The least advanced subjects in the sample (groups I and II) only rarely use the copula. It is used by 9 subjects in group II and by only 4 in group I. From the viewpoint of a future theory of focussing, which would permit distinguishing information important for communication from that which is less so, the contribution of the copula to the meaning of the sentence is certainly relatively limited. A sentence such as (1) in answer to a question concerning the profession of the informant, is certainly understandable :

(1) iq instalat8o (SP-02) (I fitter)

Isolated from its context, this sentence obviously no longer possesses any indication of tense, owing to absence of the copula.

The following table, 4-4, shows the stages of learning of auxiliary and modal verbs. Only 60 % of the German speakers' sentences consist of a simple verb. The other 40 % contain a verb accompanied by an auxiliary or by a modal verb.

TABLE 4-4 : RELATIVE FREQUENCY OF THE USE OF VERBS, AUXILIARIES AND MODAL VERBS

Group	Simple verb	Auxiliary + verb	Modal verb + verb
I	0.98	0	0.01
II	0.94	0.03	0.03
III	0.84	0.04	0.12
IV	0.56	0.35	0.09
HD	0.62	0.22	0.15

Inasmuch as paragraph 4.4.1 will present a detailed syntactico-semantic analysis of the learning of the system of German modal verbs, we shall not speak of that here. The relatively frequent use of auxiliaries among the German speakers and those in group IV is explained essentially by recourse to the perfect in narrative texts. The fact that group IV exhibits a more frequent use of auxiliaries than the German speakers still remains to be studied more closely. It is possible that what this involves is an over-generalization in respect of the formation of tenses. The subjects in this group apparently prefer forming a past tense by the use of an auxiliary (plus the invariable form of the past participle) to morphological expression of the past in the case of the preterit, wherein the additional difficulty involved in the forms of strong verbs comes into play. Among three fourths of the subjects tested, particularly among those in groups I and II, the use of an auxiliary is much less frequent than among the German speakers. As these subjects, without exception, are incapable of expressing the tense (and the person) morphologically, all that is left them is the use of lexical elements (adverbs) for expressing tense. This is illustrated by sentences (2), (3) and (4) :

- (2) Biifiil uua uu maadrit pariil ? (SP-22)  
At what time (does, will, did the) train (leave from) Madrid (for) Paris?
- (3) hoite fiil komplikasjon in doilaa (SP-09)  
Today (there are) many problems in Germany
- (4) filai ainä tag ainä stainä (SP-21)  
Maybe one (i.e., each) day one stone.

Only in (3) does the adverb clearly specify the tense ("present"). In (4), *filai* indicates a modality, but various tenses are possible. Hence we do not share the opinion sometimes expressed by specialists of pidgin jargons, viz., that adverbial complements can replace temporal signs of the verb. An explicit indication of tenses by the use of adverbial complements, for example in narrations, is not always possible, with the result that more complex temporal relationships cannot be expressed by such speakers in German.

C. - The nominal syntagma : we shall deal in what follows with the learning of nominal syntagmas in the position of subject and object.



Table 4-5 shows the different forms of expression of nominal syntagmas by nominal groups, pronouns and adjectives. The number of adjectives in a predicative function is, on the whole, low and decreases even more in the upper groups and among the German speakers.

TABLE 4-5 : STRUCTURE OF THE NOMINAL SENTENCE (RELATIVE FREQUENCIES)

Group	Nominal group	The nominal syntagma consists of :		
		Pronouns	Adjectives	Other structures
I	0.58	0.29	0.11	0.03
II	0.46	0.43	0.10	0.01
III	0.45	0.45	0.08	0.02
IV	0.34	0.58	0.07	0.01
HD	0.28	0.64	0.03	0.05

The use of nominal groups and pronouns varies distinctly from one group to the other. The proportion of pronouns greatly increases in the upper groups. But even in group IV it is still lower than the corresponding value among the German speakers.

Pronominalization is a linguistic means whereby economic and repeated reference can be made to identical persons and objects. Table 4-5 shows that the foreign subjects have only a very limited command of this means. In addition, table 4-5 must be viewed in relation to table 4-1 : whereas almost a third of the nominal syntagmas expressed in group I consists of pronouns, table 4-1 shows that almost half of all the obligatory subjects were omitted. This especially involves subjects that a German speaker would have expressed by the use of pronouns. This is illustrated by the following passage, extracted from a conversation with Lucia M. (IT-13, group I) :

- (5) Lucia M. : main man unfal ? ... wan aabait, aabaite qoben, un dan kaput. filaiqtc, anderc kollege saagen, folaiqtc gestorb, un dan tñtlfoniic klinin, klinik haidelbörk, ambulants un dan foct in klinik.

Attempted translation into standard German ; we underline the pronouns reference to which occurs outside the framework of the sentence :

Wie meinem Mann der Unfall passiert ist ? ... Wenn er arbeitet, arbeitet er oben ; und dann ist er von dort oben heruntergefallen. Ein Kollege hat gesagt, er hätte sterben können. Und dann hat er (der Kollege; es könnte natürlich auch man stehen) die Klinik in Heidelberg angerufen, die Ambulanz, und dann ist mein Mann in die Klinik gekommen.)

English translation :

How did the accident happen to my husband ? ... when he works, he works above; and then he fell from up there. A colleague said that he could have died. And then he (the colleague; of course, the German indefinite pronoun "man" would also do) called the clinic in Heidelberg, the ambulance, and then my husband was taken to the clinic.

As long as there is no conflict between the person already introduced in the discourse and a second person, when the subject or object used to express the referential identity between sentences is omitted, understanding perhaps may not hang in doubt. But the example quoted, which is representative of many others, is ambiguous. Hence learning of the pronominal system in German offers difficulties which teaching ought especially to take into account.

However, it is observed that even subjects with very limited linguistic knowledge learn the nominative singular pronouns of the first and second persons, ich and du. There could be two reasons for this :

- (a) Deitic personal pronouns can hardly be replaced by another expression : it is not usual for the speaker to refer to himself or to his interlocutor by name ;
- (b) ich and du are often heard in oral communication. (But we have seen above that frequency of occurrence of an element is not sufficient in itself to ensure its being learned). Another motive for frequent use of the pronoun du might be the fact that, in the immigrant-worker varieties, this pronoun has the additional function of marking the imperative, for most of the foreign subjects do not know the verb forms of this mood in the target language.

However, the pronoun of the first person plural, wir, is most often not known, and instead of the third-person pronouns er, sie, es, even the most advanced subjects use only the masculine pronoun er in many cases. The forms of the oblique cases are especially difficult. Studied currently in progress on prompted translations and imitations reveal that such forms as ihn, ihnen, etc. are not perceived, hence not translated, and systematically omitted in case of repetition (oral).

Table 4-6 shows the values concerning aspects of the internal structure of the nominal group. It will be observed that the use of nominal groups without articles, quantifiers or numerals is somewhat more frequent in groups I to III than in group IV and among the German speakers, though not particularly developed. The characteristic differences consist in the manner in which articles, quantifiers and numerals are apportioned among the nominal groups. In this connection, it is noted that the article is much more frequently used by the German speakers than quantifiers and numerals together.

TABLE 4-6 : RELATIVE FREQUENCY OF THE USE OF ARTICLES, QUANTIFIERS AND NUMERALS

Group	Noun without article, quantifier, numeral	article	Noun with quantifier	numeral
I	0.59	0.19	0.07	0.14
II	0.52	0.30	0.08	0.11
III	0.48	0.32	0.08	0.11
IV	0.34	0.50	0.06	0.09
HD	0.42	0.45	0.06	0.03

Absence of the article, or the substitution for it of a quantifier or a numeral, indicates that foreigners have considerable difficulty in learning the complex system of determinants in German.

D - The adverbial syntagma : the adverb plays a particularly important role in the varieties of the immigrant workers because it must often replace the functions of the morphological system not yet learned. Wherever temporal or modal aspects cannot be rendered by the morphology of the verb, it is often necessary to express them by means of adverbs. Thus ambiguity of the expression faarc/España (in which faarc is a verb form lacking morphological markings, typical of the varieties of most of the immigrant workers) can be sufficiently dispelled by the circumstantial complement lastc jaac so that the probable meaning of the statement ("last year I went to Spain") can eventually be understood by the hearer. Another support of modal information in statements is, for example, vielleicht (cf. sentence (4)), which, in the varieties studied, must often express the unreal or conditional nature of a statement. The meaning of this adverb can apply to the whole of a text, if placed in the initial sentence.

For all these reasons, adverbial complements occur very frequently in the varieties of the foreigners, even those in the lowest groups, and can probably be included among the first syntactic phenomena learned in the foreign language. They even decrease somewhat in group IV, probably because they have in part become superfluous, owing to the progress made from the standpoint of verbal morphology.

Table 4-7 indicates the internal structure of the adverbial syntagma, restricted to the possibilities of expression most often found. The German speakers frequently use adverbs, less frequently prepositional nominal groups and almost never nominal groups without a preposition. These are limited in German to durative adverbial complements of the type :

(6) ich habe den ganzen Tag geschlafen

(I slept all day)

Three fourths of the foreign subjects tested had great difficulty with the use of prepositions. Aside from the prepositions incorrectly used, one finds that half and sometimes more than three fourths of the nominal groups functioning adverbially have no preposition. A detailed syntactico-semantic analysis of the use of prepositions is found in paragraph 4.4.2.

Group	Expression of the adverbial syntagma			
	Nominal group w/o preposition	Prepositional nominal group	Adverb	Other structures
I	0.42	0.13	0.36	0.09
II	0.25	0.19	0.46	0.10
III	0.20	0.26	0.39	0.15
IV	0.09	0.30	0.43	0.18
HD	0.02	0.14	0.61	0.23

The values for the use of (simple) adverbs in groups I to IV are distinctly lower than the values among the German speakers. Research currently being conducted by means of prompted translations reveals that often means as efficient and economical as the adverbs da and dort for expressing the situative deixis are not used either actively or passively, even by advanced subjects.

The fourth column ("Other Structures"), in which the values progress regularly from group I to the German speakers, leads us to a problem to which we have paid but little attention heretofore, viz., the learning of syntax. This learning is manifested not only by the redistribution of frequency values within a set of numerically few rules, for example, by the transition from a rule enjoying preference, possibly acceptable in the source language but not in the target language, to a rule of the target language. Learning is also manifested by a constant increase in the total number of rules available, thus allowing a foreign subject a more differentiated choice of his means of expression. Hence the last column of table 4-7 groups an entire body of possible expressions, complex in most cases, for adverbial syntagmas and thus reflects the increase in the number of rules permitting a more differentiated and adequate expression of the communicative intention.

E - Subordinate clauses : to conclude the study of syntactic phenomena, we shall sketch the development of the use of subordinate clauses. Table 4-8 indicates the average frequency of adverbial and nominal syntagmas by speakers in a corpus of 100 sentences.

TABLE 4-8 : AVERAGE FREQUENCY OF SUBORDINATE CLAUSES BY SPEAKER

Group	Adverbial syntagmas	Nominal syntagmas
I	1.1	0
II	3.2	0.8
III	7.1	1.3
IV	7.9	2.9
HD	16.6	10.2

Our syntactic analysis of the structure of constituents nowhere shows more clearly the immense deviation between group IV and the group of Germans than in the frequency of use of subordinate clauses. Only the foreigner most advanced in the learning of German syntax attains to values comparable to those of the Germans ; all the other foreign subjects remain far behind. Apparently adverbial syntagmas are learned relatively early, whereas the rules for forming nominal syntagmas are acquired at the very end of the learning of German syntax.

Up to now, we have described the learning of the syntactic constituents systematically. In order to bring out the characteristics of the learning process, we have virtually abstained from illustrating the various learning stages by extracts from interviews.

The following texts are intended to illustrate our remarks on the learning of German by Spanish and Italian workers. Each interview extract is representative of a group. For group I, the one with the least knowledge, we have chosen a text of Battista I. (IT-23). For groups II, III and IV, i.e., those representing a higher level of learning, we have chosen

respectively narrations by Isabel M. (SP-12), Tomás A. (SP-36), and Mameel E. (SP-24). Each interview extract is preceded by the social data relating to the informant. The text is followed by its translation and a brief commentary on the level of learning exhibited.

Text 1 : (Level of group I) : Extract from the interview with Battista I. (IT-23).

Battista I. comes from a village of the province of Naples (southern Italy). He attended primary school for six years and worked as a mechanic. At the age of 15, he left for the F.R.G. At the time of testing, he had spent 18 months in Heidelberg, and was working there at a firm dealing in wood. He has virtually no contact with Germans, either during his work or his free time.

In the following text, Battista I. complains of the fact that he manifestly cannot enjoy the same privileges as the Germans. For example, drinking a beer during work. He also complains of being forbidden to smoke during work.

IT-23 I 620 ff.

Interviewer : Nicht eine Minute Pause dürfen Sie bei der Arbeit machen ?

Battista I. : wanc- wan iB cdriqk, trai uuc, trai uuc, ain man, E, ainc mal doftB, E, ain gasc biic alEs, E ? + wan iB driqk, Bf ogom, saagc, hõõ! was mag duu, õõ? warum iB niks, warum- E warum E/Alfred/ gome biia, iB bñtsaal, warum iB niks driqk ?

Interviewer : Auch, so die Deutschen dürfen trinken und die Italiener dürfen nicht trinken !

Battista I. : jaa. wan iBc in tóilEt, hõ, ainc maal ain daak iB in toilEt, Bf cgggm, sgg, fstEAB, dududu, hc, was maago dñs, hc? niks raugc. jaa, iB- iB rauugc, ja, iB ainc- ain pakñto zigarEt ain taak, hc? jaa, waum iB niks raugc, hc?

Translation :

Interviewer : Not a minute's break (during work) : ?

Battista A. : Once when I wanted a drink, there is a German colleague who went for a case of beer around 3 o'clock in the afternoon, the boss came and he said, "Hey! what are you doing, you there, huh ?" Why shouldn't I have the right to drink ?

Why ? (Alfred goes for the beer, I pay ?  
(Alfred went for the beer, I paid ?

Why wouldn't I have the right to drink ?

Interviewer : Oh, so that's it. The Germans have the right to drink and the Italians don't have.

Battista I. : Yes. Once when I went to the lavatory - one day I went to the lavatory - the boss came, like that (he makes a threatening gesture), you understand, "You, you, you! Hey! What are you doing there ? No smoking here! " Yes, I am a smoker ; I smoke a package of cigarettes a day. Well ! Why wouldn't I have the right to smoke ?

The sentences of Battista I. are very short. The only verbs are trinken (drink), kommen (come), machen (do, make), sagen (say), bezahlen (pay), verstehen (understand) and rauchen (smoke). The copula is missing. The personal pronouns are ich (I) and du (you). The nominal group consists of only a noun, sometimes completed by the indefinite article. The use of niks = nicht as a partial negation and to negate a sentence is particularly striking. "Niks" is one of the elements which socially characterize most strongly the German of foreigners.

Text 2 : (Level of group II) : Extract from the interview with Isabel M. (SP-12).

Isabel M. comes from a village in the province of Andalusia (southern Spain). She arrived in the F.R.G. at the age of 23 and had been in Heidelberg for ten years at the time of the tests. She did not attend school in Spain. She first worked near Heidelberg in a food products factory, then in a factory making spare parts of metal and plastic. She has little contact with Germans during work or during her free time. Although the parents want to return to Spain as soon as possible, time is working against the realization of their plans. The children are becoming accustomed to the German environment. The husband is afraid of not finding work in Spain.

In the following extract, Isabel M. speaks of the difficulties of her eldest son at the German school. She refutes the statements of the teacher, who claims that her son is stupid ; she points out the language difficulties. She alleges that the teacher himself would certainly have great difficulties in his work if he had to speak Spanish, and asks him to be patient.

SP-12 I 570 ff

Isabel M. : mainc kindc fiil tBimfc susmia, fiil tBimfc + sagān-tsag iB ni ++  
komc soq fūmfc jarc- kom iq di Bulā + un dam biscle B- E lāsc  
Bbani uq andro, un daq komc hiic E, maāstra fo di sulā imc  
tBimfā : hoo, dainc so fiil dum, dainc so fiil duq. uq da c  
Bimfā, dsage : maiq so ni duq ! warum du ni sprāBc Bbanik ?  
BwāBc su dia, a fo main so au BwāB ! laqsa, laqsa, un da maic  
son lānāk!

Translation :

Isabel M. : My children often complain to me, they complain. My son went to school at the age of 5. He learned to read Spanish, and other things besides. And then he came here. The schoolteacher is always complaining : "Oh! how dumb your son is, your son is very dumb". " Then I get angry and I say : "My son is not dumb ! Why don't you speak Spanish yourself ? It's difficult ! Well, for my son it's German that is difficult ! Not so fast, and my son will learn German too."

In comparison to text 1, Isabel uses more prepositions : zu (to), in (in), von (from, of). The determinants used are the definite article and the possessive pronouns mein (my) and dein (your). The social characteristic of this variety = as moreover for the German of foreigners in general - is the use of the quantifier viel (much) instead of sehr (very) before an adjective (here : viel dumm (very dumb)).

Text 3 : (Level of group III) : Extract from the interview with Tomás A (SP-36)

Tomás A. comes from a village in Galicia, near the Portuguese border. He attended school for seven years and was apprenticed as a mason. He left for the F.R.G. at the age of 19. At the time of the tests, he had been in Heidelberg for more than four years. He works there as a welder and as a mason. According to his indication, he is in frequent contact with Germans during work, but much less so during his free time. He is married and wants to return to Spain with his wife as soon as they have saved the money needed for a fresh start in Spain. Tomás A. explains in the following text the reasons which led him to abandon his work as a welder to accept work as a mason. He says that the welder's mask, which must be worn all day, does offer a certain protection against gases, but every time one goes to the lavatory or office, one removes it, which is dangerous, since the gases are spread throughout the shop. After a doctor confirmed to him the dangers of his work, he decided to change firms and went into construction.

SP-36 II 120 ff.

waq fiil- niks igaal ai- ainc stunde swaisē maxc odā swai stund oda tago oda ainc monat, max niks, aba wan jhntc taage jhntc, dās ima son lā-csūqt maxen. das son slūgt. dā maskc maxen niks, wan jhntc tago, do- do maskc maxen niks. jaa, filaiqt sii jās komem baiq woonetsimā<sup>+</sup>, nā? imā kantsc f- gantsc fabrik imā laufāq, flais ainc froi do swaisa maxc uq andro sqq, ni linsun rrāos, un dā andro gas ima au sālbo maxen, wan si foct maxen wi- wi saine plas arbāitc un dc maskc mus raus maxāq-dc maskc, no? & &c, iqmūs-komem, bai mic dolmātBa baiq doktor, mus i fraagāq alās fic maskc arbāit odā so, un dā doktor mic saagāq, āgaal, wan duu filaiqt komem baiq toilātāq oda tsima- woonetsima, nā ? du maskc rraus maxāq, in dc gantsc hale imā fiil raus fic aiso gāl das? un daq alās āgal &c&c&c. uq iq mus fraagāq baiq, dc maista, nā ? unda B gabcq ainc-ainc briif fon dc dokta, mus briq fon maista, maista mus lāsāq, saqoq, gi mi papic, dā maista mus ainc papic-&c &c iq balm bau komem, bau bāsa.

Translation :

When one has been a welder for a long time, it is not the same. It doesn't matter to do welding for an hour or two or for a day or a month, but when one does that every day, then that does something. The mask is useless when one does welding every day. Yes, when you go to the cloakroom, you have to go through the whole factory. And often there are fellows welding here and there, one on the right and one on the left, and the neighbor produces gases. And when you remove your mask, there are gases at the place where you are. And you have to remove the mask. I went to the doctor with the interpreter and then I asked everything about the use of the mask during work. And the doctor said : "It's more or less the same whether you wear the mask or not ; if you go to the lavatory or the cloakroom and you remove the mask, there is still plenty of gas and smoke everywhere in the room. So it all comes to the same thing. That is what I told the boss, the foreman. And I gave a letter from the doctor to the foreman, I gave it to him to the foreman ; the foreman, he read it. I told him : give me my papers (the hiring certificates), and the foreman he gave me my papers. And that is how I went into construction. Construction is better.

On the average, the sentences of this text comprise more sentence constituents than those of the preceding texts. The definite and indefinite articles are correctly used. The verb is frequently accompanied by a modal verb. The semantically blurred and over-generalized use of several lexico-semantic elements is typical of this variety, as indeed of group IV as a whole.

The preposition bei also performs the function of the prepositions ich (sic), zu, bei of standard German. The modal verb muss (must) in combination with the verb is used to indicate the present and perfect indicative (cf. section 4.1.1). Wann (when) introduces both temporal and conditional clauses.

Text 4 : (Level of group IV) : Extract from the interview with Mamuel B. (SP-24).

Mamuel B. emigrated to the F.R.G. at the age of 19. He comes from an Andalusian village near Malaga. He had attended school for ten years before being apprenticed as a mechanic. In Heidelberg, where he had been living for three and a half years when tested, he had first worked as a chauffeur and later as an assistant cook ; then he was assigned to the service of machines finally, he worked for a rather long period as a welder. He claims to have good contacts with Germans during work, whereas they are only sporadic during his free time. Mamuel B. has undergone two serious stomach operations, despite his young age. He blames emigration as the cause of his illness. That is why he wants to return home as soon as possible. In his narration, quite understandable, Mamuel B. describes how he was discharged following a visit to the dentist.

SP-24 II 200ff.

Mamuel B. : iq waa an- doo waa ain dooncrstaa un hap iq am art uua- (III) unt dan hap iq tsu iirc son gosax "iq mēqto hoite miitax om drai uua tsu maua (Ort Mauer) tsum tsanaaots gee. iB 'aabe grosc Bmēctson." un dēm sax "gut". zoo am ziiben uua bis art uua moocgēs 'ab iq das gosax, nē. gut. also iq - am 'albor drai faicrabon maxen, nē, so normal, nē, aba bai dēm ima lūqgor blaiben un niq betsaale, iibetBtundo gaa niks. drai uua sax "ja, iq gee foc un wēk. ja, oq gee tsum tsanaaots". ja, miios gosax "duu geeBt nēt wēk. duu muBt & acbaite fādīB maxo." iq sax "oite moocgē hap iq tsu diio gosax 'iq mēqton tsum tsanaaots geen. " - "duu hast miio gaa niks gosax, muuc jēts". "nē, das Btim nēt. iq 'abc so gros Bmēctso, nē. is gees wēk." - "gut, wēn dum gees, kom nii mēc". so ainfax. gut, hap iq rausgogaq, abc fochēr 'ap iq gosax "barum de (denn) ?" - "niz, 'au ap! wēk! duu simbl, duu hunt!" dōq 'ap iq s fēstādo, nē.

Translation :

It was a Thursday. And then I said to his son at 8 o'clock : "Today, at 3, I want to go to the dentist. The pain is very bad." Then he said, "all right! " It was between 7 and 8 o'clock in the morning when I said that. Fine. So I finished work at two thirty, that is normal. But I often stayed longer, and that he didn't pay me for, not even the extra hours. At three o'clock I said : "I am leaving, I am going to the dentist". And then he said to me : "you are not leaving. You finish your work first." So said to him : "This morning I told you that I wanted to go to the dentist." - "You told me nothing at all ; it's only now that you speak of it". - "No, that is not true. I am in great pain. I must go." - "All right, if you leave, you don't need to come back." Just like that (he said it). So, I left, but first I still said : "But why ? " - "Clear off ! Out ! You idiot, you dog ! " And then I understood !



Compared to the other texts, this passage is remarkable for two reasons : it is easily understandable, and it clearly shows the particularities of the local Palatine dialect (*nãt, dco, 'albor drai*, etc.). The mood and tense of the verb are used in a differentiated and correct manner. Particularly striking in comparison to the preceding texts is the relatively well-developed verbal and nominal morphology, which therefore is apparently learned rather late. The word order follows the rules of German well. One finds the forms of the present and preterit of the copula. The pronominal system is used economically.

The texts quoted can also be considered as typical examples for the study of word order, of the use of modal verbs and prepositions, and of phonology and morphology. An explanation of the different learning levels of these selected speakers is to be found in chapter 5 as part of a systematic sociological analysis of the sample as a whole.

#### 4.3.3 Summary

By greatly simplifying, it can be said that the syntactic properties of German are apparently learned in the following order by Spanish and Italian workers : at first, the sentences consist either of a noun by itself, or a noun accompanied by a simple determinant. In general, these nouns have the function of designating, naming or determining the place and time. At most, a few invariable verb forms are found. Sentences are very short, morphology non-existent.

The subjects at a slightly higher level then begin to form sentences consisting of a verb and a subject. A few pronominalizations are found. One begins to detect the first rudiments of a formation of prepositional syntagmas and a temporal determination of the verb, despite a practically non-existent verbal morphology. A limited number of nouns are accompanied by attributive adjectives and complements. The only few examples of subordinate clauses are adverbial syntagmas.

The next phase, characteristic of group III, consists essentially in extension of the elements learned in the second phase. Pronominalization, though limited to subjects, is better exploited. Differentiation of the nominal group by more frequent use of articles, quantifiers, attributive adjectives and complements progresses, as does the temporal and modal specification of verbs. The use of subordinate clauses, however, is still limited to adverbial clauses, but these are more differentiated functionally. The third level of learning is distinguished from those preceding it by a broader knowledge of rules. But the number of rules learned for expressing in a differentiated manner certain syntactico-semantic aspects - as for example temporal indications, or specification of the function of an adverbial expression by a preposition - is limited : one or two, or at any rate very few. The consequence of this is that a given rule has astonishingly high values. We limit ourselves here to noting this fact, but we shall speak of it in detail, from the semantic standpoint, later on.

In comparison to the learning levels dealt with up to now, the level of the most advanced foreigners is much more complex and differentiated. This stage of rather complete assimilation of German syntax is characterized by the following :

1. The application of rules essentially obeys the syntactic and semantic conditions of German. (The means for specifying the tense and mood of verbs are adequate ; the form in which adverbial syntagmas are expressed clearly indicates their function ; etc.).

2. An economic use of the pronominal system makes it possible to avoid overloading the sentence with heavy nominal groups.
3. The rules governing morphology of the cases and verbal morphology (especially as concerns the finite and impersonal forms of verbs), although they are still not used correctly, are nevertheless used in a differentiated manner. This helps especially to assure understanding.
4. Aside from the differentiated use of adverbial clauses, the appearance is noted of nominal and attributive clauses. Hence the number of subordinate clauses per sentence has considerably increased.
5. The varieties of the most advanced subjects are, on the whole, strongly marked by characteristics of the local dialect.

Hence even though the use of a few particular rules does not completely coincide with that of the target language, the subjects in group IV nevertheless exhibit a distinct tendency to adopt the local variety of the native speakers. We have been able to demonstrate this phenomenon in describing acquisition of the rules of German syntax ; that progresses from an elementary to a differentiated level, i.e., in the direction of increasing syntactic complexity. We now intend to complete this report by analyzing a few aspects of the surface structure of verbal expressions of the immigrant workers (word order, phonology, morphology) and by explaining the significance of the rules for a learning subject.

#### 4.4 The order of syntactic constituents in the sentence

In what precedes, we studied the syntagmatic structure of the learning varieties from the angle of its complexity and its differentiation. We shall now study the order of the syntactic constituents according to the various learning levels. We shall first deal with the position of the verb.

The inventory of the syntactic constituents of the sentence had been situated at the level of a relatively abstract description, in the sense that a survey was made of the constituents, according to the varieties of learning, without analyzing their linear sequence in the sentence. For technical reasons, it was not possible to study both at the same time.

The inventory of the syntactic constituents expressed or unexpressed in the varieties of learning is, in our opinion, more important than their linear order in the sentence. Indeed, on the one hand the number of possible positions in a given sentence increases or decreases according to the number of constituents ; and on the other hand, the position of constituents does not seem to be particularly pertinent for meaning. Missing constituents are more prejudicial to the understanding of a sentence than ill-placed constituents. Hence the positional analysis will constitute above all a "correction factor" in relation to the analysis of the inventory of constituents, in which it could not be taken into consideration. From the linguistic standpoint, word order is based on arbitrary conventions, as the following Italian, Spanish and German examples clearly show :

- (7) Abbiamo mangiato pane, formaggio e frutta
- (8) Hemos comido pan, queso y fruta
- (9) Wir haben Brot, Käse und Früchte gegessen

As concerns the order of constituents, the three sentences differ solely by the fact that the finite verb haben and the participle gegessen (which we shall also designate, with Helbig/Buscha, 1972 : 473-517, as "the grammatical part of the predicate") occupy different positions in the German sentence from those in the Italian and Spanish sentences. Whereas in the Romance languages, the two verb elements follow each other immediately, in the affirmative German sentence the finite verb occupies the second position and the corresponding participle the last. Doubtless this fact has no influence on the meaning of the sentence, for although sentence (9') is considered as unacceptable.

(9') Wir haben gegessen Brot, Käse und Früchte

any German would understand it.

Examples (10), (11) and (12) show that in the two Romance languages the elements of the verb group proper occupy the same position in the main and subordinate clauses, whereas such is not the case in German.

- (10) Il libro introduce a la grammatica tedesca, perchè gli stranieri devono studiare il tedesco
- (11) el libro introduce a la gramática alemana; porque los extranjeros deben aprender el alemán
- (12) Das Buch führt in die deutsche Grammatik ein, weil die Ausländer Deutsch lernen müssen

Here again it is the position of the verb that must be noted and not that of the other constituents of the sentence. Contrary to Italian and Spanish, in German a distinction must be made, in respect of the verb position, between main and subordinate clauses, finite verb and grammatical part of the predicate, root of the verb and separable particle. Examples (9) and (12) make it possible to outline the rules for the position of the verb in affirmative (but not in interrogative and imperative) sentences and in subordinate clauses as follows :

- 1. In the main clause, the finite verb occupies the second position ; the grammatical part of the predicate (impersonal verb form) and the separable particle (e.g., the separable prefix ein- in einführen) the final position.
- 2. In the subordinate clause, the finite verb occupies the final position ; the grammatical part of the predicate the penultimate position.
- 3. The separable particle can be dissociated from the finite verb only in the main clause.

The examples quoted justify the prediction that, as concerns the learning of word order in German, it is especially the position of the verb that will pose problems for speakers of Italian and Spanish. Indeed, in Spanish and Italian, the finite verb occupies the first, second or third position in the main clause - the second position appears to be the most usual - immediately followed, where applicable, by the grammatical part of the predicate. This is also the case in respect of subordinate clauses. Hence the German rules outlined can give rise to difficulties of learning because, by applying the rules of Spanish or Italian to sentence (12), the following unacceptable sequence is obtained (12').

(12') Das Buch efführt in die deutsche Grammatik, weil die Ausländer müssen lernen Deutsch.

Although word order is not, as we have seen, pertinent from the linguistic standpoint in respect of meaning, it is a carrier of social significance, especially when it obeys a norm. Apparently the components of discourse, such as phonetics and word order, are the object of social attention, for the good reason that they are surface-structure phenomena expressed unconsciously and subject to strong normalization by the linguistic community. They are external signs of social identity which, independently of understanding of the meaning of a statement, are the object of a social evaluation.

Hence in the following study, we shall assume, even though we cannot prove it empirically, that failure by the foreign subjects to observe the rules of word order contributes in part to characterizing socially their various linguistic varieties. The text of informant SP-36 quoted above can be used to illustrate this fact. The order of the syntactic constituents of sentence (13), which have been numbered, should, to conform to the rules of standard German, be rearranged as follows (this reordering is symbolized by the arrow and the reorganized sequence of figures following it) :

(13) filaiqt sii jās komcn baiq woootsimā (SP-36)

1 2 3 4 5 —————> 1 4 2 3 5

(Vielleicht kommen Sie jetzt ins Wohnzimmer/ Perhaps you come into the living-room now).

In (13), it is the position of the infinitive "kommen" (4) in the affirmative sentence (second position) that was not observed ; in (14), it is the final position of the impersonal verb form.

(14) ič mus fraagāq baiq Bāf (SP-36)

1 2 3 4 —————> 1 2 4 3

(Ich muss den Chef fragen/ I must ask the boss).

#### 4.4.2 Fields studied and processes of description

Our study of the order of constituents of the sentence is based on the same sample of 100 sentences for each of the 48 foreign informants and the 6 German informants from the Heidelberg area, already used earlier for analyzing the syntagmatic structure, the only difference being that the group of Germans now comprises 6 subjects instead of 5. The categories for positional analysis, viz., finite verb, grammatical part of the predicate, separable particle, subject and object nominal syntagmas, adverbial syntagmas, subordinate clauses - were so chosen as to be able to associate univocally with them the categories of the syntagmatic structure analysis which, in part, have been more differentiated. Thus the possibility of relating the results of description of the two analyses is assured. Positional analysis of the constituents was accomplished with the help of a computer. Comparison of the foreign subjects with each other and of the foreigners with the German speakers is based on classification of the foreign subjects according to their syntactic index, described in paragraph 4.3. The purpose of the positional analysis is to associate with each sentence spoken by the foreign subjects the linear sequence of its syntactic constituents, to determine the regularities of these sequences on the one hand in terms of properties of the language of the learning subjects and on the other hand in terms of deviations from the rules of position in relation to the local German dialect, and to relate the results of this analysis to those of the analysis of the syntagmatic structure of the varieties of learning.

Although we have made a positional analysis of all the constituents, we shall present here only the results concerning the position of the verb (i.e., of the finite verb, of the grammatical part of the predicate and of the separable particle). This limitation seems to us justified for the following reasons :

1. The position of the verb is the most important characteristic of the order of constituents in German sentences.
2. One can deduce from the position rules of the Romance languages concerned that learning difficulties, while the order of the constituents of German sentences is being acquired, will relate especially to the position of the verb.
3. The rules governing the position of the verb are more mandatory in German than those governing the other constituents. That is why variations in the position of the verb during learning are linguistically better interpretable than those of the other constituents of the sentence (e.g., objects or adverbs).
4. The rules for the position of the verb makes possible a rather precise differentiation of all the varieties of learning. On the other hand, the rules for the position of certain other constituents seem rather to be of importance for either a very low or a very high level.

The description of the position of the verb is based on a corpus consisting of 2.548 sentences meeting the following criteria :

1. The position of the verb was studied only in affirmative clauses (main and subordinate), there not being enough examples of interrogative and imperative clauses.
2. The corpus contains only sentences which, in addition to the verb, have at least a subject. We consider that application of the quasi-mandatory rule concerning the position of a finite verb in the main clause closely depends on the presence of a subject. The presence of a subject makes it easier to give a linguistic interpretation to the deviations observed. In the sentences with no subject, encountered particularly at the lower learning levels, the position of the verb varies greatly. Thus far it has not been possible to describe these variations in a systematic manner.

#### 4.4.3 Linguistic conditions of the interpretation of quantitative results

Regarding interpretation of the quantitative results relative to the position of the verb in the varieties of learning, the following three aspects must be taken into account :

1. The differences in sentence length (average number of constituents per sentence) between the lowest and highest levels of learning ;
2. The infrequent occurrence of sentences comprising both a subject and a verb in the lower varieties of learning ;
3. The fact that the morphological markings of the verb increase as the knowledge of German increases.

Figure 4-1 shows that in groups I, II and III, sentences with up to three constituents are the most frequent. Groups IV, V and VI prefer sentences with 2 to 4 constituents. Groups V and VI, and the HD group, most often use sentences with 3 to 7 constituents.

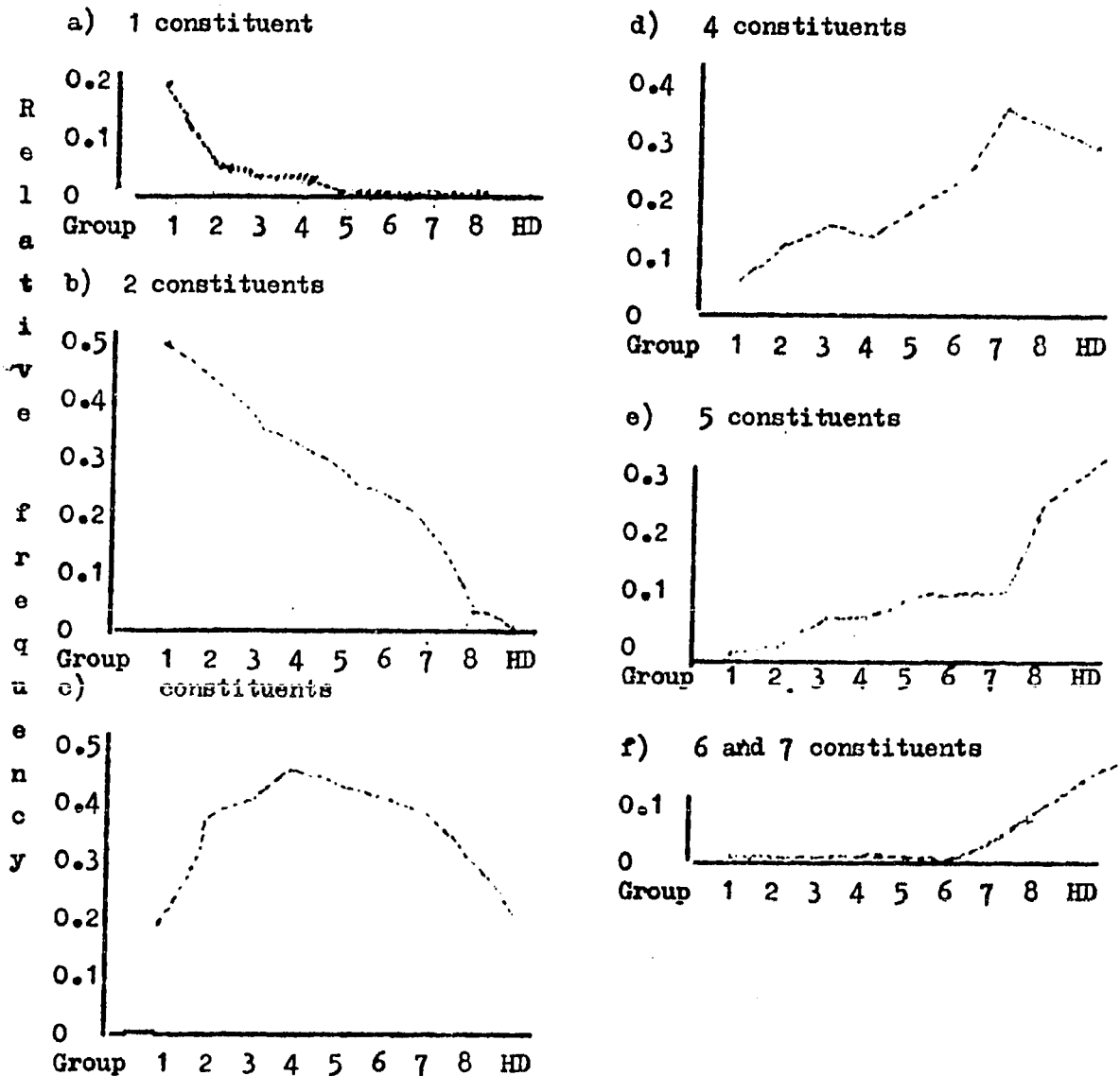


Figure 4-1 : Relative frequency of sentences comprising between 1 and 7 constituents among 8 groups of foreign subjects and a group of Germans speaking the Heidelberg dialect (HD).

There still exists a marked difference between the two highest groups of foreigners and the group of speakers from the Heidelberg area. Sentence length, which increases with the syntactic level of the learning group (in direct proportion), has consequences for the analysis of the verb position. It is obvious that subjects using sentences with four or more constituents can choose the position for the verb ; the possibility of choice is lacking among subjects with little knowledge of German, whose sentences, on the average, rarely comprise more than three constituents.

On the other hand, the increased number of choices also makes the possibility of incorrectly placing the verb increase. But the more the verb is correctly placed, the more one is entitled to consider that the subjects know the corresponding rule. Indeed, it cannot be a matter of mere chance that the correct position is invariably chosen from among 5 or 6 possible positions. Yet that is precisely what we suppose to be the case among subjects whose sentences are short. If the choice bears on an average of three positions, the probability of choosing the second one is relatively high. In such cases, one must therefore expect a higher number of "lucky accidents". Hence the average sentence length corresponding to a given learning level is a factor that helps us determine the linguistic significance of relative frequencies.

The particular situation of the lower groups is further characterized by the fact that one finds few sentences among them comprising both a verb and a subject. As compared to the most advanced group, such occurrences are very rare. Groups VI, VII and VIII alone provide 54 % of the sentences comprising both a subject and an object, as against only 12 % for groups I and II. In group I, there are only 13 occurrences. Hence the lower the level of learning, the shorter the sentence. At the same time, one encounters fewer and fewer sentences containing both a subject and a verb. Hence a critical examination of the facts underlying the relative frequencies is essential. Figure 4-2 (p. 80) is a good example of this. All the sentences (100 %) of the most advanced subject, IT-01, comprise a subject and a verb. With the weakest subject, these are present in only 2 % of the sentences. In the case of informant SP-35, we have only two sentences with a subject. In them the verb is found in the second and third positions, respectively. Of course, with any such example it would be absurd to say that 50 % of the verbs occupy the second position and 50 % the third.

A final factor which helps with an adequate interpretation of the data is the difference between morphologically marked and unmarked verb forms. In group VIII, 95 % of the verbs have precise morphological markings, whereas this figure falls to 12 % in group I. At the same time, it was observed that in the three lowest groups the morphologically unmarked verb generally occupies the final position, often identical to the second. This involves sentences such as (15) and (16), which we have taken from the extracts of interviews quoted in 4.3.3:

(15) Bāf saagc (IT-23)

(Der Chef sagt/ The boss says)

(16) maħstra fo die sulā imc tBimfc (SP-12)

(Der Lehrer in der Schule schimpft immer/ The teacher at the school is always complaining).

The problem that interpretation of the morphologically unmarked verb forms poses is the following : one must question whether one is entitled to consider these as finite forms, which then should occupy the second position. In our analysis, we treated them as such, for we could not do otherwise than confine ourselves to the constituents actually present. By extending our interpretations further, we would have fallen into the domain of empirically unverifiable speculations. Of course, this manner of approaching the study of the position of the verb in the sentence among subjects in the lower groups remains unsatisfactory as long as it has not been decided whether the unmarked verb form is to be understood, from the standpoint of the speaker's communicative intention, as a finite form or as an impersonal form that would occupy, perfectly correctly, the final position ; the auxiliary or the modal verb, which normally must precede it, would then be

understood, the speaker not having been capable of expressing them. Hence it would be necessary to initiate additional research on the position of the verb at the lower levels and on the relations with verbal morphology. This study would also have to take into consideration the suppletory function of other constituents, especially of the "adverbs".

From these reflections, we can retain that in interpreting quantitative results relative to the position of the verb among speakers whose linguistic level is low, one must take into account the generally very deficient aspect of the corresponding varieties.

#### 4.4.4 Results

##### 1. Position of the finite verb in the main clause

Figure 4-2 indicates the position of the verb among 48 subjects (8 groups of 6 speakers each). Each rectangle represents the proportion of sentences comprising both a subject and a verb among the affirmative sentences as a whole. The slope of 98 % with its graduations, linking the speaker on the left of the table to the one on the right, illustrates the very great differences between the levels of learning. As a general rule, the same differences are also observed in respect of the position of the verb.

Save for rare exceptions, the verb most often occupies the second position in the sentence. To explain this phenomenon, we can adduce the following reasons :

1. In the two Romance languages concerned, the verb frequently occupies the second position. This favors adoption of the rule for positioning the verb in the main clause in German ; 2. The verb most frequently occupies the second position in the sentences heard by foreign subjects in the course of their verbal contacts with Germans ; 3. Most of the subjects in the two upper groups have an explicit knowledge of the rule concerned ; 4. It is more or less by chance that the subjects in the two lowest groups place the verb in the second position. The fact that their sentences frequently have no more than 3 constituents creates as it were a sort of structural pressure to place the verb in the second position. The value for the group of speakers from Heidelberg in table 4-9 indicates that the verb almost mandatorily occupies the second position. This value is appreciably higher than that observed for the most advanced group of foreign speakers, indicating the deviation in comparison to the target variety.

The value for the other groups show a decreasing tendency up to group III, after which they again rise slightly. The final values, which are at variance with the general tendency, are to be attributed to the low number of constituents per sentence at this level. Indeed, in them the second position is frequently the last.



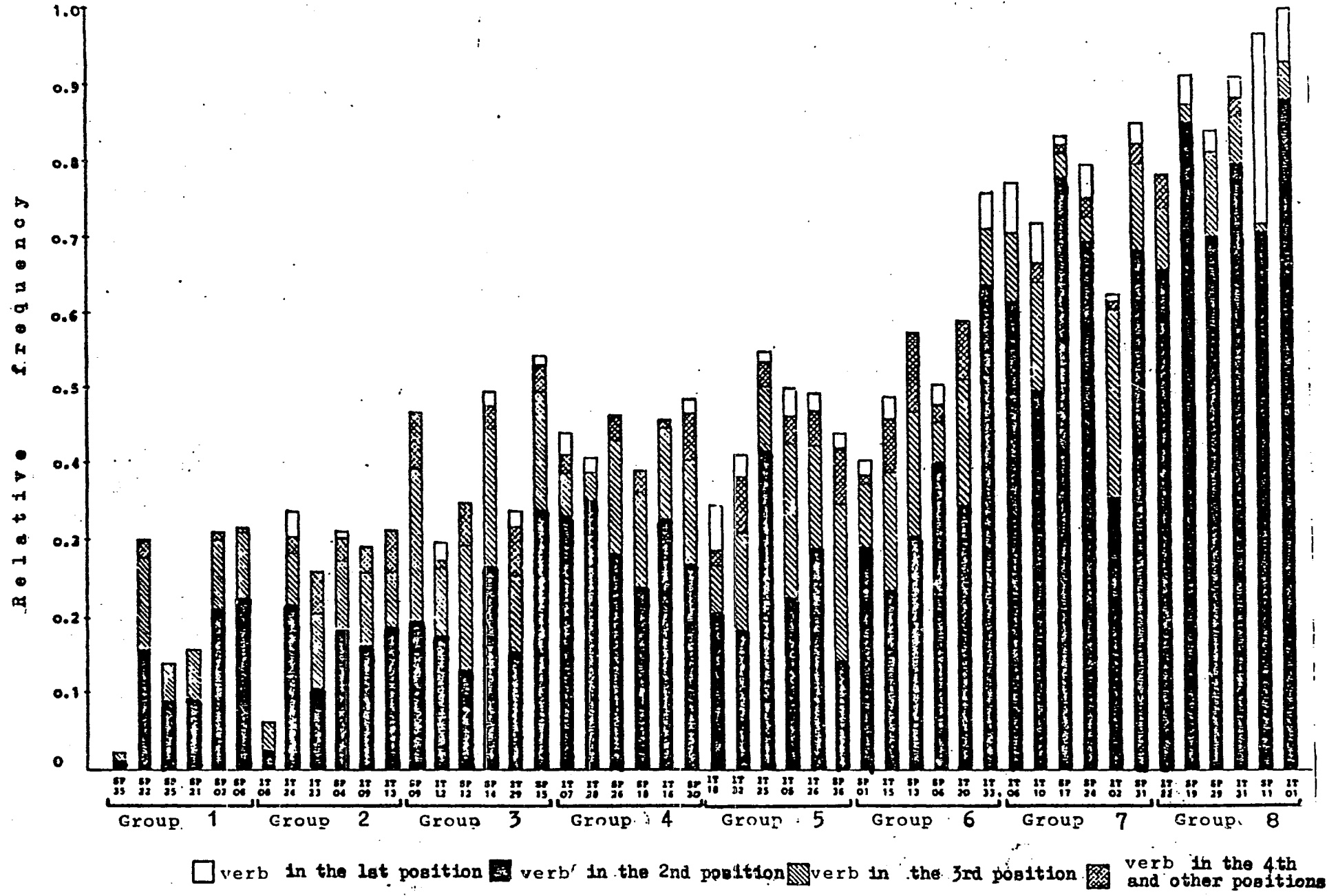


Figure 4-2: Position of the verb in main clauses comprising a subject among 48 Italian and Spanish informants.

TABLE 4-9 : RELATIVE FREQUENCIES OF THE POSITIONS OF THE VERB IN RELATION TO THE TOTAL NUMBER OF AFFIRMATIVE SENTENCES COMPRISING BOTH A SUBJECT AND VERB AMONG EIGHT GROUPS OF FOREIGNERS AND A GROUP OF GERMAN SPEAKERS FROM HEIDELBERG.

Groups*	% of sentences containing a subject and a verb in relation to total affirmatives.	First Position	Second Position	Third Position	Other Positions
1	0.21	0.00	0.63	0.34	0.03
2	0.26	0.03	0.57	0.30	0.12
3	0.41	0.03	0.50	0.36	0.11
4	0.42	0.03	0.67	0.23	0.06
5	0.46	0.07	0.54	0.29	0.10
6	0.56	0.04	0.67	0.20	0.08
7	0.76	0.05	0.79	0.15	0.02
8	0.90	0.08	0.85	0.06	0.01
HD	0.99	0.06	0.92	0.01	—

\* Each group comprises 6 speakers.

Let us now examine the other positions of the verb. Table 4-9 shows that in 6 % of the cases the German speakers use the first position. After examining the Heidelberg speakers' data, we reached the conclusion that the initial position of the verb is a stylistic device grammatically acceptable in oral narration. Certain speakers are quite prone to use it. This is illustrated by the following passage from a narration by HD-02 (II - 665 ff.). The verbs placed in the initial position have been underlined:

Hans B. : hot Bun fel gewē do ... ausenanāsetsuqc, sin sc tsum bctriipsraat gaqē un antweda hot siB dē bctriipsraat nēt Bstaak gomuk fē si aiksetst ... oda kon dānē eBt i momānt nēt helfc, hawc sē ksaat...

Translation :

Hans B. : There are quite a few disputes. They went to see the joint production committee, and either the committee didn't do enough for them or was unable to help them at the time ; that is what they said.

We must therefore include the finite verb at the beginning of the sentence among the positions acceptable to native German speakers ; and this in addition to the second position of the verb. From the viewpoint of the target language, all the other positions are therefore to be considered as unacceptable. We can disregard the 1 % of verbs in the third position, as they probably involve an error of strategy during formulation, or some other type of deviation.

The percentage of verbs in the initial position is relatively low for all the groups of foreigners. But to determine the total number of verbs in an acceptable position, we nevertheless examined all the occurrences of verbs in the initial position. In respect of groups II to VI, the number of acceptable occurrences is so low that it is superfluous to express them as a percentage. On the other hand, almost all occurrences in groups VII and VIII were acceptable in comparison to the norms of the target variety. If we add these occurrences to those of verbs in the second position, we obtain for group VII 83 % and for group VIII 92 % of verbs in an acceptable position. The acceptable use of verbs in the initial position among the most advanced subjects (especially IT-01 and SP-11, cf. figure 4-2) proves that they are apparently capable of using this position for stylistic purposes. This distinguishes them from the other less-advanced subjects.

Table 4-9 and figure 4-2 show that besides the second position, the third and all subsequent positions are used by subjects at a moderate or low level. In groups II and III, the third position and subsequent positions total 42 % and 47 %, respectively. This means that these 12 subjects, in almost every other sentence, place the verb in the third or one of the subsequent positions. How can we explain the fact that subjects at the lower levels frequently place the verb in the third position or in one of the subsequent positions, whereas the advanced subjects have a distinct tendency to abandon this incorrect practice ?

In the case of verbs in the fourth or subsequent positions, these are rather often morphologically unmarked forms in the final position. This probably can be explained by semantic restrictions peculiar to the varieties of learning. At most, one can assume that the foreign speakers are observing certain rules of focus when they place the nominal groups designating objects or persons, as well as complements of time, place and manner, before the verb. As these speakers are unable to express temporal and modal morphological markings of the verbs, they compensate for this inadequacy by placing adverbial complements in relief at the beginning of the sentence. This compensation seems to lead to a normalization of this position facilitating comprehension of a given message in daily communication. The final position of the morphologically unmarked verb appears to indicate that from among all the potential verb positions, the speaker will choose one that is as "neutral" as possible and that will thus enable him to get his message across through a sort of compromise as to the various positions. The reason for this may be that, in case there is an auxiliary or a modal verb present, the impersonal form of the verb, which is also the core of the meaning, generally takes the final position in the main clause ; foreign speakers are then led to place a morphologically unmarked verb at the end, expressing tense and mode not by means of an auxiliary or a modal verb, but by using adverbial expressions. If our assumptions are correct, it would ensue that the instruction of German to foreigners whose linguistic level is low - such instruction being supported by knowledge already acquired - could enable them to formulate more acceptable sentences by introducing early the most important modal verbs (wollen, können, müssen/ to wish, want ; to be able; to have to) and formation of the perfect by use of the verb haben (to have).

The relatively high percentage of verbs in the third position, found in groups I to V, can, with some plausibility, be attributed to the influence of the speaker's mother tongue. The verb is rather frequently placed in the third position in statements by the foreign subjects ; that is in conformity with the possibilities in Italian and Spanish, in which the subject and the verb can be preceded by an adverbial expression (cf. examples (17) and (18)), but not in German :

- (17) Actualmente, el ansia de unidad de los trabajadores españoles es evidente
- (18) Giustificando la propria posizione, Bernstein trascura delle critiche importanti mosse contro la teoria chomskyana ortodossa.

In German, in such cases, the verb must occupy the second position, whereas the subject and the adverbial expression are placed indiscriminately in the first or third position.

At the lowest levels, in most instances, the following constituents are the ones which, placed with the subject before the verb, result in the latter being found in the third position :

1. Circumstantial subordinate clause followed by the subject ;
2. Circumstantial complements of place, time and manner occupying either the first or the second position ;
3. The particle do (da, dann (there) in standard German), which, although an adverb of time, quite often in the Palatine dialect has the ritual function of introducing discourse.

Less frequently, an object, in addition to the subject, precedes the verb. In all the cases mentioned, the foreign subjects do not know the rule of German requiring that one of the two constituents of the verb preceding the verb must be placed after it.

What would appear to characterize the levels of learning in respect of placing the verb in the sentence (second or third position) is the influence of the mother tongue. On the other hand, in certain instances, the position of the verb is probably due, particularly at the lower levels of learning, to strategies of learning. The advanced subjects have to a large extent adopted the norms of the target variety ; this is evident especially in exploitation of the acceptable initial position.

2. The place of the grammatical part of the predicate (impersonal forms of the verb) and of the separable particle in the main clause.

The finite verb constitutes with the impersonal forms of a verb or a separable particle the verbal framework.

- (22) dɔɔ iɔ ɔɔɔɔ c teadɔɔ kapt (HD-03)  
(Da habe ich gerade Ärger gehabt/ I have just had troubles).
- (23) iB kan di gaa nɛt aktsɔɔpdiiro (HD-04)  
(Ich kann die gar nicht akzeptieren/ I can't accept it at all).
- (24) ɔs kunt halt aa wida truɔ oo (HD-04)  
(Es kommt halt auch wieder drauf an/ that depends).

Different constituents can be placed outside this framework, that is, after the impersonal form of the verb or after the separable particle. In the case of subordinate or comparative clauses (er hat in die Menge geschrien wie ein Wahnsinniger/ he shouted in the crowd like a madman), this construction is perfectly grammatical ; in the case of circumstantial complements (Ali hat den Deutschunterricht aufgegeben in dieser chaotischen Grossstadt/ Ali gave up the German courses in this chaotic big city),

it is considered acceptable ; it is not considered acceptable in the case of an object (Pedro hat seinem Kollegen empfohlen das Buch/ Pedro recommended the book to a colleague). Hence one observes certain variations in respect of the impersonal forms and of the separable particle. The transfer of a circumstantial complement beyond the impersonal form of the verb or separable particle is rather frequent because typical of the spoken language.

The linguistic material of the present study is apportioned rather unequally in the sample, because the complex verbal structures are essentially found among the foreign speakers who are rather advanced in their learning of German : the upper half of the sample alone contains 88 % of the occurrences of such structures (modal verb + infinitive, auxiliary + participle) ; this amounts to approximately 20 occurrences per informant. The other half totals only 12 %, scarcely 3 occurrences per informant. That is why our observations can claim only a restricted validity. It follows also that this rule of position is learned relatively late in the course of acquiring German.

TABLE 4-10 : THE POSITION OF THE GRAMMATICAL PART OF THE PREDICATE (IMPERSONAL FORMS OF THE VERB) IN THE MAIN CLAUSE AMONG EIGHT GROUPS OF FOREIGNERS AND THE SPEAKERS FROM HEIDELBERG.

Group	Final position		Penultimate position followed by a subordinate clause.		Penultimate position followed by another constituent		other positions	
	N	in %	N	in %	N	in %	N	in %
1	3	... <sup>+</sup>	-	... <sup>+</sup>	1	... <sup>+</sup>	-	... <sup>+</sup>
2	6	... <sup>+</sup>	-	... <sup>+</sup>	3	... <sup>+</sup>	-	... <sup>+</sup>
3	12	57	-	0	6	29	3	14
4	17	55	-	0	12	39	2	6
5	30	56	1	2	18	33	5	9
6	53	62	4	5	24	28	5	6
7	82	66	3	2	28	22	12	10
8	170	77	21	9	25	11	6	3
HD	145	76	27	14	17	9	2	1

<sup>+</sup> = not calculated for lack of enough occurrences

N = absolute number of occurrences.

Table 4-10 first gives the position of the impersonal forms without taking into consideration the length of the sentence. We distinguish three main positions, one of which, the penultimate, is subdivided according to the nature of the element that follows : a subordinate clause vs. another constituent. The N columns clearly show the marked increase in occurrences among advanced speakers. The values for groups I and II are too low to permit a comparison with the other groups. The number of occurrences is also rather low in the case of groups III and IV, but the upper groups provide sufficient data.

The columns are arranged from left to right in decreasing order of acceptability of the position of the impersonal form. But we must stress that the rule the position of the impersonal form cannot be considered as mandatory in German, seeing that it allows of certain variations. The occurrences in columns 1 and 2 are altogether acceptable. Comparative study of the percentages reveals an increasingly marked tendency to place the impersonal form in the final position ; likewise, the positions of limited acceptability decrease. The very deviant positions (final column) are relatively rare among the groups.

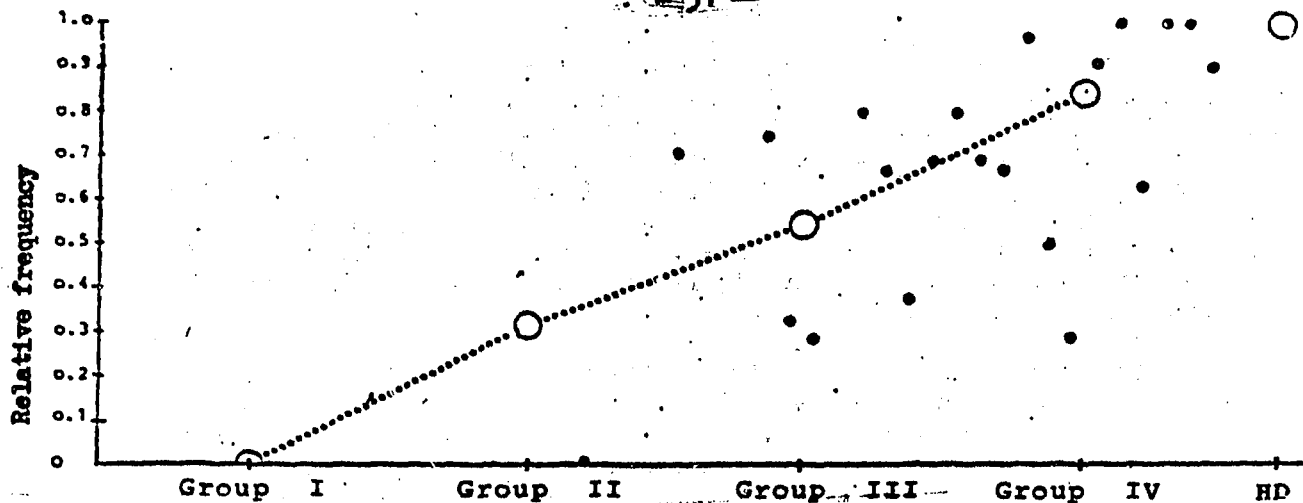
Just as in any analysis of the order of constituents, the length of sentences will play an important role. Many sentences of low-level speakers are so short that they practically preclude any violation of the position rules :

- (25) tanc musc gobauc (IT-12)  
(Dann muss man bauen/ Then, one must build)
- (26) musc saagcnc (IT-12)  
(muss sagen/ must say)
- (27) i B haw awáito (IT-07)  
(ich habe gearbeitet/ I worked)
- (28) ic habo fúostandc (SP-26)  
(ich habe verstanden/ I understood).

A sentence containing only the subject, the finite verb and an impersonal verb form will always have these constituents appear in this order (cf. (26) and (28)). We have not observed any other positions. In order to determine the extent to which a foreigner has learned the position rule for the impersonal verb form, sentences that comprise other constituents (object, adverbial expression, negation) must be examined :

- (29) ic habo gesuux aino man (SP-26)  
(Ich habe einen Mann gesucht/ I looked for a man)
- (30) ic bin kom bai xaidolbáro ('Heidelberg') in oktubúo (SP-01)  
(Ich bin im Oktober nach Heidelberg gekommen/ I arrived in Heidelberg in October).
- (31) on di swaidc dax hab ic Boq alainc goarbait (SP-19)  
(Und am zweiten Tag habe ich schon alleine gearbeitet/ And the second day I already worked alone).

Hence figure 4-3 takes into account only sentences containing enough elements for the finite verb and the impersonal verb form to be able to form a verbal framework. Therefore there will always be at least one constituent between these two elements. The dotted line connects the averages of four groups of twelve informants each. The lower part of this line is unreliable owing to the low number of occurrences. The informants having provided more than three occurrences are indicated by a dot.



○ = averages per group

● = value of an informant with  $N > 3$

Figure 4-3: Relative frequency of use of the verbal-framework rule (at least one intermediate element) in the sentences comprising a subject.

This type of analysis shows better than table 4-10 the extent to which the subjects have actually learned this rule. We have already mentioned that Italian and Spanish do not have this syntactic rule. From that one might conclude that the aspects of the mother tongue are transposed without alteration into German. The line in figure 4-3 would then indicate that the rule of position in the mother tongue had been disregarded and the rule of the target language learned. In group IV, the German rule is observed in 9 cases out of 10, but in it one still finds speakers not in complete command of the rule.

This remark would appear to be at variance with what we said earlier, viz., that markedly deviant positions of impersonal verb forms were on the whole relatively rare. But it is found to be confirmed if both short sentences and long sentences are examined. At all events, it is only when speakers are capable of forming sentences expressing more than an elementary predication that the impersonal verb form can cause them a learning problem.

The separable particle obeys the same position rule as the impersonal verb form. It can be separated only from a finite verb form ; that is, it remains linked to the impersonal form.

Inasmuch as we have only a few infrequent occurrences of separable particles, we shall present only a few informal remarks. Apparently what is involved here is a grammatical phenomenon of German that is learned relatively late. 28 out of 60 occurrences (in 4,314 sentences) are divided among 45 speakers, which gives an average of 0.8 occurrences per sentence. Other research will have to be done to determine the reasons for such a low occurrence.

Only in the upper third of the foreign speakers does one find examples of the correct formation of the verbal framework consisting of a finite verb and the separable particle. The other speakers manifestly prefer the impersonal forms not separated from their prefix, i.e. (32)

(32) *tesc fraucl i aabänd widagoxomc* (IT-12, 71)

instead of (32')

(32') *diese Frau kommt am Abend wieder*  
(this woman will come back this evening).

Here we refer back to our previous reasoning, when we pointed out that the status of the verb forms in the final position was unclear. If the verb form in (32) was intended to express a present, the particle should have been detached (kommt ... wieder). If we are to consider that an auxiliary or a modal verb is understood, the expression of the impersonal verb form and its position are correct. What would then be involved is a defect in the verbal system.

We can nevertheless state that the sentences requiring separation of the verb and particle, and placing of the latter in the final position, are apparently difficult for foreigners to express. That is why the subjects at the lower levels appear to avoid this sort of construction. They perhaps have a tendency to choose verbs without a separable particle for the beginning positions of the sentence. On the other hand, the verbs in the final position are more frequently separable. We assume that the compulsory separation of particle and verb constitutes an additional learning difficulty ; foreigners try to avoid the second position,



morphological marking and separable particle whenever they use a verb. The more frequent use of composite verbs in the final position seems to indicate that they are not understood as consisting of a verbal base and a prefix, the two elements being able to perform different grammatical functions, but as lexical units having a specific non-decomposable meaning.

### 3. The position of the verb in subordinate clauses

The results of the analysis of the verb position in subordinate clauses are characterized by the fact that the latter are apparently learned relatively late. It is evident from table 4-11 that 46 % of the occurrences of subordinate clauses are found in group VIII ; groups II through VI total only about 40 % of such occurrences. In the first group, there is no occurrence of a subordinate clause comprising, at the same time, a subject and a verb.

TABLE 4-11 : SUBORDINATE CLAUSES COMPRISING BOTH A SUBJECT AND A VERB AMONG EIGHT GROUPS OF FOREIGNERS AND A GROUP OF SPEAKERS FROM HEIDELBERG : TOTAL NUMBER, SUBORDINATE CLAUSES CONTAINING A FINITE VERB AND AN IMPERSONAL VERB FORM (= GRAMMATICAL PART OF THE PREDICATE), SUBORDINATE CLAUSES CONTAINING A MORPHOLOGICALLY UNMARKED VERB FORM.

S = Subordinate clause

Group	S with subject and verb (total number)	S with finite verb and impersonal verb form.		S with morphologically unmarked verb form.	
		N	in %	N	in %
1	-	-	-	-	-
2	7	-	-	6	86
3	10	-	-	7	70
4	13	-	-	11	85
5	27	1	4	18	67
6	23	6	26	16	70
7	26	8	31	7	27
8	89	36	40	5	6
HD	123	36	29	-	-

A certain number of other linguistic characteristics must be taken into account. Group VIII uses in a relatively differentiated manner circumstantial clauses introduced by the conjunctions wann (when), weil (because), wenn (if), wo (where) and wie (as). 86 % of the circumstantial clauses of the other foreign subjects are introduced by wann. This conjunction appears to be used by low-level informants to introduce temporal and conditional clauses indiscriminately - a further example of "semantic blurring".

Only group VIII provides a considerable example of subordinate clauses containing a finite verb and an impersonal verb form. None are found in the first four groups. Groups V, VI and VII total 26 % of the occurrences.

In respect of morphologically unmarked verb forms, we obtain the opposite result. In that respect, 86 % of the occurrences are found in the first six groups, versus only 7 % in group VIII. This result increases in importance when we take account of the fact that approximately 35 % of all the verb forms in groups I to VI are morphologically unmarked verb forms occupying the final position. In the study on main clauses, we have already pointed out, among the low-level speakers, a certain tendency to place unmarked forms in the final position. There still subsist, to be sure, differences between group VIII and the German speakers ; the latter use more subordinate clauses especially, and morphologically unmarked verb forms are totally lacking. But the tendency to approach the target variety is quite apparent.

In German, the finite verb normally occupies the final position in the subordinate clause. Table 4-12 indicates that the German speakers from Heidelberg abide by this rule in 84 % of the cases. Two other phenomena share the remaining 16 %, the verb occupies either the penultimate or the second position, as in the main clause. In the first group, the finite verb loses the final position owing to the adjunction of an additional subordinate clause, a circumstantial complement or a comparative construction. These occurrences are generally acceptable. The second group involves solely subordinate clauses introduced by weil (because).

- (33) awa iB bœmffl miB ima, wail iB fints iagentwii.blŭt (HD-02)

(Aber ich bemühe mich immer weil ich es irgendwie blöd finde/  
But I always try, because I find that stupid in a way).

- (34) iB duu als ſmool c biscl miB mi dānſ unchaldc, wail (HD-04)  
iB bin do aa focabaidſrin.

(Ich unterhalte mich auch manchmal ein wenig mit denen, weil ich  
dort auch Vorarbeiterin bin/  
I speak to them from time to time, because I am also their foreman).

The second position of the verb in sentences introduced by weil is an increasingly frequent phenomenon in the familiar language. Here weil seems to perform the same function of coordination as denn.

Taking account of all the acceptable positions, we obtain for group III a total of 81 % of subordinate clauses with the verb correctly placed. Hence, group VIII is clearly at the head of the three most advanced groups. The penultimate column of table 4-12 also very clearly brings out the differences between the groups of foreign speakers. It indicates the verbs in the second position (position of the main clause) in subordinate clauses other than those introduced by weil. The number of these unacceptable positions decreases regularly from group IV to group VIII. Almost 90 % of such positions in groups II to VII are found in subordinate clauses introduced by wann (when). We have already said that this type of subordinate clauses is characteristic of the lower levels and that it performs the dual functions of a temporal and a conditional subordinate clause, that is to say, it involves an over-generalized use of wann. Group VIII, on the other hand, prefers to use other conjunctions and, especially, it distinguishes between wann and wenn. The high frequency of the use of subordinate clauses introduced by weil with the verb in the second position would seem to indicate that this rule for the position of the verb is applied, as the result of a false generalization, to subordinate clauses introduced by wann, wie, wo and wenn. The second position of the verb, only a single occurrence of which is found among the lower learning levels in a subordinate clause introduced by wann, might be due to an influence of the position rules of the mother tongue. But in the present stage of our research, these are only vague hypotheses.

TABLE 4-12 : POSITION OF THE VERB IN SUBORDINATE CLAUSES CONTAINING A SUBJECT AMONG 8 GROUPS OF FOREIGNERS AND A GROUP OF GERMANS FROM HEIDELBERG.

Group	Finite verb in final position		Morphologically unmarked verb in the final position		Verb <sup>+</sup> in final position		verb <sup>+</sup> in 2nd position (S. introduced by <u>weil</u> ).		Verb <sup>+</sup> in 2nd position (other S.)		Total acceptable positions of the verb in the S.**	
	N	in %	N	in %	N	in %	N	in %	N	in %	N	in %
1	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	4	...+++	4	...+++	-	-	3	...+++	4	...+++
3	3	30	4	40	7	70	-	-	2	20	7	70
4	-	-	3	23	3	23	-	-	10	77	3	23
5	3	11	6	22	9	33	-	-	17	63	10	37
6	1	4	10	43	11	48	2	9	6	26	16	70
7	8	31	5	19	13	50	-	-	10	38	17	65
8	40	45	3	3	43	48	21	24	17	19	72	81
HD	103	84	-	-	103	100	3	2	-	-	123	100

S = subordinate clause

+ = morphologically marked and unmarked forms

++ = the acceptable positions are : the final position of a marked or unmarked form ; the penultimate position followed by a subordinate clause, a circumstantial complement or a comparative construction ; the second position of S. introduced by weil

+++ = not calculated for lack of sufficient occurrences.

To sum up, we can make the following remarks relative to the learning of the verb position in subordinate clauses :

1. Only group VIII, comprising the most advanced subjects, provides an acceptable number of rather complex predicates (combinations of a finite verb and an impersonal verb form) and of different types of subordinate clauses. In addition, this group differs from the others by the use of subordinate clauses in which the verb is correctly placed in the second or penultimate position. This would seem to indicate adoption, by the subjects of group VIII, of the position rules peculiar to the local dialect.
2. The lower learning levels are characterized by a relatively high percentage of morphologically unmarked verb forms and by an appreciable number of unacceptable occurrences of verbs in the second position. Once again, this phenomenon may be attributable to the influence of the speakers' mother tongue.
3. The higher the learning level, the greater the number of verbs in the final position, thus indicating the gradual adoption of the norms of the target variety by foreign speakers.

We conclude here the study of the order of constituents in the varieties of learning, and we now embark on the more detailed study of the syntactic and semantic functions of certain types of lexical units.

#### 4.5 A few lexical and semantic aspects of the varieties of learning

We shall study in considerable detail the number of modal verbs and prepositions used by the foreign speakers. Our starting point will be the preceding analysis of the syntagmatic structure, the results of which were summarized in 4.3. Contrary to the word-order analysis, we shall base ourselves here on a division of the subjects into four groups (I-IV) of twelve speakers each.

##### 4.5.1 The learning of modal verbs

The over-generalization of a certain form or a certain rule of the target language during unguided second language learning is a well-known phenomenon (cf. for example Richards, 1973). As an example, we shall study the learning of modal verbs whose morphologically marked forms (generally finite forms) are frequently used in combination with impersonal verb forms. A rule of rewriting of the syntactic component corresponds to the occurrences of the "modal verb + impersonal verb form" syntagmas. Table 4-13 indicates the frequencies of use of this rule among the foreign speakers. We were unable to take the German speakers into account, for at the time of preparation of the present study we had not yet completed analysis of the data from said group. This does not entail any disadvantages for our analysis, in that we consider that the speakers in group IV at all events most nearly approach the target variety.

TABLE 4-13 : FREQUENCY OF USE OF THE "MODAL VERB + IMPERSONAL VERB FORM" AMONG FOUR GROUPS OF FOREIGN SPEAKERS

	G R O U P			
	I	II	III	IV
Absolute frequency	4	25	94	72
Relative frequency	0.01	0.13	0.48	0.37

Table 4-13 reveals a relatively high value for group III, one considerably exceeding that of group IV (cross-over pattern). This is the more astonishing as a wider and more differentiated use of modal verbs by the speakers in group IV was rather to be expected, owing to the fact that they are already very near the local target variety. In addition, the increasing values for groups I and II would seem to indicate that application of this rule continually increases from group I to group II. That is why the decrease of 0.11 % between group III and group IV requires explanation. To explain the discrepancy of group III, it appears desirable to examine first the lexical expressions of the rule for modal verbs. The modal verbs found in 195 sentences from our corpus are the following : können, wollen, müssen, sollen and mögen. The following sentences are examples of statements from our corpus :

- (32) iq niks können sprächen (SP-08)  
(Ich kann nicht sprechen/ I don't know how to speak)
- (33) bai mia ima wolo Bimfc (SP-14)  
(Er schimpft immer mit mir/ He is always grumbling at me)
- (34) iq militäc mux maxen (SP-26)  
(Ich muß zum Militair/ I must do my military service).
- (35) was zol iq maxen ? (IT-31)  
(Was soll ich machen? / What should I do ?)
- (36) iq möqtc ... tsum tsanaacts gee (SP-24)  
(Ich möchte ... zum Zahnarzt gehen/ I should like to go ... to the dentist)

TABLE 4-14 : ABSOLUTE AND RELATIVE FREQUENCIES OF LEXICAL EXPRESSIONS OF THE RULE FOR MODAL VERBS

GROUP	Modal verbs					TOTAL
	<u>können</u>	<u>wollen</u>	<u>müssen</u>	<u>sollen</u>	<u>mögen</u>	
Group I	1	3	-	-	-	4
Group II	3	9	13	-	-	25
Group III	6	12	75	1	-	94
Group IV	19	26	19	5	3	72
TOTAL	29	50	107	6	3	$\Sigma$ 195
Relative frequency	0,02	0,03	0,55	0,26	0,15	

Table 4-14 shows that 1) the most-used modal verbs are müssen, wollen and können ; 2) wollen and können ; 3) mögen and sollen are learned very late and 4) müssen alone provides more than 50 % of the examples of application of a rule. What is most surprising, however, is the fact that group III, with its 75 occurrences, reveals a very high use of the verb müssen.

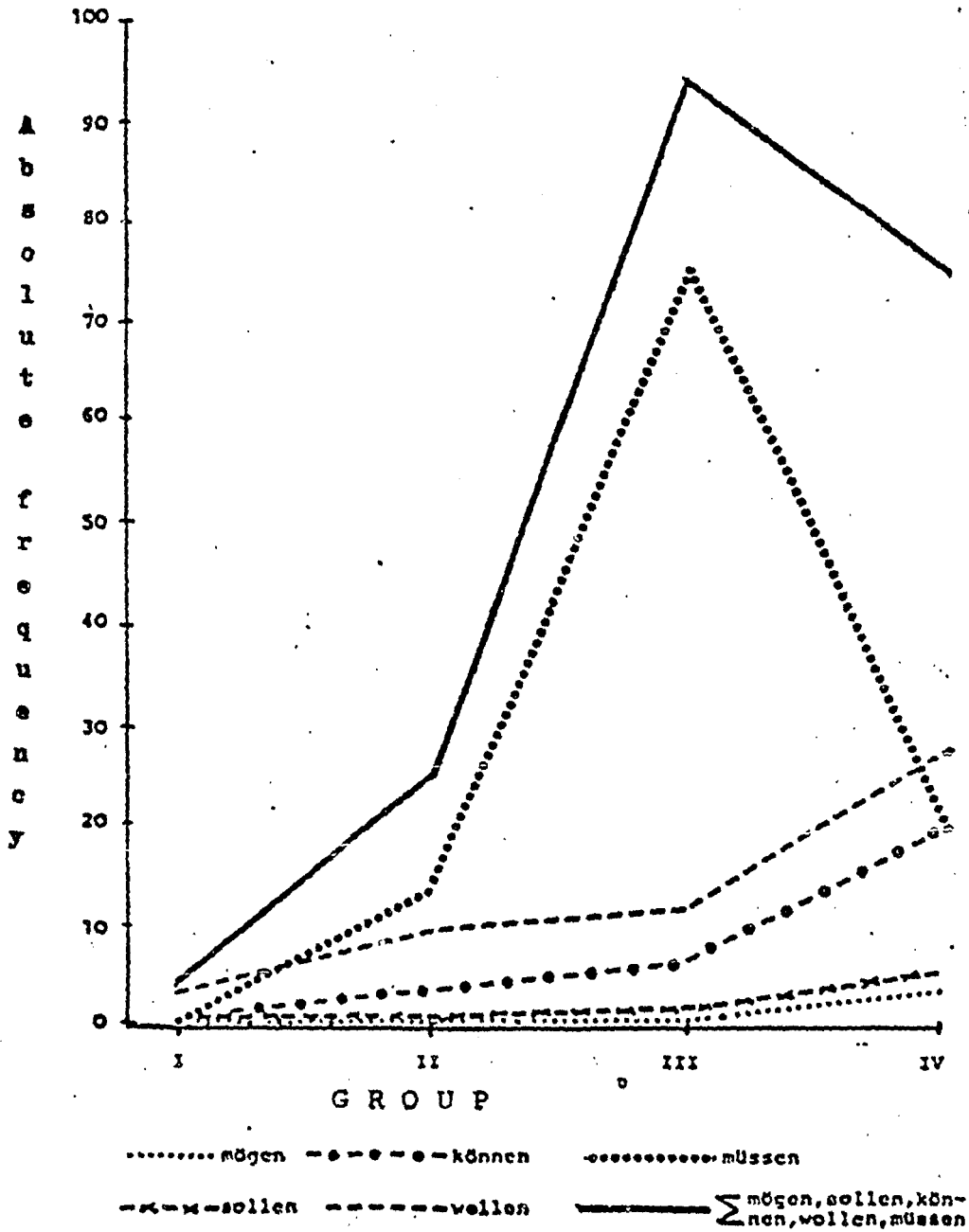


Figure 4-4: The learning of modal verbs among four groups of Italian and Spanish speakers (absolute frequency)

If we examine the values for group IV, we observe that müssen, wollen and können are used approximately in the same proportions. The high value for müssen in group III, which value distinctly differs from that in group IV for the same verb (cf. figure 4-4) can possibly be explained either by particular themes, or by specific learning strategies. In the latter case, the meaning of müssen is broader than that normally accepted in standard German.

Study of the interviews with the subjects in group III shows that the cause of the frequent use of the verb müssen seems ascribable rather to uses of particular verbal strategies than to specific themes. The following passage, taken from an interview with Tomás A. (SP-36), gives some idea of this strategy :

Tomás A. is Spanish. At the time of the interview, he had been living for 4 years in the F.R.G. He had immigrated at the age of 19. He has contacts with Germans in the course of his work and during his free time. He attended primary school in Spain for 7 years and arrived in Germany as a specialized worker. He works as a welder near Heidelberg (the accent is noted only in the instances where it differs from that of German).

SP-36 II - 55 ff.

u:n bar miə indzənp:rə mus sa:gn bida anfa: aRbaitə, van i: komən u: ləu, aba i: fRagə niks. i: blos aimo:l mus fRagn papia un dan ima fə:t, ja: un də maista, van bai miə fRagən sun dRai vox ualəu, q sag, niks, sun fiə vox. un də: mus simfən, hə! van du fiə vox ualəu, van komən du papia bai diə, papia, n? un dan fə:t. un dan i: mus fRagn, oks i. van du mus fRagn papia, ima papia. is aux diəs fRagn papia. u:n mus fə:t.

Translation :

And the engineer told me I was to start work again when I came back from vacation ; but I didn't do it. I only asked for the papers and left for good, yes. And when the foreman asked me if I had already had three weeks' leave I said : No, four weeks already. And he complained : Hey, if you have had four weeks' leave, you can, when you come back, go get your papers, the papers, and then begone ! And then I asked for them, okay. If you ask for your papers, you always get them. So I asked for my papers. And I left .

In this narration of a personal experience, mus appears to be, in fact, a general indicator of the past. From a socio-linguistic standpoint, it is not usual in German that a foreman should be obliged to say something to a worker (indz np:r. mus sa:gn) or that he should be obliged to bawl him out (mus simf n). Furthermore, a person wanting to ask something would not say that he is compelled to ask it (mus fRagn), he would simply do it. Hence mus is apparently used in the narration as a substitute for the morphological marking of the verb tense. Therefore, its function is over-generalized in the sense that it covers not only the meaning of müssen in German, i.e., the obligation to do something, but also the aspectual and temporal system of the verb.

The following five Spanish paraphrases of statements in German from the interview with Tomás A. confirm in fact this interpretation. During the interview with Tomás A., the interviewer realized that Tomás A. was using the construction mus + impersonal verb form even when it was not necessary in German. Hence when the informant used such a construction, the interviewer

immediately reacted, saying that he did not understand the sentence and asking the informant to explain it to him in Spanish. These requests were taken as an attempt to overcome difficulties of comprehension. The five paraphrases mentioned above are the following (since syntactic and semantic problems are our concern here, we use the ordinary spelling to transcribe the statements) :

- |  |   |
|--|---|
| (37) ich <u>muss</u> <u>gesehen</u><br>(I must seen)   | (37') yo lo he visto<br>(I saw him)                     |
| (38) ich <u>muss</u> <u>fragen</u><br>(I must ask)   | (38') yo digo<br>(I say)                                |
| (39) ich <u>muss</u> <u>arbeiten</u><br>(I must work)  | (39') yo trabajo siempre<br>(I am still working)        |
| (40) ich <u>muss</u> <u>nachhause</u> <u>gehen</u><br>(I must return home)                             | (40') yo tengo que ir a mi casa<br>(I must return home) |
| (41) ich <u>muss</u> <u>zurück</u> <u>nach</u> <u>Spanien</u> <u>gehen</u><br>(I must return to Spain) | (40') yo volveré a España<br>(I shall return to Spain). |

These examples confirm our hypotheses of over-generalization of the construction muss + impersonal verb form. Only in the case of (40) is the first person singular, present muss rendered by tener que in Spanish (40'). In the other cases, Tomás A. uses the future and the present perfect in Spanish. Inasmuch as we do not thus far have equivalent data relative to the other informants using müssen with equal frequency, these conclusions are of exploratory value only. However, other interview passages corroborate our hypothesis.

Meanwhile, this analysis is supported by examples provided by prompted translations (mother tongue-German, German-mother tongue) that we are having done (encouraged by the informal translations of Tomás A.) by a third of the foreign subjects. In them we stress the temporal and modal aspects of the verbal system. To date, the survey is not completed and we have not yet made a systematic analysis ; but we are beginning to have the rather distinct impression that the lexical units (a) do not exist and hence cannot be expressed, (b) that they exist in part and are partially over-generalized (from time to time an adverbial expression exactly corresponding to a given modal verb exists ; the former has been expressed instead of the latter) and (c) that they exist and can be used in a differentiated manner. What is surprising is that the plural forms are hardly ever used except by the most advanced speakers. The speakers often appear to have learned only a singular form of the modal verbs they use, which they then employ for all the persons. Moreover, this is confirmed by informant SP-36, who also possesses only one paradigm of the verb müssen, viz., muss.

Linguistic and sociological arguments can provide a preliminary explanation for the over-generalized use of müssen. From the linguistic viewpoint, muss functions as an over-generalized element and as a hidden error. The use of muss is over-generalized because it covers a broader field of grammatical and syntactic meanings than in the German dialect. And often the construction contains a hidden error, in that it is well formed on the surface, but incorrect in respect of its deeper semantic structure, that is, its interpretation. The speaker inserts muss merely to obtain a superficially acceptable construction. But the latter is contextually and semantically unsuitable. The selection of muss as an appropriate formal expression of this strategy of learning may be explained by the fact that the forms of the first and third persons singular of müssen are identical (muss).



From the sociological viewpoint, the over-generalized use of müssen has three interesting aspects. First, it is probably the modal verb that the foreign workers hear most frequently in daily communication, especially during their work. But although its selection as a substitute for the aspectual and modal system of the verb would appear to be socially motivated, its significance is primarily linguistic, seeing that the specific meaning of müssen, i.e., the expression of an obligation, is unconsciously over-generalized. Hence the sense of müssen has been only partially understood. Secondly, the insertion of muss before the verb permits avoiding the use of morphologically unmarked verb forms (infinitive) which are considered as socially negative characteristics of the use of German by foreign workers. The use of muss has then the function of increasing the social prestige of foreign workers by "improving" their linguistic behavior.

Finally, exaggerated use of the construction muss + impersonal verb form would appear to be characteristic of a particular group of speakers, namely, those who have already acquired enough knowledge of German (even if it leaves something to be desired from the normative standpoint) to be able to meet everyday communication requirements. Such speakers have lived for between four and six years in the F.R.G. and are between 20 and 30 years of age. Their contacts with Germans, their way of life and the nature of their employment all seem to indicate that they are becoming adapted socially. But that conclusion is to be considered with as much caution as the observation on the over-generalized use of müssen, said to be more often encountered among men than among women. At all events, additional data will have to be collected and described before the preceding ideas and remarks can be verified.

#### 4.5.2 Prepositions

##### 1. Purpose and method of the analysis

Prepositions will be studied from the angle of their syntactic and semantic functions. We shall study this class of lexical units because it constitutes, with word order and inflection, one of the essential means for expressing and clarifying existing relations between the various syntactic units in the sentence. Hence prepositions are of great importance to the understanding of a statement and to successful communication (cf. Barkowski/Harnisch/Kumm, 1976: 65).

The purpose of our analysis is to examine the various uses of prepositions in the different varieties of learning. Our starting point is the prepositions present and lacking in our corpus, and a syntactic and semantic description of these lexical elements. We shall attempt, as in the preceding analyses, to determine the lines of development of the prepositional system by resorting to a comparison of the groups of foreigners among themselves and with the German speakers from the Heidelberg area.

Contrary to the syntactic analysis, the present detailed study was carried out on only 24 foreign speakers (12 Italians and 12 Spaniards) and on 6 German speakers. The linguistic material is more abundant than that of the 100 sentences per informant used for the syntactic analysis. We have taken into account all the transcriptions, representing an average of 1,000 words of text per subject. Hence we have taken that figure as the reference base for the absolute frequencies resulting from the quantitative analysis.

This broadening of the data base was necessary in the perspective of a detailed study of infrequent elements. As the unit of analysis is the prepositional group and not necessarily the sentence, we can also include in our study fragments of sentences comprising prepositional syntagmas, prepositional syntagmas obtained in reply to a question, etc., i.e., constructions that were excluded from the syntactic analysis.

Starting with a division of informants into four groups based on the syntactic index (cf. 4.2 and 4.3.1), we selected from each of these groups three Italian and three Spanish speakers. Identification of the prepositional syntagmas is done on the basis of reconstruction, in the target language, of certain syntactic constituents. This means that we have coded as "prepositional syntagma" all the constituents whose context indicates that a preposition is required to make them acceptable. Such prepositions were counted as missing:

- (42) faare /España (SP-04)  
(fahre nach Spanien / am going to Spain)

We have not taken into account the cases in which reconstruction of the prepositional syntagma was doubtful:

- (43) maino kint Buulo (SP-12)  
(mein Kind geht in die Schule / hat Schule // my child  
goes to school / is at school)

In our syntactic description, we have differentiated prepositional syntagmas according to their syntactic function in the sentence (cf. Holbig/Buscha 1974:67):

- a) Prepositional syntagmas functioning as attributive adjectives  
(i.e., dominated by a nominal syntagma):

- (44) dii bāt fon dii haus (SP-31)  
(die Betten vom Haus / the beds of the house)

- b) Other prepositional syntagmas (i.e., dominated by a verbal syntagma):

- (45) kome nach Köln (SP-06)  
(komme nach Köln / am coming to Cologne)

- (46) koste bai mia (SP-04)  
(kostet mich/für mich // costs me / costs for me)

For the semantic description, especially important for the analysis of the use of prepositions, we have divided prepositional syntagmas into the following categories:

- a) place, non-directional

- (47) arbaito in biiro (SP-18)  
(arbeite im Büro / work in the office)

- b) place, directional

- (48) kome su mia (SP-30)  
(kommt zu mir / comes to my house)

c) temporal

(49) färdi in abrillo (SP-01)  
(fertig im April/ ready in April)

d) personal/non-personal incidence

(50) wann bai mia (IT-26)  
(schwer für mich/ difficult for me)

e) modal

(51) sag auf doit (SP-19)  
(auf Deutsch sagen/ to say (it) in German)

f) final

(52) halb stunde für mitax (SP-01)  
(eine halbe Stunde für die Mittagspause/ a half-hour for the noon break)

g) others (comparative, causal, partitive, etc.)

With each occurrence of a proposition in the learning varieties, the corresponding semantically correct proposition of the target variety has been associated. This was done to recognize possible extensions or restrictions of meaning of prepositions in the learning varieties.

## 2. Results

### 2.1 Propositions as a whole

Ratios between expressed and unexpressed prepositions

We shall first examine the propositional syntagmas as a whole.

TABLE 4-15 : EXPRESSED AND UNEXPRESSED PREPOSITIONS

Group	Expressed		Unexpressed		Total
	N	in %	N	in %	
I	143	51	139	49	282
II	243	71	103	29	346
III :	341	83	72	17	413
IV	303	94	18	6	321
HD	250	100	0	0	250

The number of occurrences of propositional syntagmas increases by approximately 30% from group I to group III, thereafter decreasing by about 20% with group IV. The German speakers' value is lower still than that of group IV. The use of propositional syntagmas seems to play an important role in the intermediate stages of learning. At the upper levels, propositional syntagmas are apparently replaced by other syntactic structures.

The proportion of prepositions expressed markedly increases from group I to group IV. Whereas the group I values in respect of expressed or unexpressed prepositions are almost identical, 70% of the propositional syntagmas already contain a preposition in group II. Reduction of the number of propositional syntagmas lacking prepositions continues more or less regularly up to group IV, with only 6% of prepositions unexpressed.

## 2.2 Types of prepositions

The number of different prepositions clearly increases with the level of learning. Group I uses an average of 3 different prepositions, group II 5, group III 8, group IV 11, and the group of German speakers 12.

TABLE 4-16 : RELATIVE FREQUENCY OF in, bei AND mit IN RELATION TO THE TOTAL NUMBER OF EXPRESSED PREPOSITIONS

Group	Propositions			
	<u>in</u>	<u>bei</u>	<u>mit</u>	<u>others</u>
I	54	27	10	9
II	43	14	11	32
III	31	20	16	33
IV	23	17	10	45
HD	22	14	13	46

All the groups, including the group of German speakers, frequently use the prepositions in, bei and mit. They comprise 91% of the occurrences in group I. In is the most frequent preposition, followed by bei with 27% and mit with 10%. Whereas the occurrences of in and bei are divided relatively regularly among all the speakers in group I, the high value of mit is accounted for by the astonishingly frequent use of that preposition by a single speaker. The latter remark applies as well to 9% of other prepositions. The acquiring of prepositions other than the three most frequently encountered apparently occurs more or less at random at this stage of learning and seems to depend on the individual learning situation.

A more marked differentiation appears from group II onward. At the intermediate learning levels, the three prepositions mentioned constitute approximately two thirds of the total occurrences. The corresponding value for group IV, 55%, is almost identical to that of the German speakers. In these two groups, it is noted that 45% and 46%, respectively, of the remaining occurrences are expressed by a large number of different prepositions. In group IV, we find the following prepositions: in (23%), bei (17%), von (13%), mit (10%), zu (8%), für (5%), an, auf, nach (4% each), bei, um (2% each), bis, vor, wegen (1% each), ab, als, aus, durch, gegenüber, hinten, über (less than 1% each). This repertory on the whole is identical to that of the group of German speakers, but use of the prepositions by the foreign speakers deviates in part from the norms of the target variety.

### 2.3 Syntactic function of the prepositional syntagma

The prepositional syntagmas in the aggregate can be divided according to their syntactic function into two classes: (a) those which are part of the verb group (er is vor drei Tagen aus München gekommen / he came from Munich three days ago) and (b) those which are part of a nominal group (ein Kollege von mir / a colleague of mine). The table shows the distribution of these two classes among the four learning levels and the group of speakers from Heidelberg.

TABLE 4-17: RELATIVE FREQUENCY OF PREPOSITIONAL SYNTAGMAS ACCORDING TO THEIR SYNTACTIC FUNCTION

Group	Prepositional syntagma (p.s.) in the verb group		Prepositional syntagma in the nominal group	
	with preposition		w/o preposition	
I	94	54	6	50
II	91	70	9	81
III	91	83	9	93
IV	89	94	11	100
HD	91	100	9	100

It is observed that the value for class (a) averages 90%, which means that the majority of the prepositional syntagmas are part of the verb group. Only 10% belong to class (b). No significant difference is noted between the two classes either in respect of their evolution or of their distribution between German and foreign speakers.

### 2.4 Semantic function of prepositional syntagmas

We shall study, still in comparison with the group of German speakers, the semantic function of prepositional syntagmas among the various learning levels and their evolution in the course of learning. Our analysis will be based on the categorization into seven semantic classes described above.

TABLE 4-18: RELATIVE FREQUENCIES OF PREPOSITIONAL SYNTAGMAS ACCORDING TO THEIR SEMANTIC FUNCTION AMONG FOUR GROUPS OF FOREIGN SPEAKERS AND A GROUP OF GERMAN SPEAKERS FROM HEIDELBERG

Semantic functions	G R O U P				
	I	II	III	IV	HD
place, non-directional	56	35	33	30	26
place, directional	15	13	19	18	19
personal/non personal incidence	19	24	20	22	29
temporal	6	12	8	15	6
modal	4	9	10	7	13
final	1	1	4	4	-
other	-	2	3	3	2
idiomatic <sup>+</sup>	-	-	-	-	6
unclassifiable	-	4	4	1	-

<sup>+</sup> = p.s. corresponding to an idiomatic expression

Table 4-18 shows that among all the foreign speakers, by far the most frequent function is "place, non-directional". 50% of the occurrences in group I fall into this category, and still about one third in the other groups of foreigners. Among the German speakers, the "place" function still totals 26%. The high value in group I may be explained by the fact that the low-level speakers chiefly transmit concrete information referring especially to places (country of origin, host country, place of work, etc.). This hypothesis is supported by the large number of constructions of the type preposition + proper noun, which are almost twice as frequent in group I as in group IV.

The semantic category of second importance is that of personal/non-personal incidence. By this concept is meant the use of a preposition serving to designate the personal - or, less frequently, the non-personal - aspect of a happening or situation (cf. Helbig/Buscha, 1974: 382) (e.g., sprach mit mir (SP-20) (spricht mit mir / speaks with me), (egal bei mir (SP-04) (egal für mich / makes no difference to me), (freunde von meiner Tochter (IT-10) (Freunde von meiner Tochter / friends of my daughter). This category registers approximately identical values in the four groups of foreign speakers. The value for the group of dialectal speakers is slightly higher. These figures apparently reflect the necessity felt by the speakers, during communication, to define their own rules and viewpoints relative to the happenings and situations expressed.

Directional prepositions of place occupy the third rank in all the groups. Their use is closely linked to that of verbs of motion. Even in group I, where few verbs are encountered, the majority of the prepositions of this type accompany a verb.

The occurrences of temporal prepositional syntagmas markedly increase from the lowest to the highest level, thereafter decreasing, with the group of German speakers, to the value in group I. The possibility of expressing temporal indications without resorting to prepositions, a tactic very frequently used by the German speakers, is either not yet used, or is less used, by the groups of foreign speakers.

Modal uses represent approximately 10% of the occurrences in groups II to HD. There are very few in group I.

Table 4-19 indicates, from left to right, a distinct differentiation of the semantic functions of the prepositions used. Among the lower learning levels, a small number of different prepositions serve to express a small number of frequently used semantic functions. These prepositions then undergo a considerable extension of their meaning. That is what we shall show exemplarily in respect of the preposition bei.

Prepositional syntagmas introduced by bei expressing personal incidence are encountered almost without exception with verba dicendi, such as sprechen (to speak), sagen (to say), rufen (to call), fragen (to ask); they frequently replace in such instances a direct complement or indirect object. This applies to such verbs as kosten (to cost), interessieren (to interest). Bei is also used with adverbs and adjectives in the sense of the preposition für of standard German: egal bei mir (SP-22) (egal für mich / all the same to me), besser bei mir (SP-04) (besser für mich / better for me), schlecht bei mir (SP-30) (schlecht für mich / bad for me).

It is interesting to note that bei is the only preposition whose use differs between the Italians and Spaniards. The Spaniards total 82% of the occurrences of this preposition. On the other hand, the semantic functions expressed by bei are the same for both nationalities, namely, place/non-directional, place/directional, personal/non-personal incidence. But their quantitative distribution is different. Among the Italians, the few occurrences of bei are equally divided among the three functions, whereas among the Spaniards 50% of the occurrences come under the personal incidence category. Among the Spaniards, this function is almost always expressed with the use of bei; among the Italians, where the same frequency is found, the preposition mit is more often found. The preponderance of the use of bei among the Spaniards is still unexplained for the time being. It may involve a phenomenon of interference, a problem which remains to be solved in detail.

#### 4.6 Remarks on the development of morphology and phonology

##### 4.6.1 Morphology

Morphology, or more precisely flectional morphology, generally plays an important role in the teaching of foreign languages, especially when the morphological processes are characterized by a certain irregularity - as for example in the case of the "strong verbs" of German. Hence particular importance should be attached to knowledge of these phenomena during the learning of a second language. It therefore seems altogether indicated that a study of the unguided linguistic learning of a language should take morphology especially into account. However, such a study encounters several difficulties of diverse nature and importance.

1. In most current linguistic theories, morphology plays an altogether secondary role — in contrast to its status in traditional grammar and also in many structuralist approaches. That is why appropriate descriptive techniques are lacking for the time being.

2. In the study of the linguistic learning of a language, the object is not to describe a morphological system but the gradual learning of certain morphological rules. Descriptive techniques leaving these differences out of account are of little use, just as was the case with the syntactic analysis. The point is to find a procedure whereby the processes of improvement, the stages of development can be discerned with precision.

3. A particularly difficult problem is posed by the fact that the subjects do not learn only certain forms or certain modifications of forms, but sometimes only the categories and the different modes of expression by the morphological system. This problem is recognized in foreign-language instruction and interferences are apt to be explained by reference to it. Consider the difficulties frequently experienced by Germans in learning the difference between the past definite and the imperfect, or the aspectual contrasts in Russian, or again the progressive form in English. And though the description of the forms themselves is often quite good and clear, the categories they express are frequently very imprecise and arguable.

4. As concerns the unguided language learning of foreign workers, it is not at all certain that the language they learn in their social context contains the same morphological categories as the codified standard language. To be sure, it is not very likely that for example in the Heidelberg dialect there exists a category of plurality expressed by morphemes differing from standard German. But it is not clearly known whether the different verb forms in the personal narrations express an aspectual category or rather a temporal category. In such cases one tends to adopt the views of traditional grammars rather than question the actual function of the various forms used.

Hence on the one hand one is faced with the necessity of studying morphological development in order to get a complete picture of the most important processes of language learning; on the other hand, it is obvious that such a study will turn up problems whose solution is far from having been found. Hence an attempt must be made to formulate a sort of "working model" whereby the development of morphology can be described with a certain degree of finesse on the basis of the data collected, without any claim that said description is the definitive linguistic analysis of morphological development.

Such a "working model", already rather precise, was devised in our research group (cf. Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1976, chap. V: 240-281). Only lack of time has thus far prevented its application to our data as a whole. We have been able to study exemplarily, using six informants, only a particular problem of flectional morphology, namely, the forming of the plural of nouns. It is not yet possible to draw final and irrefutable conclusions from it, but the study nevertheless permits discerning the trend of the phenomena to be examined during subsequent morphological analysis.



1. The forms of the singular do not reveal any morphological differences among the informants at different levels. As was to be expected, the singular is not morphologically marked.
2. As concerns formation of the plural, the trends observed among the Italians and Spaniards differ:
  - (a) The three Italian informants, whose knowledge of syntax differs widely, all simultaneously resort to three formation procedures: no marking, by a chva, by a z (sometimes accompanied by a chva). o tendency to progress was discerned.
  - (b) Each of the three Spanish speakers uses a different procedure for forming the plural: the informant at the lowest syntactic level knows only a single procedure (use of a chva as a morphological mark); the informant at the intermediate level knows two; the one at the highest level, three. Hence among the informants a certain parallelism of the syntactic levels is observed; however, the differences are much less pronounced; syntactic development is more advanced than morphological development.
3. Seeing that the syntactic level of the informants differs in part considerably, but that these differences do not appear, or appear only slightly, in the morphological field, there is some justification for the opinion that morphological structures will be formed in the later stages of learning.

Cursory examination of the data reveals that flectional morphology is generally learned late. There may be two reasons for this: either it is possible that flectional morphology is of relatively little importance for communication; hence it will be learned very late or not at all, just as with certain syntactic constructions having only slight importance for communication. Or it may be that morphology is particularly resistant to learning because of its difficulty. We reather incline to the first of these two reasons; but that is finally a matter for empirical verification.

#### 4.6.2. Phonology

A foreigner's "pronunciation" plays an important role in his appraisal by natives with whom he speaks. This is manifest, for example, in such frequently heard judgments as "He has a funny accent". Indeed, our data reveal that the foreign speakers use certain German words in a form so deviant that they can be understood only with difficulty, if at all: e.g. /xar/ for "Harz" (resin), or /əna/ for "Schnaps" (spirits). We have devised a relatively precise procedure for analyzing phonological development; but up to now it has been applied exemplarily on only three Spanish informants (cf. Klein, 1976, Rieck, 1975; a broader analysis is in preparation).

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<sup>+</sup> It was only after preparation of the present chapter that the authors learned of the important and thorough study of Helga Huber (Huber, 1977) on the verbal morphology of several speakers from the Heidelberg sample. The study confirms the principles of the hypothesis advanced here. The lower and intermediate learning levels have little or no knowledge of morphology and hence can be regrouped into a single level from the morphological standpoint. It is only among the most advanced speakers that the beginnings of an increased morphological differentiation are found (cf. Huber 1977: 103 ff.).



The consonant rules, on the other hand, are more complex and rather variable:

- (5) C  $\longrightarrow$   $\emptyset$  /  $\_\#$
- (6) t  $\longrightarrow$   $\emptyset$  /  $\_\text{S}$
- (7a) v  $\longrightarrow$  b / as absolute final
- (7b) v  $\longrightarrow$  w / elsewhere
- (8) z  $\longrightarrow$  s
- (9a) s  $\longrightarrow$  z /  $\left[ \begin{array}{c} \text{C} \\ \text{+ sth} \end{array} \right]$
- (9b) s  $\longrightarrow$  h /  $\_\# \text{C}$  (only among the Andalusian speakers)
- (10a)  $\int$   $\longrightarrow$  s
- (10b)  $\int$   $\longrightarrow$   $\partial\text{s}$  /  $\text{-V} \# \_\text{C}$
- (10c)  $\int$   $\longrightarrow$   $\emptyset$  /  $\_\text{C}$
- (10d)  $\int$   $\longrightarrow$  t $\int$  /  $\_\text{V}$
- (11a)  $\text{ç}$   $\longrightarrow$  x
- (11b)  $\text{ç}$   $\longrightarrow$  s
- (12) x  $\longrightarrow$  k  $\_\#$
- (13a) h  $\longrightarrow$  x
- (13b) h  $\longrightarrow$   $\emptyset$
- (14) N  $\longrightarrow$   $\left[ \begin{array}{c} \text{N} \\ \alpha / \end{array} \right] \_\_ \left[ \begin{array}{c} \text{C} \\ \alpha \end{array} \right]$  in which  $\alpha$  is a variable for labial, dental, velar
- (15) l  $\longrightarrow$  r /  $\_\text{C}$  only among the Andalusian speakers

(C = consonant; V = vowel; N = nasal;  $\#$  = end of syllable; - = negation)

Rule (5) - dropping of a consonant at the end of a syllable - is certainly the most radical, the more so as it may be repeatedly applied. It leads to forms such as /froi, ma:, sna/ for Freund (friend), Markt (market), Schnaps (spirits). This dropping is sometimes accompanied by a slight compensatory lengthening of the then-final vowel, though said length does not attain that of a long vowel in standard German. Leaving aside a pronounced extra-linguistic variability, the probability of application of this rule depends essentially on three linguistic factors:

- (a) the nature of the consonant: e.g., r,  $\int$ ,  $\text{'}$  are rarely dropped;
- (b) preceding application of the rule (several applications are less probable);
- (c) the following sound.

## 5. SOCIAL CONDITIONING OF THE UNGUIDED LEARNING OF A SECOND LANGUAGE BY IMMIGRANT WORKERS

The aim of this chapter is to identify the social factors governing the learning process in German. We shall first define a frame of reference enabling us to study the connection between the social situation and the linguistic situation. Within this framework, we shall thereafter summarize the results of our sociological analysis. The degree of correlation between the diverse factors and the linguistic data will serve as a criterion for determining which factors foster or, conversely, hinder the learning of a second language.

### 5.1 The unguided learning of German as a social process

As a general rule, the only possibility that immigrant workers in the F.R.G. have to learn German is not participation in courses of instruction - there exists no legal entitlement to courses, as in Sweden - but confrontation with a German-speaking environment. That means that the unguided learning of the language is a social process. Among the social factors intervening here, one can differentiate (1) factors concerning the personal conditions of learning, e.g., the training factors, and (2) factors concerning the context of learning in the F.R.G., e.g., the contact factors (cf. chapter 2). These two groups of factors determine the learning level that the foreign subject has the possibility of attaining. Favorable social conditions facilitate learning, unfavorable conditions hinder it.

A rough analysis reveals initially that the learning conditions of immigrant workers are unsatisfactory as a general rule. This is revealed straight away by an outline of their social situation: the national and international effects of the capitalist economic system and the division of labor at the international level resulting from it compel immigrant workers to sell their labor potential abroad in order to provide for their subsistence. Serving as a contingency buffer and reserve army for industry, they work at ill-paid, unpleasant and to a large extent mechanical jobs (cf. Geiselberger 1972, chap. II and III and Nikolinos 1975 : chap. IV). The corollary to economic exploitation is social discrimination. This situation has the following consequences :

- immigrant workers are torn from a rural-area or small-town professional and social structure to face, without preparation, the conditions of production and existence prevailing in large cities and industry.\*

- It follows that :

- (a) they are torn from social conditions offering security (family, friends), without being able to find anything to replace them in the country of immigration. They meet with the massive prejudices of the German population, doubtless explained by the difference in socialization, cultural background, and the fact that a large proportion of the German population does not clearly understand the reasons for the hiring of immigrants, nor the policy followed in this regard by capital, and views the immigrant workers as competitors in the labor market, wage-lowerers, etc.

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\* We are considering here only the typical social changes in the situation of immigrant workers. Of course, some may become established in a rural area and work in agriculture.

- (b) they find themselves incorporated in productive processes that are largely standardized and hence poor in communicativity.

These factors lead to loss of self-assurance, separation and isolation (cf. Borris 1973 : chap. VIII); rather frequently also, the immigrant reacts to this situation by consciously returning to his national group in the host country. Social isolation entails isolation from the standpoints of language and communication. It is obvious that such conditions are very unfavorable to the unguided learning of German.

## 5.2 Correlation between linguistic factors and social factors in the learning of German by Spanish and Italian workers

### 5.2.1 Method

To determine the connection between linguistic and social factors, we proceeded as follows (a detailed presentation is to be found in "Heidelberger Forschungsprojekt 'Pidgin-Deutsch'" 1976 : chapter VI, 283-351):

Using the data provided by exploratory interviews, participant observation and related sociological fields, we selected the social variables concerning both the individual conditions of the speakers on the date of immigration, and their social context in the F.R.G. For each of the 48 speakers examined, we correlated the variables with the subject's "syntactic profile" level, i.e., his rank on the speakers' scale in terms of the syntactic index (cf. on this point 4.2 and 4.3.1). The link between syntactic level and social factors will be measured by use of the association criteria  $\chi^2$  and  $r$  (cf. Benninghaus 1974 : 230-256).

We shall present the variables in what, according to our research, is the decreasing order of their importance to unguided second language learning. For a more "spoken" presentation, we refer in part to groups of speakers established in terms of the syntactic level. For the sociological analysis, the subjects were divided into three groups of 16 speakers each, group C comprising the speakers whose linguistic level is high, group B those at an average level, and group A those at a low linguistic level.

### 5.2.2 Results

#### 1. Leisure-time contacts with Germans

This variable presents the greatest correlation with the syntactic level ( $\chi^2 = 0.64$ ). The speakers with many contacts are found at the top of the syntactic scale; those with few contacts are part of group A.

TABLE 5-1 : DISTRIBUTION OF THE 48 SUBJECTS ACCORDING TO THE THREE SYNTACTIC LEVELS AND THE "LEISURE-TIME CONTACTS WITH GERMANS" (TABLE OF FREQUENCY)

few	moderate	many	n
6	5	5	16
8	8	-	16
15	1	-	16
29	14	5	48

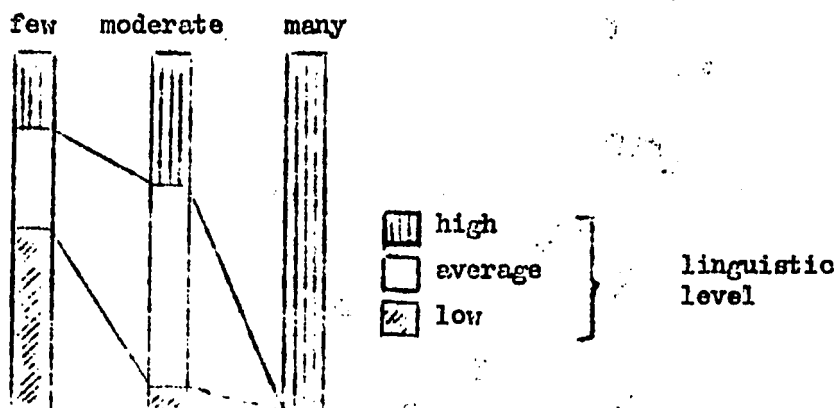


Figure 5-1 : histogram

What ensures a high level of learning is living with a German partner. Through the latter, moreover, contacts with German relatives or friends are established. It appears that relations with a German partner increase the immigrants' possibilities of integration and also their desire to integrate. In reality, only a minority of the immigrant workers enjoys such a situation. Among 60% of those interviewed, contacts are limited to the strict minimum: exchanged greetings with neighbors, the few spoken words required for making purchases, etc. Found in this group are all those housed in company lodgings and who live in a sort of ghetto. Fourteen individuals have nevertheless managed to have peripheral contacts, with neighbors especially, which already has positive effects on learning the language: they are part of groups B and C.

Let us say that, generally speaking :

- none of the subjects questioned maintains contacts with German colleagues during his free time;
- aside from the immigrant workers living with a German partner, the subjects seek satisfaction of their needs for contact within the circle of relatives and friends of the same nationality;
- male immigrant workers know hardly any situations enabling them to establish contact with Germans, and this is even more the case with female workers.

## 2. Age of immigration

This variable is the second in importance ( $\beta = 0.57$ ;  $r = 0.56$ ). It involves an inverse relation: the greater the age of immigration, the lower the level of language learning. The average age of immigration to the F.R.G. of the ten speakers with the highest syntactic indexes was 20. On the other hand, the speakers who arrived at the age of 40 or more are part of group A. Those who were between 25 and 35 years of age on arrival form a relatively compact group in the middle. It therefore appears that the conditions of learning are particularly favorable when the foreign subject arrives young in the F.R.G. (up to age 23 approximately), and particularly unfavorable when he arrives at age 40 or more. We should not jump to any conclusions about neurological or cognitive conditions - e.g., that the learning capacity decreases with age -, although that cannot be

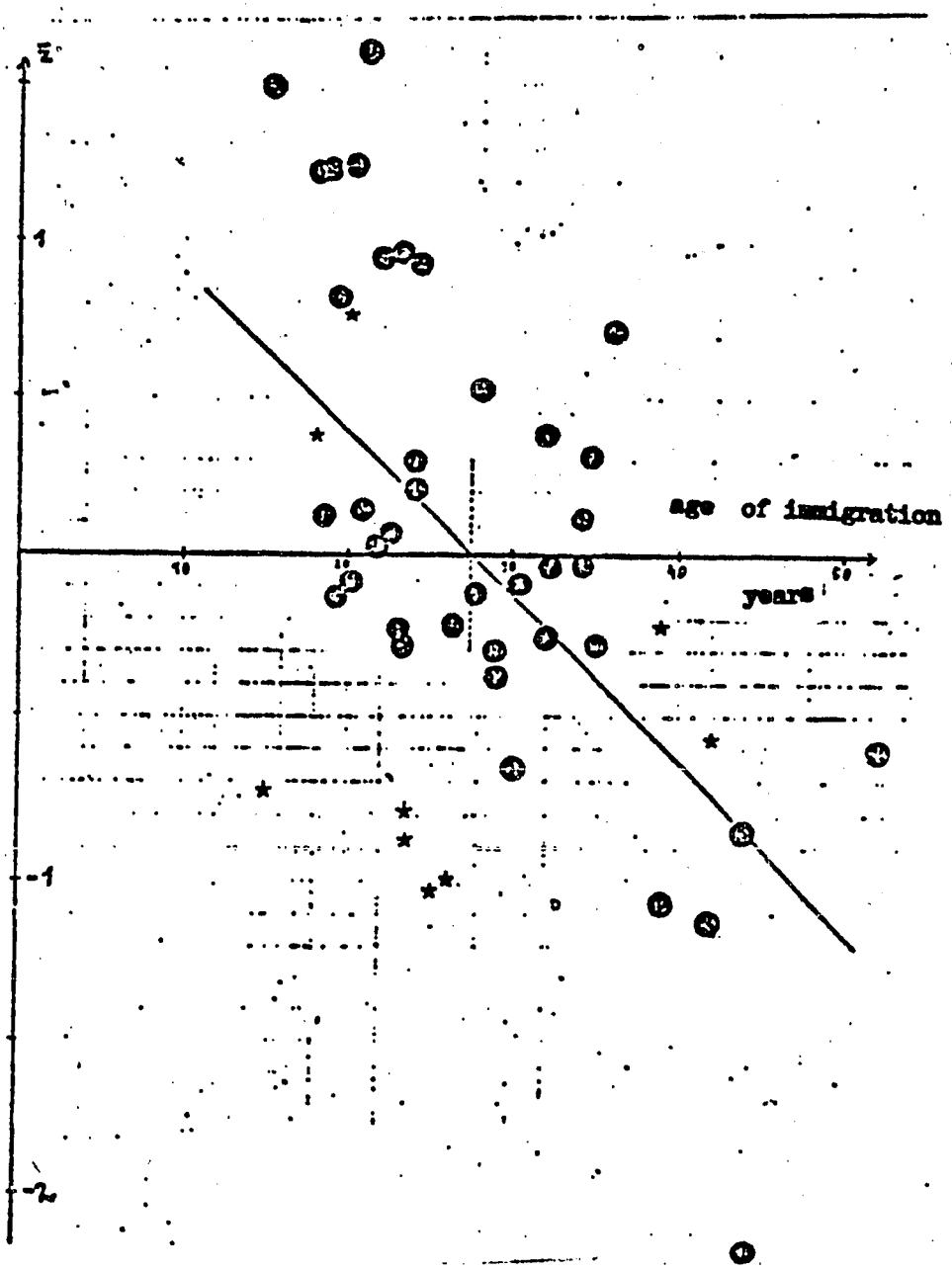


Figure 5-2: Distribution of the 48 immigrant workers according to syntactic index and "age of immigration" (the asterisks indicate subjects having lived in the F.R.G. for less than 2.4 years).

ruled out. In reality, certain factors of the social context vary with the age of immigration, especially the contact factors. The result is the following picture : those who arrived young are more open to contacts and more capable or more desirous of adapting, whereas older individuals are rather disoriented and tend to withdraw.

### 3. Contacts with Germans at the place of work

Given the few possibilities of contacts with Germans during leisure hours, the place of work still offers the best opportunities for communication with natives. The correlation between the level of learning and this variable is  $r = 0.53$ . It appears that the importance of contacts at the place of work depends in each case on the following factors :

#### a) Type of activity :

The greater the obligation to collaborate at the place of work, the greater the communication :

- jobs involving different sequences foster communication (e.g., hand-crafts, the use of several machines, etc.)
- likewise, jobs requiring a prior agreement (e.g., construction work, site assignments)
- service trades intensify communication (e.g., chauffeur, hair-dresser, cook's helper, etc.)

#### b) Type of employment :

- the requisite condition for contacts is that the immigrant worker find himself solely among German colleagues;
- quite often, noise, accelerated cadence, prohibition of conversation, piece work, isolation in space of the work position, etc. prohibit any oral communication.

#### c) Worker's position in the enterprise :

- foremen are usually obliged to communicate more often, e.g., to break in newcomers, check work done, etc.
- company interpreters, i.e., bilingual immigrant workers serving as intermediaries between foremen or supervisors and immigrant workers with limited knowledge of the language, must also communicate more.

During participant observation at the enterprise (a detailed presentation on this point is to be found in "Heidelberger Forschungsprojekt 'Pidgin-Deutsch'", 1975 a : chap. 4), it was found that, in general, the German and immigrant workers communicated only in connection with the work. Only a small number spoke on subjects not related to the work, the barrier disappearing only when favored by long presence or a promotion in the company.



TABLE 5-2 : DISTRIBUTION OF THE 48 SUBJECTS ACCORDING TO SYNTACTIC LEVEL AND "CONTACTS WITH GERMANS AT THE PLACE OF WORK" (TABLE OF FREQUENCY)

few	moderate	many	n
-	4	12	16
4	6	6	16
10	3	3	16
14	13	21	48

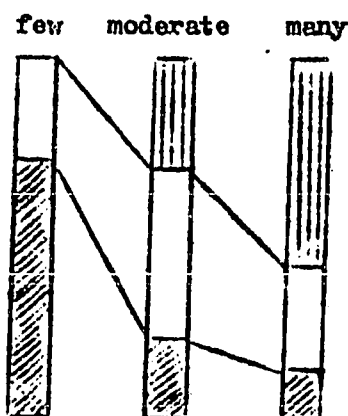


Figure 5-3: histogram relative to table 5-2

#### 4. Professional qualification acquired in the country of origin

This variable and the following one (length of school attendance) take into account, in learning of the language, the initial situation at the time of emigration. This variable presents a low correlation to the level of learning. In the cases studied,  $r = 0.42$ . Three fourths of the subjects questioned were workers "with initiation" or "untrained". Those considered as untrained are all the subjects who had worked as peasants, day laborers, housewives. To the "with initiation" group of workers belong those who, in their country of origin, most often in small businesses, had had the benefit of a period of initiation or apprenticeship. No difference in the learning of syntax was found between the two groups. On the other hand, the syntactic level is distinctly higher among skilled workers. Most of these belong to group C. It is likely that these workers, already familiar with the industrial world, find their bearings more easily in the host country and thus adapt better to the social and linguistic situation.

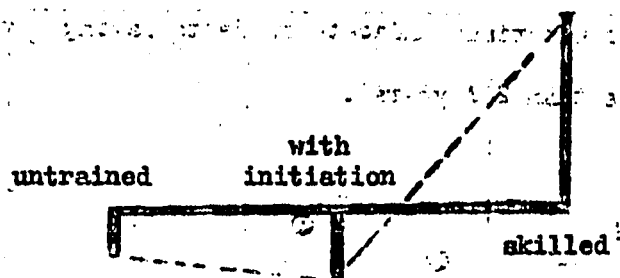
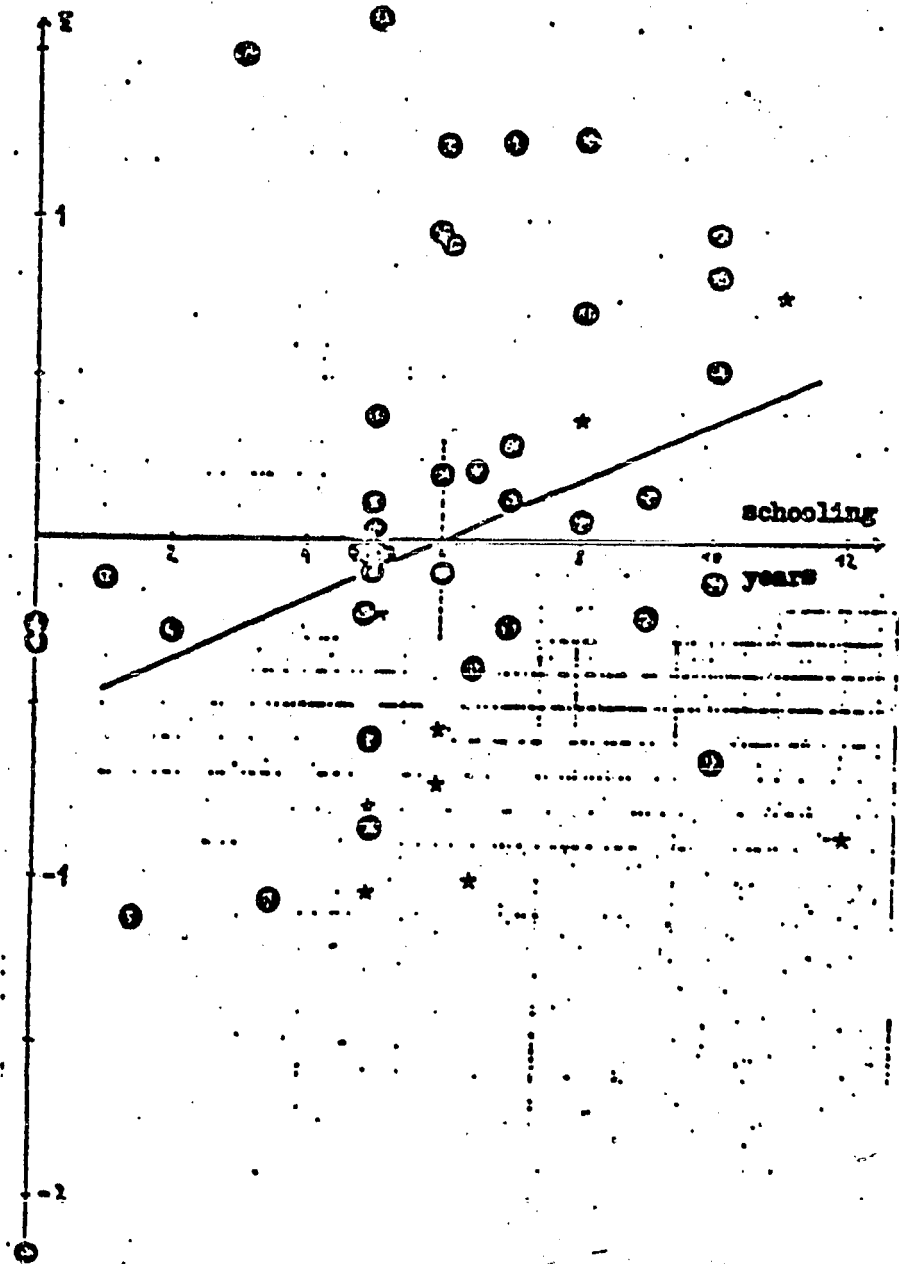


Figure 5-4 : Syntactic average in relation to the three categories of the variable "training in the country of origin"

### 5. Length of school attendance

The correlation with the syntactic index is as follows :  $r = 0.33$ ,  $r = 0.35$ . The speakers without primary school training are part of group A. Those who went beyond primary school are in most cases found in groups B and C. The syntactic level increases with the length of school attendance, the correlation being approximately linear.

Figure 5-5: Diagram of variance: Distribution of the 48 immigrant workers according to syntactic index and "length of school attendance" (the asterisks indicate subjects having lived in the F.R.G. for less than 2.4 years).



## 6. Length of residence

Off-hand, no correlation is found between the length of residence and the linguistic level attained. The rise in the syntactic level is not at all proportionate to the length of residence; it appears instead that after a certain

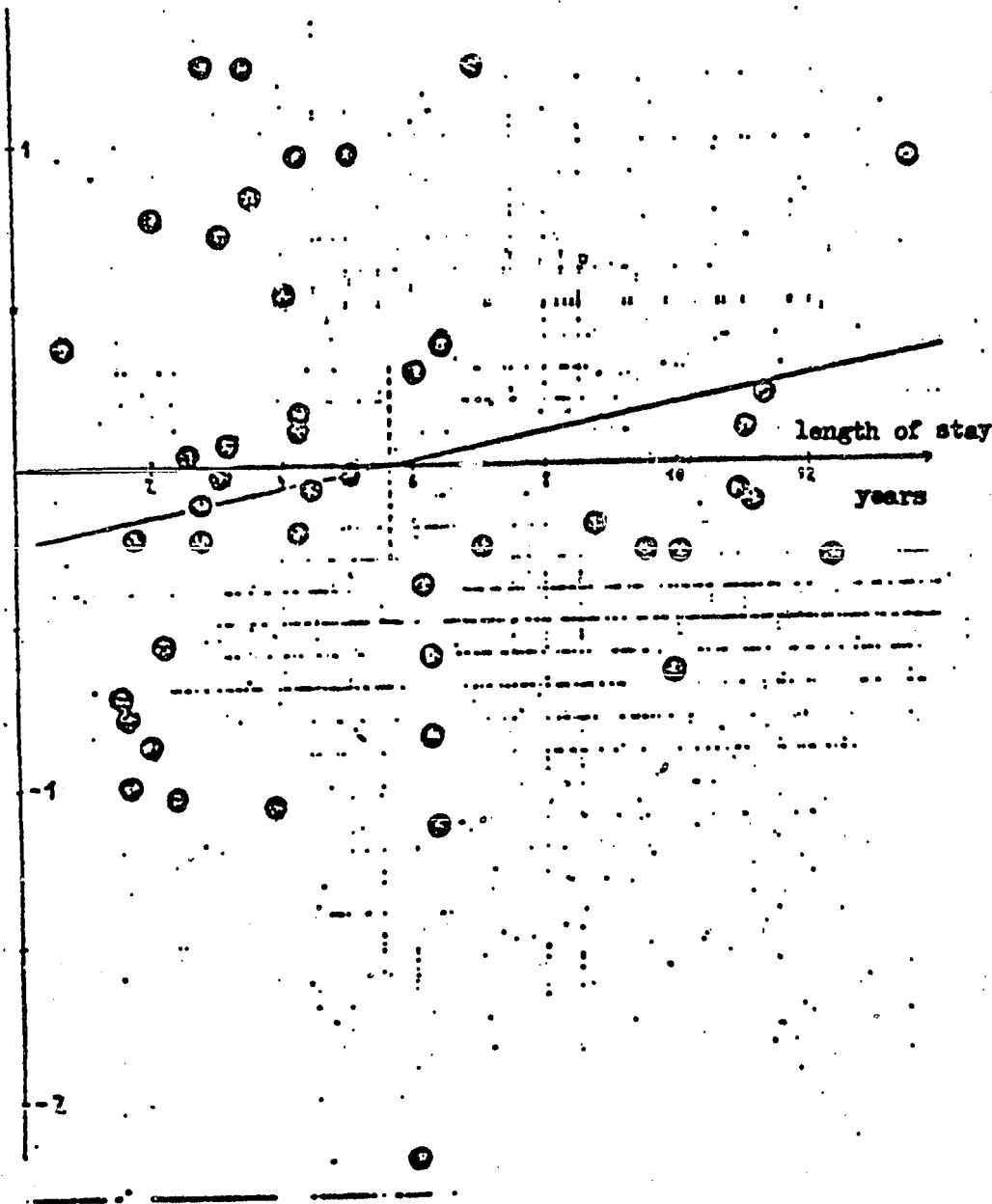


Figure 5-6: Distribution of the 48 immigrant workers according to syntactic level and "length of residence" (the asterisks indicate subjects having lived in the F.R.G. for less than 2.4 years).

becomes set, or "petrifies", at a certain stage. The following observation is interesting: if one considers the subjects having resided for less than two-and-one-half years, one finds that their place in the syntactic scale is less good than that of subjects in a comparable, or even less favorable, social situation, but who have lived for a longer period of time in the F.R.G. The low syntactic level of the former would seem to relate to the shortness of their residence. This manifestly means that during the first two or three years, all the subjects make progress in syntax. Following this stage of elaboration, they stabilize at a particular level, whose height depends on such factors as "contacts", etc. The speakers having favorable learning conditions reach a higher level during this period than those having unfavorable conditions. Once the syntactic level stabilizes, it appears that it cannot be dynamized unless certain social factors change (e.g., promotion, entering relations with a German partner).

## 7. Sex

The method of analysis used revealed no differences between men and women in respect of syntactic levels. Doubtless working and living conditions have so marked an effect that the differences linked to sex are obscured.

## 8. Housing

The correlation between this variable and the syntactic index is clear:  $r = 0.44$ . Despite the ghetto tendency, in buildings or neighborhoods, workers living in private quarters have more possibilities of contact than those in centers ("foyers") where they are collectively lodged. The "foyer" situation, by the mere fact that such housing is relegated to outlying districts, entails a sort of "withdrawal from the world" (Morris 1973: 138), an isolation. Thus workers housed at such centers are also the ones with the lowest syntactic level.

So much for what can be said of the explanatory value of the different social variables in respect of language learning, it being clearly understood that relations of causality cannot be founded on such research, but only the observance of connections.

## 5.3 Summary

The detailed investigations of the final paragraph confirm on the whole the overall analysis sketched in the beginning. To be sure, immigrant workers occupy an irreplaceable position in production, but the measures relative to infrastructure (e.g., in the fields of housing, training and health) directed toward reproduction of their labor potential are limited to a minimum. They are to a large extent excluded "from the development of social relations, from inter-personal relations, from the expression society gives itself in law, politics and culture and their institutionalization" (Barkowski/Harnisch/Kumm 1976: 42). Thus the mass of immigrant workers can acquire only an insufficient capability of interaction, and by the same token is incapable of defending itself against discrimination and of fighting for its rights. Hence a necessary, though not sufficient, condition for changing the intolerable situation of immigrant workers consists in giving all of them the possibility to learn German in courses of instruction that take their socio-cultural situation into account.

## 6. CONCLUSIONS AND RECOMMENDATIONS

In this chapter, we propose to summarize a few practical conclusions reached in the light of our socio-linguistic research. Their subject is the conditions that must be fulfilled if the language instruction of immigrant workers is to be really effective. These conditions are both socio-political and linguistic: socio-political in that the successful teaching of a language depends on a social and political framework that juridically fosters the learning of a foreign language and positively influences approaches to learning; linguistic in that the subjects' unguided linguistic level and the specific laws for acquiring a second language must be amply known in order for judicious and effective instruction to be formulated. But on the one hand we are obliged to begin with the migration of workers as a fact against which we cannot but react (cf., however, our political assessment of this matter in Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1975a: 12 ff.); on the other hand, though we cannot go on to an arrangement of the linguistic materials into curricula, we can adhere to a few linguistic facts which, in our opinion, absolutely must be retained when the curricula are formulated. Such is the framework within which the following remarks are to be considered.

### 6.1 Bias factors vs. contextual factors

Due reflection must precede any proposal aimed at transforming the language-learning situation of foreign workers. Such reflection will bear on determining where transformations should intervene. In the case of foreign workers, should they occur at the level of bias factors (individual conditions of the subjects, such as mother tongue, age, social origin, etc.) or rather at the level of contextual factors (factors constituting the learning environment)? What is the most favorable way to influence the learning situation? Our sociological analysis has shown that only foreign workers who have contacts with Germans (whether during their free time or at work) adequately learn the local variety of their entourage. Hence social distance with respect to the German environment is manifestly the chief barrier to successful learning of the second language. The importance of the "age at the time of arrival" factor little changes anything here, for, as concerns the basic issue of this social distance, age can be considered as a mere "contact filter", offering the young a greater chance than their elders of overcoming the contact barrier.

In the case of immigrant workers, it is easy to associate an improvement in the learning situation exclusively with a transformation of the context of learning. As opposed to the case with intellectuals and individuals belonging to the middle stratum, learning motivation depends less on various psychological conditions at the individual level (these bias factors could be influenced positively) than, in an altogether decisive manner, on the initial social and legal situation. If this situation is transformed positively for the individuals concerned, a favorable influence even on bias factors as stubborn as age and educational level can be expected. Furthermore, it should be clear that such factors, the same as the mother tongue, are not merely "transformable" but can be positively influenced through the medium of the learning context. Hence creation of an improved learning situation implies a transformation of contextual factors, which, in turn, can help to lessen the influence of bias factors.

### 6.2 The conditions for transforming the context of learning

In the introduction, we have already mentioned that the fact of learning a second language without guidance did not mean that command of said language was ipso facto less good. To the contrary, all the experiments

conducted with subjects optimally "immersed" in a second language indicate that language learning acquired through frequent and intensive contacts is better and faster than that acquired by the use of manuals. One altogether decisive result of our analysis is that the great majority of the subjects of our sample have no contact, or at best infrequent contact, with Germans - the most favorable situation still being the necessity for cooperation at the place of work. Opposed to this is the relatively good command of the language by a few; this command is due to intensive and intimate contacts with Germans, a circumstance normal for people belonging to the middle class, but not customary in the case of foreign workers (cf. chap.5).

Since good relations are the exception and perturbed relations the rule, one cannot leave solution of this situation up to the individual; to the contrary, it must be improved by means of a guided intervention: instruction in German can, in this situation of perturbed contact, perform such a role, since it offers at a formal level, the means (grammatical rules of German) and, from the standpoint of content, the verbal strategies whereby the social and intercultural impediments to direct communication between German and foreign workers can be eliminated (cf. also Barkowski/Harnisch/Kumm 1976b).

In this perspective, the institutionalized teaching of German, dispensed at all levels, constitutes a requisite, though non-sufficient, condition for transforming the social situation of foreign workers. However, the reality that we observe in this regard in the F.R.G. must not be lost sight of: the right to instruction in the language does not exist, and at the Länder level, there is no compulsory and uniform legislation permitting the regular offering of courses. Only institutions such as the Goethe Institute and the popular universities contribute to such instruction, but what they offer differs regionally and, in the aggregate, amounts to very little. The central institution in this field, specially founded by the West German Government and concerned with teaching German to immigrant workers (the Sprachverband Deutsch für ausländische Arbeitnehmer e.V.) stated that, so far, it has instructed 10,000 individuals in German. This corresponds to 0.6% of the total population of foreign workers living in Germany at the present time. Little has changed since publication of the Federal Ministry of Labor report (1973: 31) indicating that more than 70% of the foreign workers acquired their knowledge of the language at their place of work, whereas only 6% of them have had courses of instruction.

The language-training policy practiced in Sweden is diametrically opposed to this situation: since 1965, foreigners have had the right to take language courses free of charge. According to the declarations of the Swedish Ministry of Education, more than 150,000 individuals followed Swedish-language courses between 1966 and 1970 (Swedish Ministry of National Education (1977: 36)). This represents 40% of the immigrant workers presently living in Sweden, or 150%\* more than the beneficiaries of the West-German institution (and it must be remembered that there are ten times more immigrant workers living in the F.R.G. than in Sweden). Since 1973, Sweden has had a law providing that immigrant workers have the right to follow, during their paid work-time, courses in Swedish for 240 hours. Since enactment of this law (which dates from the summer of 1973), more than 20,000 immigrant workers have availed themselves of it (Swedish Ministry of National Education 1977: 44). If this number is added to that

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\* Translator's note: If the other figures (10,000 and 150,000) are correct, this should read 1500% (or 15 times more).

of the total number of participants for the period between 1966 and 1970, and we assume that, between 1970 and 1973 approximately 100,000 additional individuals have taken the courses, the conclusion is reached that at least 70% of the immigrant workers currently living in Sweden must have taken language courses.

As opposed to this, judging by the figures that we were furnished for the entire F.R.G., the fact must be recognized that at most 10% of all foreign workers have taken language courses (cf. above table 1-2 and the figures of the Federal association). Considering different socio-linguistic levels, we have attempted to show in this report what the consequences were when, on the one hand, language courses are not institutionalized as a right valid for all immigrant workers and, on the other, direct communication between German and foreign workers is, as a rule, perturbed. The great majority of the subjects studied in this report have only a very reduced syntactic and lexical repertory in the foreign language. Such indicators of assimilation of the local dialect as formation of the morphology and of temporal and modal systems, the learning of word order, the differentiated use of main and subordinate clauses, of the pronominal system and of prepositional syntagmas are found only in embryonic form. To be sure, one cannot judge from a purely linguistic standpoint the extent to which, by use of this reduced linguistic repertory, certain wants or requirements can be met; neither do we question the clear fact that rudimentary understanding can be assured between Germans and foreigners, seeing that native speakers have learned, by practice acquired over the years, to supply missing elements of the pidginized structure through communication routines having their own norms. The reality, which we have frequently seen reflected in the course of our three years of investigation, shows that foreign workers with practically no command of the second language (they constitute the great majority of our sample):

1. are able to make themselves understood by only a very small number of interlocutors;
2. do not possess, in the foreign language, the ability to make long, coherent statements that can be understood by anyone;
3. can express themselves on only extraordinarily limited subjects;
4. do not possess the verbal techniques of argumentation (for asserting their rights), of making contact (for articulating private needs), of expressing feelings (to communicate pain, interest and joy - but also dissatisfaction), such techniques being necessary for mastering the social and individual situation.

As concerns the latter point, certainly no one will require that instruction in German "impose on the migrant adults undergoing training a rhetorical and normative language that would be foreign to their daily social environment" (Unesco 1977, Recommendation 16, p.21), but it is clear, as confirmed by numerous recordings in our corpus, that with a greatly restricted grammatical and lexical repertory it is very difficult to argue, make contacts, swear, or tell jokes. But that is precisely what everyday communication consists of. Our linguistic analyses have sufficiently shown that what is lacking is the elementary linguistic tool for truly living communication - such communication being the condition not only for establishing contact with someone, but for maintaining it. Development of such verbal practices will not be possible until the microcosm of basic morphological, lexical, syntactic and semantic rules, which we have been able to study only in part, have been mastered. The real situation must be contrasted with all the games of reflection found among intellectuals: in such games, pidginized varieties (greatly reduced) fascinate, for they constitute auxiliary international languages and by the same token are an economic means to rapid



mastery of punctual contacts: furthermore, any long-term effort aimed at obtaining a command of the language conforming to the target variety is taxed with luxury or mere adaptation. The reality, as met with among families, for instance, is a prime source of conflicts. Foreigners' children as fluent in the second language as in their mother tongue are ashamed of their parents when they hear them speak German. Frequently, feeble command of the second language is, within families, a factor of alienation.

Consequently, regulation as practiced in Sweden constitutes a most urgent requirement for the situation of immigrant workers in the F.R.G. Such regulation should provide for an approximately equivalent number of hours of instruction, legally guaranteed, and available, without exception, to all foreign workers during their paid work-time. That such instruction should be given during paid work-time has been proved by numerous analyses: individual motivation to follow courses of instruction during free time is too poor; furthermore, the work load precludes long-term participation in such courses. Finally, the fact must be stressed that it must be expressly recommended, by means of detailed information, to all those arriving in the F.R.G. that they avail themselves, immediately on arrival, of their right to instruction in the language. One of the most difficult problems of language teaching to immigrant workers who seldom have been living for less than 5 years and frequently for more than ten years in the F.R.G., is that it has to correct deep-rooted errors, semantic blurrings, fossilized over-generalizations and structures of learning. The effectiveness of instruction in the language will be doomed to failure as long as special teaching concepts have not been developed for overcoming fossilization and rooted erroneous routines. As these constitute the negative phenomena attending unguided foreign language learning that has been allowed to develop naturally (it being possible to consider such phenomena in some respects as the faithful reflection of a perturbed contact situation), the instruction reserved for immigrant workers must be started as early as possible. But for the majority of those who currently live in the F.R.G. and might follow German courses, the object is to complete the knowledge they have of the language and to avoid erroneous developments.

The Unesco congress of 1977 on the language of foreign workers recommends that the governments concerned have research done "aimed at discovering...the means of motivating migrants to go beyond the minimal level of use of the second language, so as to avoid 'fossilization' of said language" (Unesco 1977: 20).

It appears that at present, in the F.R.G., the chances are slight of realizing a widely diffused program of instruction through which the linguistic knowledge acquired without guidance by foreign workers can be completed and corrected. Although, according to certain estimates, approximately two thirds of the foreigners currently living in the F.R.G. will remain there permanently or at least until retirement age, the West German Government still refuses to consider the F.R.G. as a country of immigration and therefore to shoulder the consequences resulting from the existence of immigrants. The most recent governmental projects relative to an overall policy in matters of the employment of foreigners (Federal Ministry of Labor and Social Order 1977) indicate that a future hardening of policy in this field is to be feared. Whereas there is no governmental plan to provide for immigrants' right to instruction in the language, as in Sweden, there is on the other hand an attempt to see whether foreign workers, on the pretext of insufficient knowledge of German, cannot be deprived of improved legal status in respect of their residence permit.

It is clear that, for immigrant workers, the right to German language instruction is only one element in a series of measures susceptible of improving, materially and in the long term, their social and communicative situation. Anyone lacking the right to obtain an unlimited residence permit, to participate in politics despite the fact that he has been living, as a native, and working in the country for years, who is not treated, in the labor market, on a footing of equality with his German colleagues, and who finally can have no hope of ever obtaining the right to nationalization in the country, will never be motivated to learn German well. Hence in the final analysis an improvement in the learning situation implies improvement in the social and juridical status of foreigners living in the F.R.G. Any such improvement (cf. also on this subject Albrecht 1976) should, at least in its practical implementation, meet the following requirements (Dittmar 1977: 21):

1. Right to naturalization after an uninterrupted residence of three years in the F.R.G.
2. Echelonned guarantees relative to the legal aspect of residence
3. Right to participate in political life, particularly at the level of municipal and federal electoral legislation
4. Equality of German and foreign workers in the labor market
5. Right to courses of instruction in German during paid work-time
6. Right to bilingual education for the children of foreign workers.

#### 6.3 Conditions for an appropriate conception of the teaching of German to foreign workers

In this report, we have repeatedly stressed that the success of German instruction dispensed to immigrant workers depended, to a large extent, on our knowledge of the factors conditioning unguided second language learning. On the one hand, one has almost no true beginners and, on the other, foreign workers who have acquired an incorrect knowledge of various fragments of German. It is in relation to this background that the results of the present study are pertinent.

Account must be taken of the following factors which, although they relate to Spanish and Italian workers, also apply to other groups of foreigners:

- a) Unguided second language learning tends to copy the local variety of the dialectical environment.
- b) Many important grammatical rules of German are lacking in the varieties of learning as compared with the target variety.
- c) Numerous rules are badly learned, i.e., they are not used in the normal manner and in part give rise to confusion.
- d) The foreign workers' varieties of German have characteristics of the mother tongue, particularly at the phonological level and apparently also at the syntactic level.

- e) Among what is rapidly learned, one finds:  
simple substantives, without complement (designations, proper nouns), simple verbs (very rarely compound verbs, copulas, modal and auxiliary verbs), simple adverbial expressions (of place and time, often without preposition), simple deictic forms such as dies (this) or das (that), numerals, a form of negation, a form of intensification (usually viel (much)) and adverbial syntagmas (subordinate clause introduced by wann (when)) (cf. 4.4.4.3).
- f) Slowly learned are:  
all the morphology, a differentiated level of the systems of mood and tense, the pronominal system, conventions relative to the position of words in main or subordinate clauses consisting of complex predicates, nominal and attributive sentences, pronominal adverbs and such lexical units as "ja", "nun", "doch", etc. of the spoken language.

This list, although incomplete in respect both of the whole and of individual points, provides only approximate guide points, but helps us to make certain decisions in formulating an appropriate instruction of German. We shall discuss them in the following paragraphs: 1. dialect vs. standard language (a), 2. priorities of learning (points (e) and (f)), 3. measures of elaboration (point (b) in relation to (e) and (f)), 4. measures of elimination (point (c) linked to point (e)) and 5. contrastivity (point (d)).

#### 6.3.1 Dialect vs. standard language

The varieties of the most advanced subjects reveal quite distinct dialectical influences, reflecting the contact they have with their co-workers who speak the dialect. As we are obliged to take account of the primary contacts of the individuals concerned, a set place must be reserved for the dialect in teaching the language.

Furthermore, the part that the dialect should occupy in teaching of the language is determined by assessing the importance of the standard language and considering the written language in comparison with the spoken language. The proportion of the instruction that should be devoted to the written language and the spoken language obviously cannot be decided in a blanket manner, but rather in terms of the participants' requirements. One important argument is that only the standard language is written. Moreover, if we consider the fact that workers must pay careful attention to choosing which variety of language to learn, for reasons (i) of mobility (change in the place of work and hence in the dialectical space), (ii) of understanding at the national level (one need only think of dialects as dissimilar as Bavarian, Swiss German, or Low German) and (iii) of the frequent stigmatization of what is called "immigrant workers' language" (dialectical influences being likely to intensify such discriminations), the debate should conclude in favor of the standard language as the variety to use in instruction. However, we cannot approve such a decision of principle unless the dialectical varieties learned by the subjects are not merely accepted as bona fide expressions, but taught on the same basis as the rules and expressions of the standard language. Hence the goal to attain would be passive command of the dialect, since it is clear that the dialect predominates where the immigrants work.

Basing oneself on our analysis, it is altogether possible to devise instruction containing a specifically dialectical component. In respect of certain essential points, it is possible to define precisely the distances

and contrasts between the varieties of learning and the target dialectical variety. By this very procedure the base is established which in turn permits determining the distances of these varieties in relation to the standard language. It must be emphasized that in this manner language instruction is not reduced to merely adapting to the linguistic knowledge already acquired. According as the content of the learning objectives is defined, this "base", i.e., the deviations described, can be used for diverse purposes.

### 6.3.2 Priorities of learning

From our analyses, it emerges that two particular phenomena mark the unguided learning of a second language by immigrant workers: deficiencies in the systems of learning, and the unacceptable or incorrect use of certain linguistic constituents. Given these flaws, measures of elaboration and of elimination must be adopted for the instruction (cf. in this connection 6.3.3 and 6.3.4). However, we shall first discuss two fundamental grammar problems: what importance should be attached to particular components, and what priorities are to be observed for progression in the language?

The answer to these problems may be provided in toto by the unfolding of the learning process itself (cf. e.g. 4.3.4). One would be well advised to observe the principle which holds that the "natural" consequences of unguided second language learning must not be totally rejected. Naturally, it is possible, in pursuance of the finalities of content, to teach attributive syntagmas before verbal syntagmas, the preterit before formation of the perfect with the auxiliary have, or particles before a broader spectrum of adverbs. But such a method does not seem very pertinent, since, as our results indicate, adverbial syntagmas are far more necessary than attributive syntagmas, the preterit plays a distinctly less important role in the spoken language than the perfect, and the very differentiated meanings that particles may have are generally learned only after a good command of the target variety has been attained. That it is advisable, therefore, to follow in its main outlines the natural development of learning in respect of progression does not by the same token imply that in teaching one cannot deal on a priority basis with certain aspects recognized as particularly deficient and typically reflecting a "not very natural" contact situation. However, it is necessary to differentiate clearly between the introduction of lexical units and that of syntactic rules. With the latter, it is possible to proceed in a much less arbitrary manner. The body can digest only when it has eaten; the same is virtually true of language learning.

The two especially striking characteristics of the varieties of learning, viz., deficiencies and mistaken uses, imply the necessity for priority insistence in teaching on the learning of basic syntactic and semantic rules. This is further justified at an empiric level: morphology is learned only late (cf. Huber 1977); manifestly, it is only of moderate importance for direct communication. The phonology of certain varieties of learning is to be sure greatly deformed in part, but as a rule the phonic constituents of the words in general use can be articulated intelligibly. Only secondary importance should be attached to the position of words, for elements that have not been learned cannot be incorrectly placed. Hence particular stress should be placed on enlarging the lexicon and on the repertory of syntactic and semantic rules; note that the latter should be used when meanings have been wrongly learned. We can summarize the viewpoints just enunciated by stating that **INTELLIGIBILITY** takes precedence over **GRAMMATICAL CORRECTNESS**. If the former is practically assured, the latter can be stressed.

### 6.3.3 Measures of elaboration

By this is meant all the measures that, in the instruction, aim at filling in and completing the subject's deficient structures. Analysis of the inventory of lexical elements found in the varieties of learning will determine in what field and to what extent these must be completed. For subjects whose level is very low, virtually all the modal verbs will have to be introduced. The same does not apply to numerals. Likewise, the inventory of prepositions governing the semantic function of adverbial complements will have to be considerably enriched (cf. 4.5.2, especially table 4-20). For the closed classes, it is easy to establish diagnoses; on the other hand, for the open classes, we depend, for determining the extent of the lexicon, on criteria bearing on the content. Research on the verbal lexica of the varieties of learning is currently being conducted.

In the field of syntax, our research provides a relatively clear picture of the measures of elaboration to be adopted in terms of each level of learning. By way of example, we shall mention a few points concerning the following syntactic constituents: the verb, the nominal syntagma, the adverbial syntagma and subordinate clauses.

#### 1. The verb

Verbs should be introduced before copulas. The unguided learning process shows quite clearly that the copula performs no significative function. (Thus it is lacking in many languages.)

Among the forms of the past, formation of the perfect with have should be taught before the preterit.

The subjunctive, which can be rather easily replaced by the use of adverbs, should be introduced still later.

Considered from the angle of word order, it appears advisable to introduce the modal verbs and the auxiliaries to have and to be as early as possible, for the inability to express satisfactorily tense and mood lead to the anteposition of temporal and modal adverbs and thus to more frequent placing of the non-marked verb in the final position; the ambiguity of such sentences can be partially dispelled by the use of modal verbs and of auxiliaries (cf. 4.4.4), the final position of the verb favoring such a measure.

#### 2. Nominal syntagmas

One must begin with substantives alone and complete them thereafter; that is where articles and quantifiers play an important role. Numerals can be neglected, as most have been learned, even by subjects whose level is low. Pronouns should be introduced after simple nominal syntagmas.

#### 3. Adverbial syntagmas

Adverbial syntagmas of time and place should be dealt with before those performing a different semantic function. By enlarging the prepositional system, one can obtain a more differentiated use of adverbial syntagmas. Finally, enlarging the spectrum of adverbs of place, time and manner should precede the introduction of pronominal adverbs.

#### 4. Subordinate clauses

Adverbial syntagmas should take precedence over nominal syntagmas. Later on, attributive syntagmas must be introduced.

It is clear that the priorities just formulated are closely linked to the series established in chapter 4.3.4. Naturally, the particular priorities to be established in the curricula must be determined much more concretely and in a more balanced relation with the other linguistic levels. In this study, our concern was to bring to light measures of principle permitting of practical realization. The research conducted at Heidelberg aims at using the empirical results obtained to formulate a system of instruction; by the use of concrete material assembled into curricula, it will be possible in the months ahead to report on this.

Moreover, as has doubtless been understood, the measures of elaboration start concretely with what has already been learned, incorporate it productively into the instruction and develop it proportionately to the deviation found from the basic dialectical or standard variety.

#### 6.3.4 Measures of elimination

These are all the measures adopted in the instruction for correcting errors - whether over-generalizations, or semantic blurrings or transfers - due to improperly learned rules and meanings, and for replacing them within the limits of customary utilization norms. The fact must not be overlooked that such errors are in a causal relation with the deficient learning system; that is why elaboration and elimination measures are correlated. In chapter 4.5, we showed in detail that a speaker who knows only one preposition, e.g., bei, will use it for totally different semantic purposes, whereas German uses other prepositions. By using bei not only in its semantic function of place/non-directional but also for personal incidence (e.g., ich spreche bei dir instead of zu dir), the subject neutralizes the existing dilemma between verbal means he does not possess and the exigencies of differentiation required in communication. The result, in the guise of a structural constraint, is semantic blurring stemming from a deficient system of learning. If we consider the cases already discussed of the adverbial syntagma introduced by wann (4.4.4.3), which may express either the time or condition, and of the modal verb missen, which may express aspects of tense and mood of the verb and simultaneously perform the pleasing function of making sentences more acceptable, we observe that what this involves is fundamental verbal strategies on the part of the subjects: for a field of semantically distinct functions, the subject chooses, from a limited repertory of the language, the element which, under the unfavorable conditions of semantic blurring, still offers an optimum of comprehension, acceptability and compatibility with the syntactic and semantic properties of a language.

In language teaching, one must correct this strategy, which is certainly economical, by providing the means for a greater differentiation of the over-generalized element. As these strategies have been absorbed in the course of daily living, they can be effectively corrected only by making the subject conscious of their functioning. For courses given to foreign workers, as opposed to the preparation of German instruction for others, an elimination-measures catalogue is of such importance that it determines success. Such a catalogue can be compiled from the results obtained by analysis of the unguided learning of a second language.

### 6.3.5 Contrastivity

Reference to the subject's mother tongue plays an important role, particularly from the angle of phonetic correction (cf. chap. 4.6.2), but it can also be used for vocabulary and syntax. In teaching, the mother tongue can be used (a) to produce conscious awareness, through contrast, of the priorities of German and (b) to explain points that have not been understood.

We confine ourselves to point (a). When dealing with Spanish workers, it is certainly pertinent to teach the word Kollege before Freund, as the Spanish word colega resembles the German word. On the other hand, the combinations of consonants possible in German as compared to Spanish must be explained circumstantially. Beyond the phonological field, it is certainly difficult to reduce errors of learning to contrastive aspects of the languages involved. One must clearly differentiate between recourse to analogous structures in the mother and target tongues, which fosters progress (this applies to subjects whose level is very low), and the productive elaboration of varieties of learning based on what has already been acquired (in the case of advanced subjects). For the concept of "contrastivity" encompasses not only the mother tongues but also the varieties of learning: this is what we showed clearly in chapter 6.3.4. For example, let us say the problem emerges of how to make the subject understand the working of an over-generalized rule. This could be done in a pertinent manner by recourse to the mother tongue, to the extent that the mechanism of the over-generalized rule in German is illustrated by use of a rule in the mother tongue.

As "conditions for an appropriate conception of the teaching of German to foreign workers", we have dealt in this chapter especially with linguistic aspects related to our research concerning unguided second language learning. We are of the opinion that grammatical rules must occupy a central position in the teaching of German. Determining how that is to be done is more a matter of didactics. For foreign workers, the instruction will be dispensed in quasi-game form and using visual extra-linguistic material (cf. Barkowski/Harnisch/Kumm 1976b). But this in no wise alters the fact that the curricula should be based on a linguistic progression whose background consists of an analysis of the varieties of learning.

In conclusion, the linguist's progression should be integrated with a pertinent framework from the angle of content for the instruction of German. At the core of this concept should be found: 1) the "presentation and elimination of the cultural and identity conflict" of the foreign workers, which results from the tension between initial socialization in agrarian society and subsequent socialization in industrial society, 2) the teaching of German as an obligation toward the "goals and methods of worker training", in other words: "it should instill awareness of the interests of workers and of the necessity for solidarity; it should work from experiences in concrete living, should not communicate abstract knowledge, but emphasize learning linked to real people and things" (Barkowski/Harnisch/Kumm 1977: 2 ff.).

BIBLIOGRAPHY

- Albrecht, G. (ed.). 1976, Das Düsseldorf Reformprogramm zum Ausländerrecht. Vorgelegt vom Initiativkreis für die Reform des Ausländerrechts beim Diakonischen Werk der Evangelischen Kirche im Rheinland, Bonn.
- Augustin, V. und Liebe-Harkort, K. 1977, Peridun. Ein Lesebuch und Sprachprogramm nicht nur für Türken. München.
- Barkowski, H., Harnisch, U. und S. Kumm. 1976a, "Sprachhandlungstheorie und Deutsch für ausländische Arbeiter", in: Linguistische Berichte 45, 42-54.
- Barkowski, H., Harnisch, U. und S. Kumm. 1976b, Theorie und Praxis des Fremdspracherwerbs. Jahresbericht des DFG-Projektes zum Sprachunterricht für ausländische Arbeiter. Jeveröffentl. Manuskript, Fachbereich 16, Freie Universität Berlin.
- Barkowski, H., Harnisch, U. und S. Kumm. 1977, "'Peridun' - Neue Wege zum Deutschunterricht mit türkischen Arbeitern". Rezension zu Augustin, V. und K. Liebe-Harkort. (1977), Ms., Freie Universität Berlin (publication pending)
- Benninghaus, H. 1974, Deskriptive Statistik. Stuttgart.
- Bickerton, D. 1975, Dynamics of a Creole System, London-New York
- Bundesanstalt für Arbeit. 1977, Presseinformationen Nr. 51/77 (4 August 1977 (4 August 1977)). Nürnberg.
- Bundesanstalt für Arbeit. 1974, Ausländischer Arbeitnehmer. Beschäftigung, Anwerbung, Vermittlung. Erfahrungsbericht 1972/73. Nürnberg.
- Borris, M. 1973, Ausländische Arbeiter in einer Grosstadt. Eine empirische Untersuchung am Beispiel Frankfurt. Frankfurt am Main.
- Bundesanstalt für Arbeit. 1973, Repräsentativuntersuchung 1972 über die Beschäftigung ausländischer Arbeitnehmer im Bundesgebiet und ihre Familien - und Wohnverhältnisse. Nürnberg.
- Bundesminister für Arbeit und Sozialordnung. 1977, "Vorschläge der Bundesländer-Kommission zur Fortentwicklung einer umfassenden Konzeption der Ausländerbeschäftigungspolitik" (IIa, 5-24, 200/22 Bonn). In: Journal G, 23-40.
- Chomsky, N. 1965, Aspects of the Theory of Syntax. Cambridge.
- Corder, S.P. 1973, Introducing Applied Linguistics. Harmondsworth.
- Demetz, und Puente. 1973, Deutsch - Ihre neue Sprache. Wiesbaden.
- Dittmar, N. 1976, Sociolinguistics. A Critical Survey of Theory and Application. London.



- Dittmar, N. 1977, "Argumente für den Deutschunterricht ausländischer Arbeiter als notwendige Voraussetzung zur Veränderung ihrer sozialen Situation. Mit einer explorativen empirischen Studie zu linguistischen Grundlagen des Sprachunterrichts". In: Kühlwein, W. und G. Radden (eds.), Diglossie, Multilingualismus und Probleme der kulturellen Integration, Hamburg (= Stiftung Europa Kolleg, Schriftenreihe zur Europäischen Integration Bd. 18).
- Dittmar, N. und B.O. Rieck. 1977, "Datenerhebung und Datenauswertung im Heidelberger Forschungsprojekt 'Pidgin-Deutsch ausländischer Arbeiter'". In Bielefeld, U. Ernest W.B. Hess-Lüttich und A. Lundt (eds.), Soziolinguistik und Empirie. Beiträge zum Berliner Symposium "Corpusgewinnung und Corpusauswertung", 15.-18. Januar 1976. Frankfurt, 59-96.
- Dumas, G., L. Selinker und M. Swain. 1973, "L'apprentissage du français langue seconde en classe d'immersion dans un milieu torontois". In: Travaux de Recherches sur le Bilinguisme, No. 1, Toronto.
- Geiselberger, S. (ed), 1972, Schwarzbuch: Ausländische Arbeiter. Frankfurt am Main.
- Heidelberger Forschungsprojekt "Pidgin-Deutsch". 1975a, Sprache und Kommunikation ausländischer Arbeiter. Analysen, Berichte, Materialien. Kronberg/Ts.
- Heidelberger Forschungsprojekt "Pidgin-Deutsch". 1975b, "Zur Sprache ausländischer Arbeiter: Syntaktische Analysen und Aspekte des kommunikativen Verhaltens". In: Zeitschrift für Literaturwissenschaft und Linguistik 5, H. 18, 78-121.
- Heidelberger Forschungsprojekt "Pidgin-Deutsch". 1976, Untersuchungen zur Erlernung des Deutschen durch ausländische Arbeiter. Arbeitsbericht III des Heidelberger DFG-Projekts. (unpublished)
- Heidelberger Forschungsprojekt "Pidgin-Deutsch". 1977, "The Acquisition of German Syntax by Foreign Migrant Workers". In: Sankoff, D. (ed.), Proceedings of the Montreal Conference on Linguistic Variation, March 26-28, 1977. (publication pending)
- Helbig, G. und J. Buscha. 1972, Deutsche Grammatik. Ein Handbuch für den Ausländerunterricht. Leipzig.
- Huber, H. 1977, Morphologische und semantische Beschreibung des Verbsystems im Deutsch ausländischer Arbeitnehmer. Exemplarische Untersuchungen anhand einiger ausgewählter Sprecher. Zulassungsarbeit zur wissenschaftlichen Prüfung für das Lehramt an Gymnasien. Universität des Saarlandes.
- Klein, W. 1974, Variation in der Sprache. Ein Verfahren zu ihrer Beschreibung. Kronberg/Ts.
- Klein, W. 1976, "Maschinelle Analyse des Sprachwandels". In: P. Eisenberg, Computerlinguistik, Berlin.
- Mehrländer, U. 1974, Soziale Aspekte der Ausländerbeschäftigung. Bonn - Bad Godesberg.
- Swedish Ministry of Education. 1977, "Swedish Policy in respect of Immigration and the Training of Immigrants in Sweden". In: Swedish National Committee to Unesco, (ed.) The Literacy Requirements of Migrants. Final Report and Recommendations, Stockholm, 30-48.

- Nikolinakos, M. 1973, Politische Ökonomie der Gastarbeiterfrage. Migration und Kapitalismus. Reinbeck bei Hamburg.
- Richards, J.C. 1972, "Social Factors, Interlanguage, and Language Learning". In: Language Learning 22 (2).
- Richards, J.C. "Error Analysis and Second Language Strategies". In: In: J.W. Oller and J.C. Richards, Focus on the Learner. Pragmatic Perspectives for the Language Teacher. Rowley, Mass., 114-135.
- Rieck, B.-O. 1974, Die Interlingua spanischer Arbeitsimmigranten Magisterarbeit. Germanistisches Seminar der Universität Heidelberg.
- Schumann, J.H. 1975, Second Language Acquisition: The Pidginization Hypothesis. Phil. Diss., Harvard University.
- UNESCO, 1977, The Literacy Requirements of Migrants. Swedish National Committee to UNESCO, (ed.) Final Report and Recommendations, Hasseludden, Stockholm.