

# ECOLOGY OF ADULT LANGUAGE ACQUISITION A PSYCHOLINGUISTIC RESEARCH PROJECT.

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## 0. Introduction

This project deals with the spontaneous second language acquisition (henceforth SSLA)<sup>1</sup> of adult, foreign immigrants, and their communication with speakers of the language of the country where they live and work. "Foreign" refers here to language rather than citizenship. There are at present about 11 million adult immigrants living in the industrialized western European countries, and their number is increasing.

The foreign language acquisition of these adults, and their use of this language, is the topic of the project. More specifically, it aims to provide at least partial answers to questions of the following type: what are the basic principles according to which adult immigrants acquire the language of their social environment? Why is it that at some stages acquisition proceeds rapidly, whilst at others it slows down? what causes acquisition to halt? How do adult immigrants use the specific language forms they have acquired at a certain time in their daily interaction? Answering these questions requires a detailed analysis of the acquisition process, an investigation of the various factors that determine this process, and a consideration of the communicative problems, specific to adult immigrants. These considerations are discussed in 1.

The basic orientation of the project is linguistic and psychological, but it will necessarily include sociological research as well (cf. especially 3.1, and 4). Thus, it may be regarded as a language-focussed counterpart to the ESF Additional Activity on human cultural-aspects of migration in Western Europe.

The project is planned as a comparative study in five European countries: France, Federal Republic of Germany, Great Britain, the Netherlands and Sweden, with the corresponding target languages (TLs) French, German, English, Dutch and Swedish. Six source languages (SLs) are taken into account: Arabic, Finnish, Italian,

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<sup>1</sup> Or untutored acquisition, as opposed to language learning in a classroom.

Punjabi, Spanish and Turkish. The organization of SLs and TLs is discussed in 2 below.

The project should run over five years with a staff of about twenty researchers. A pilot year has been completed (cf. Appendix). The practical organization of the project and its time schedule is discussed in the Appendix. It will restrict itself to adult immigrants, both because it would not be feasible to extend such a cross-linguistic study to include child language acquisition, and because comparable cross-linguistic studies on child language acquisition have been, or are being, carried out. A possible extension of the project is of course to compare

its findings with the findings of those projects. The project is primarily aimed at investigating "natural language acquisition", but its findings are expected to contribute to the scientific basis of language teaching and thus also indirectly to increased efficiency in language teaching.

## 1. General objectives of the project

1.1 Most adult immigrants spontaneously acquire some knowledge of the language of their social environment, the TL. A careful and systematic analysis of this process is the aim of this project. Specifically, it has three objectives:

1. An investigation of the social and psychological factors that can be shown to determine the process and tempo of language acquisition in adult learners, and their interaction.
2. A description of the structural and temporal properties of the language acquisition process. That is, establishing what communicative devices are available to adults at the *onset* of acquisition, what devices specific to the TL are acquired, in what order, and at what rate relative to each other.
3. An investigation of adult immigrants' use of the TL, which involves a description both of an informant's language system at a given time and of how this system is put to use in everyday interaction.

These objectives, are closely related--- indeed interdependent and will be approached by a cross-linguistic, longitudinal study:

- For the project's findings to have any general significance as a contribution towards a theory of (second) language acquisition, it will be necessary to identify those phenomena in the acquisition process which are language- or culture specific, and those which are recurrent. A cross-linguistic comparison of many TLs by speakers of different SLs seems the best way of approaching this problem;
- A longitudinal study is necessary to investigate the *process* of adult language acquisition. That is, it is not sufficient to infer what the process or processes may be from a cross-sectional study of adults at different levels of proficiency. The

longitudinal study does however need to be controlled by cross-sectional data, for reasons given in 4 below. Our informants will therefore be of two types: the main "longitudinal group" and different "control groups". One control group - the long resident control group, cf. 4 is of special importance for the project's third objective. The informants in this group are adult immigrants who have lived at least three years in the target country. Data obtained from these informants is designed to place the question of linguistic communication between immigrants and native speakers of the TL in a wider perspective.

1.2 The choice of objectives 1-3 is motivated by the following considerations:

- adult immigrants typically acquire the TL in everyday communication with its native speakers. They already possess, of course, a rich repertoire of communicative skills, many of which - for example non-verbal devices and certain discourse strategies - may not be particular to the SL, and can be used from the onset while they progressively acquire TL lexical items and rules. Thus a description of *how* they acquire the TL necessitates looking at how they put the overall repertoire they have at a given time to use, in order to communicate, and at what is successful or unsuccessful in this communication (cf. for example, 3.4). In this sense, objectives 2 and 3 of the project are interdependent.
- previous work, and indeed everyday observation, shows that in contradistinction to first language acquisition, SSLA results in very different degrees of language mastery: Some adults reach near native proficiency, some never go beyond a vocabulary of 50 words, a few elementary syntactic structures and one or two idiomatic expressions. Why should this be? In particular, how do the relevant psychological and social factors determine the temporal characteristics -acceleration, slowing down, halt - of the acquisition process? Is it legitimate to talk of one process? That is, are the resultant stable (or "fossilized") varieties the outcome of different acquisition processes where real structural differences can be observed, or do they represent different stages in one acquisition process? Thus, objectives 1 and 2 of the project are interdependent.

1.3 The many factors that may influence the acquisition process can be divided for heuristic purposes into three major groups:

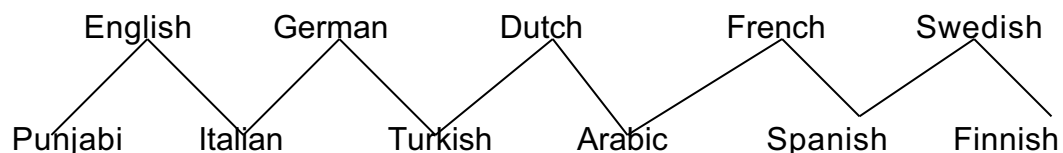
- The cognitive, perceptual and motor abilities that adults bring to the acquisition task: for example, their ability to segment the speech stream, to identify recurring units and to associate them with particular functions or meanings, their ability to produce combinations of segmental and suprasegmental features. Although these abilities are in part biologically given, they will have been influenced by previous learning experience and in particular by first language acquisition. As we are dealing with adults of many SL's, these factors must be taken into account.
- The adults' propensity to acquire the TL, that is, their communicative needs, their attitudes to the TL and the society which uses the TL, and their resultant motivation to acquire. Learning a second language requires considerable cognitive effort, and it can be assumed that learners make this effort to the extent

that, and for the time that, they are- motivated to do so. Thus these motivational. and attitudinal factors presumably play an important role in the temporal characteristics of the acquisition process (and in its possible halt) and will have to be taken into account.

- The type and quantity of the TL that learners are exposed to, and their experiences in communicating in the TL. It is necessary to establish firstly what variety of the TL is spoken in a learner's environment, what communicative situations are recurrent, and whether TL native speakers address the learner in the same way as they address other native speakers (the clearest example of this not being the case is the well-documented phenomenon of "foreigner talk".) Secondly, "foreigner talk" is a clear symptom of the linguistic disadvantage that most adult immigrants suffer from. The potential for misunderstanding, and for verbal aggression, which exists between native speakers of different varieties of a language foreign adults, whose speech is heightened in the case of a is generally judged negatively by members of the majority community. They consequently undergo forms of linguistic aggression such as being addressed in "foreigner talk", with the possible result that they have little confidence in their use of the TL, and therefore low expectations of any linguistic interaction involving native speakers. This may then have an effect on their motivation to continue acquiring. These two aspects of their exposure to the TL are factors which bear directly on objectives 2 and 3, and therefore must be taken into account.

## 2. Organization of source and target language

The Ms are French, German, English, Dutch and Swedish. They were chosen because they are the most important languages for foreign workers (ranging from German with about 5.5 million potential learners to Dutch with about half a million). For each target language, two source languages were selected. The selection was essentially based on two criteria. First, those languages with the largest number of native speakers (in a given host country) should be given priority. Second, it should be possible to make linguistically interesting comparisons; this means that paired.. comparisons should-be made of the acquisition of one target language (TL) by speakers of source languages (SL) with very different structures, and of the acquisition of two TLs by speakers of the same SL. Only such an arrangement would allow a systematic analysis of the impact which a particular mother language has on the language acquisition of a learner and allow us therefore to identify generalizable phenomena in the acquisition process (cf. 1.1.).The two criteria lead to the following combination of target and source languages:



Hence, Arabic, Spanish, Turkish and Italian are represented in two host countries each. Punjabi and Finnish remain singles; they are the most important source

languages in Great Britain and Sweden, respectively, but they play no role elsewhere. Three out of the six source languages are non-Indoeuropean.

This combination is straightforward and, under the given circumstances, an optimal solution. But there are still numerous problems both with respect to target and source languages, the most important of which is the more or less strong internal variation in these languages. This is most apparent in the case of Arabic, but it also holds, though to a lesser extent, for the other source languages, and it also plays a role for the TLs.

Thus, firstly, it will be necessary to control and match informants for their actual native language variety, and secondly, as was stated in 1.3., it will be necessary to control the TL variety (and possibly variety switches) used in the social environment of the informants. This motivates the inclusion of a further "control group" in the project: data will be collected twice during the longitudinal study from TL native speakers who are in contact with the longitudinal group (cf. 4.2.).

3.0 Existing theories and research projects on SSLA focus on specific domains. Whilst it is true that language acquisition proceeds on many different levels, it is obviously beyond the scope of this project - or any project - to study all linguistic aspects of a learner's acquisition and relate them to the explanatory factors discussed in 1..3. Four broad topics of investigation have therefore been chosen, encompassing many specific questions: they will be discussed in turn.

### **3 Topics of Research**

#### **3.1 Understanding, misunderstanding, breakdown.**

It was suggested in 1.3 that adult immigrants' TL acquisition is partly determined by the exposure to, and opportunities to use the TL provided by their social environment, and that they bring to the learning task both a set of cognitive, perceptual and motor abilities and a set of attitudinal and motivational expectations, which are in part determined by their background culture and source language. An encounter between an adult immigrant and representatives of the majority community will therefore initially actualize and bring into contact - possibly conflict - the cultural background assumptions acquired by both parties in primary socialization, as reflected in their way of speaking.

This topic of research sets out to examine the effects of those social and cultural factors on TL acquisition, from the point of view of the individual learner, and of the potential for misunderstanding inherent in such encounters. Important is here to study the different strategies that learners use to resolve problems arising from misunderstandings and breakdowns in communication

Negative judgement of the speech of an adult immigrant (cf 1.3) is one factor contributing to the general image of immigrants as persons of low social class, social inadequacy and, of course, poor communicative ability. The cumulative effect of continued misunderstanding in encounters between adult immigrants and TL native speakers leads to the reinforcement of such stereotypes. In this respect, social

disadvantage can be linked to language, and immigrants' experience of this can affect their own motivation to acquire.

This topic of research is therefore relevant for all three objectives of the project.

To communicate at all, immigrants are faced at the outset with accomplishing, under conditions that can be difficult, the task of changing their perception of the speech stream from a meaningless babble to meaningful utterances uttered by persons trying to accomplish various communicative goals in particular social situations. An attempt will be made to investigate: - in what way their own cultural background influences this change; -the relative help or difficulty of different types of interaction. A special study will have to be made of how the informants learn to give and interpret feedback signals both of a verbal and a nonverbal kind. Another study will be made of the way in which linguistic and contextual clues are used by informants in their search for important words in an utterance. The understanding and taking in of important words will govern certain aspects of their production which are discussed in 3.2 and 3.3. Furthermore we will study how immigrants repair and correct their own speech as this gives important information on their linguistic awareness at different stages. Since attitudinal and motivational factors can be expected to be important a study will be made of how immigrants understand and misunderstand emotion and attitude in the target language. We will also attempt through role play to elicit situations which immigrants report have influenced their attitudes to the TL.

### 3.2 Thematic structure of utterances

In striving to understand TL utterances (cf. 3.1) adults will identify words and expressions which are important for them. In order to produce meaningful utterances of their own, they will attempt to combine those elements. This topic of research is concerned with discovering the principles according to which adults structure information in utterances they produce, and how this structuration develops. As development will presumably depend to a large extent on the relative communicative success achieved in *using* the principles they have at a given time, this topic bears directly on the second and third objectives of the project.

The principles used to structure information in utterances may be classified for heuristic purposes into three types:

- (a) language-specific syntactic principles, for example: "verb is in initial position", "quantifier follows noun";

Possibly universal pragmatic principles, or principles independent of a language, e.g: "old information occurs in initial position, new information follows", "state what an utterance is about, then comment on it", "group semantically related items together";

- (c) (possibly) universal syntactic-structural principles, generalizable for all natural languages, e.g: "One constituent may be moved outside a complex noun phrase". Since if this type of principles are universal they are probably innate, it... Is assumed here that they will remain constant during the acquisition process, and will not be discussed.

These principles may be used to determine the form, in particular the word order and intonation, of learners' utterances. The semantic or functional relations these utterances are used to express (such relations as attribution, identification, possession, quantification, etc) and the development of the means for expressing them will presumably depend on the need the learner has to express them. This topic will therefore depend directly on the learner's psychological needs and thus be relevant for the first objective of the project.

The working hypothesis adopted here is that learners' utterances will initially be structured along *pragmatic* principles, as this seems to be the case at the outset of other types of language development, and that the developmental process will be, in very general terms, from simple, analytical and semantically transparent language to complex, syntactic and semantically opaque language.

This hypothesis is SL- and TL-independent, and is likely not to correspond completely to the facts in the case of typologically related SLs and TLs, e.g. Spanish and French, where learners can draw more fully and successfully on previous, language-specific syntactic knowledge. What is interesting is however to see *how closely* the hypothesis corresponds to *all* cases of acquisition in the project. Stated in this fashion, the hypothesis allows a direct investigation of the problem of language-specific vs generalizable phenomena in the acquisition process (cf. 1.1), and will further allow comparisons between the overall structure of language development in the *type* of learner studied in the project with the structure postulated for other types of learners.

### 3.3 Processes in the developing vocabulary

The main preoccupation of this topic is to identify and study in selected lexical fields, the semantic processes at work as the adult learner builds up his vocabulary. An attempt will be made to relate them to some of the explanatory factors mentioned in 1.3: for example, if successful communication with native speakers of the TL involves recurrent use of specific items in some environment, then it can be hypothesized that the corresponding lexical field will exhibit a high degree of precise differentiation.. Alternatively, if some environment is perceived to correspond closely to some environment of the SL culture, the corresponding lexical field may be structured according to SL principles: this topic may therefore prove fruitful in a cross-linguistic study such as this.

An attempt will also be made to identify what have come to be known as lexical gap fillers: strategies used to compensate for the specific\_word, such as gestures, paraphrasing and codeswitching. As the relative communicative success of the use of such strategies presumably influences further acquisition on, this topic is directly relevant for objectives 2 and 3 of the project.

Finally, this topic will serve as a check on the perceptual strategies mentioned in 3.1. The strategies used for identifying important words will presumably result in their acquisition and subsequent production: the exhaustive lexicon for each SL- TL-pair which the project is in a position to establish (at least for the early stages of

acquisition) will allow researchers to determine, for each informant, the order of appearance and frequency of use of lexical items.

### **3.4 Reference to persons space and time**

Reference to persons, space and time is one of the most important components of any successful communication. The devices used to express this reference share some properties across languages, while in other respects they differ. This topic therefore allows - as in 3.2 - an investigation of what is specific to the acquisition of one language, and what is generalizable. All languages offer a rich variety of means to express this reference, not all of which are equally important for daily interaction. An appropriate analysis of the acquisition process in this domain must therefore go beyond an investigation of how differing expressions for referring are learned, to how, at a given time, the adult tries to make optimal use of the devices at his/her disposal. Thus this topic is directly relevant to the second and third objectives of the project. Furthermore, as, for immediate communicative needs, the learner has to acquire *some* means to refer to people, space and time, it can be assumed that the needs to achieve such reference is great and acquisition is rapid until these needs are satisfied, whereupon acquisition speed will probably decline. Thus the topic is relevant to the first and second objectives of the project, and demonstrates the interdependence of all three objectives.

Given these considerations, analysis will bear on the internal communicative functioning of each learner variety, since an appropriate understanding of the acquisition process, its internal systematicity and the forces which drive it seems hardly possible without an understanding of how the learner variety satisfies, or does not satisfy, the communicative needs of its user at a given time.

## **4. Informants**

4.0 The main concern of the project is a longitudinal study on small numbers of adult immigrants (cf. 4.1). This study will be controlled from different points of view by smaller cross-sectional studies (4-2).

### **4.1 The longitudinal group**

Informants in this group will be adults between 18 and 40 years at the time of immigration. Given the project's second objective (cf. 1-1), those informants should have extremely limited knowledge of the TL at the beginning of the study. They should have received little formal schooling in their SL, and this SL should be the only language they speak. They should be matched - especially in the case of Arab learners - for the variety of the SL that they speak. Both men and women should be represented in the longitudinal group. If they are married, they should not have children being schooled in the target language. Ideally, they themselves should not be receiving TL classes.

In each of the five countries, these adults' language acquisition will be observed over 30 months. In each of the five target countries, it is planned to finish the



longitudinal study with data on two groups of four informants (one group per SL). This obviously entails starting the study with more than four informants, as it cannot be guaranteed that all informants will remain available and-motivated over a period of 30 months.

The practical considerations of finding and motivating informants hold for all types of informant within the project. Much work has been devoted to this problem in the Pilot year, but for reasons of space it will not be discussed here. For details, see Chapter 7 of the Project's field manual.

## **4.2 The control groups**

### ***The Initial Learner Control***

These forty learners will be under regular observation over two and a half years. That means that a great deal of their social contacts with the host population will consist in regular contacts with the researchers. Moreover, it is most likely that their language learning propensity will be influenced by their Participation in the project. Thus, we will have considerable control effects. We see no way to avoid them, but we should have some information about their extent and about the direction in which they lead. To this end, six of the ten longitudinal groups (in France, Holland and Sweden) will be compared to a group of four informants whose language acquisition is not observed but who belong to the same type of learner population. On three occasions, data about these control groups will be collected: At the outset, after about one year and a half, and at the end of the 30 months (these time spans are approximate).

### ***The Long Resident Control Group***

The majority of adult immigrants at present active in the target countries are those who have been established for some years, and whose socio-linguistic problems have not necessarily been overcome. Six of the longitudinal groups will be compared with informants of this type, from whom data will be collected six times during the period of the longitudinal study. The "long residence group" will comprise 36 adult foreign workers with at least five years' residence in the target community. 12 per TL (English, German, Swedish), 6 per SL- TL-pair. Data will be collected from them six times during the longitudinal study.

In studying such informants, it is hoped to obtain a fuller picture of the use of non-native varieties of the TL in everyday interaction (the third objective of the project) and thus to obtain more insights into what the communicative needs and motivations for language acquisition of adult immigrants are the first objective of the project).

### ***The Native Speaker Control Group***

The necessity of controlling the actual variety of the TL that the longitudinal group is exposed to was mentioned in 2. To this end, four native speakers of each TL, who are in regular contact with informants, will be interviewed twice during the period of the longitudinal study. As it cannot be guaranteed that these informants' linguistic

performance in an interview with researchers directly reflects their way of speaking with informants, they will also be observed in everyday interaction with informants.

### ***Limitations in informant selection***

Practical considerations make it impossible to study the language acquisition of more than a total of 40 adult immigrants in the longitudinal group (8 per TL, 4 per SL-TL-pair). The sample is not therefore representative in any statistical sense. However, as little is known about the relevant psychological or social factors determining SSLA (cf. 1.1), the hypotheses which should emerge from this study can be seen as a prerequisite for any future co-variational study requiring representative samples of non-native TL speakers.

Similarly, it is not feasible, given the time and personnel available, to study both an initial learner control group and a long residence control group in all five countries. It is however expected that the insights into the "control effect" obtained from a comparison of the longitudinal group and the initial learner control group in three countries, and the broader study of language use and fossilization in three countries, will give results that can be generalized.

Broadly speaking, the same methods of data collection will be used with all the informants in the project (see Appendix C).

## **5. Summary**

As far as second language studies are concerned, there are at least four aspects of this project which, to our knowledge, go beyond previous related research. Firstly, the number of languages both source and target - which are simultaneously studied (cf. 2); secondly, the attempt to carry out a coordinated longitudinal study in these different linguistic environments (cf. 1 and 4); thirdly, the range and type of linguistic phenomena (from prosody to discourse skills) whose acquisition is investigated (cf. 3); and finally, the attempts to relate these multiple skills to each other and to various non-linguistic factors which may determine their acquisition (cf. *passim*).

## **Appendix: Practical lay-out of the project**

### **A. Personnel Participating organizations**

Five research teams are cooperating in the project, one in each TL country. They are: France: Groupe de Recherche Sur l'Acquisition des Langues, Université de Paris VIII, coordinator Colette Noyau; Federal Republic of Germany: Universitat Heidelberg, coordinator Rainer Dietrich; Great Britain: National Centre for Industrial Language Training coordinator Tom Jupp; Holland: Katholieke Hogeschool Tilburg, coordinator Guus Extra; Sweden: University of Göteborg, coordinator Jens Allwood.

The project is an "Additional Activity" of the European Science Foundation in Strasbourg. It has been approved by the ESP's Social Sciences and Humanities committees, and by its General Assembly. It is supported by the following ESF member organisations: Max-Planck-Gesellschaft (FRG), the Social Sciences Research Council (Britain), the Nederlandse Organisatie voor Zuiverwetenschappelijk onderzoek, the Humanistiskt-Samhällsvetenskapliga Forskningsrådet (Sweden) and the Academy of Finland.

The project's central coordination is at the Max-Planck-Institut für Psycholinguistik, Berg en Dalseweg 79, NL-6522 BC Nijmegen. The project coordinators are Wolfgang Klein (MPI) and Jens Allwood; Clive Perdue (MPI) is officer for interproject information. On the side of the European Science Foundation, the project is organized by Monique Flasaquier, ESP, 1, Quai Lezay Marnesia, P-6700 Strasbourg. Science Foundation, the project is organized by Monique Flasaquier, ESP, 1, Quai Lezay Marnesia, F-6700 Strasbourg.

In addition, a "Steering Committee" has been set up which meets regularly, advises the project members in their work and reports to the ESP about the on-going research. It is composed as follows:

John Lyons, University of Sussex (Chairman)  
Ayhan Aksu, Bogazici University, Istanbul  
Norbert Dittmar, Freie Universität, Berlin  
Willem Levelt, Max-Planck-Institut, Nijmegen  
Bengt Nordberg, University of Uppsala  
Dan Slobin, University of California, Berkeley.

## **B. Time schedule**

### ***The Pilot year***

The project has been preceded by a pilot year carried out in Heidelberg, Germany by Rainer Dietrich, Angela Becker and Ani Garmirian and in Göteborg, Sweden, by Jens Allwood, Sven Strömqvist and Kaarlo Voionmaa. During the pilot year the data Collection methods described in C. Of this Appendix were tested and work was carried out to find informants for the project itself. This work also contributed to the writing of a Field Manual whose primary purpose is to provide a theoretical and practical framework for the whole project, but which will also serve as a detailed source of information for interested researchers and organizations. Copies of this Field Manual may be obtained from Wolfgang Klein and Clive Perdue at the Max-PlanckInstitut.

### ***The Project***

The whole project will run over five years. It has two phases: Phase A (3 years): This phase is planned for field work, preparation of data (selection for analysis and transcription) and first analysis. Phase B (2 years): This phase will involve the detailed analysis and the completion of the project report. "Field work" and "analysis" are not completely separated. It seems sensible to start with some exemplary analysis in Phase A, and it may be necessary to collect some additional data in Phase B.

## **C. Data collection**

The project is conceived as an empirical study, and its success will largely depend on whether the five teams involved will be able to collect the appropriate amount of good, reliable and comparable data. It was emphasized in 1. 2. that SSLA is language acquisition in communication. Collecting and analyzing data from everyday interactions must therefore constitute an important part of the project's work: this is essential, for example, in order to obtain as clear an idea as possible of the informants' exposure to the TL (cf. 1.3.). With this in mind variations of a technique which may be termed observation will be used. Attempts will also be made to persuade informants to record themselves in interaction with TL speakers, if these latter agree.

*Observation* has three major functions:

- i) it should give the researcher an impression of informants' real way of living - the scope of their possible activities, experiences and social contacts;
- ii) it should give the researcher a better understanding of informants' communicative behaviour and the reasons for communicative failure and success;

- iii) it should therefore provide information about informants' communicative needs and abilities, and their actual contacts in daily interaction, including the attitudes and speech of TL native speakers. This latter point serves as a check on the data obtained from interviewing TL informants (cf. 4.).

One variant - *participant observation* involves the researcher becoming, for a period, a member of the type of environment the informants experience (for example, by going to work in a factory which employs immigrant workers) and recording, usually in the form of field notes, relevant parameters of the linguistic interaction between immigrants (and not necessarily the specific informants) and TL native speakers. It is expected that all researchers on the project will accomplish one week's participant observation during the data-collection period. To expect more seems difficult, given the economic situation in some countries, and work regulations in others.

*Accompanying observation*, as its name suggests, involves the researcher accompanying an informant to the post office, to the police station, etc and observing and video or audio- recording the interaction (subject to the agreement of all parties involved). She/he will thus obtain a more precise idea of how an individual informant deals with interactions with native speakers of the TL. The data obtained from this technique will be completed, if possible, by the informants' recording their own interactions when the researcher is not present (*self-recording*) The data obtained by these techniques are however not sufficient. They usually give no immediate evidence about what the informant felt, his attitude and the attitude of the interlocutor, what he as speaker *intended* to say with a particular word or construction, what he as listener understood in the interaction, what role different background assumptions played in the interaction, etc. It is also necessary to ensure that for each informant, there are good-quality recorded data on a regular basis throughout the longitudinal study. It is therefore planned, in addition, to hold *conversations* with informants, and to incorporate what may loosely be termed "experiments" and role plays into these conversations.

For the *longitudinal study*, it is planned to interview informants once per month over a period of thirty months. For two months out of three, this conversation will be audio-recorded and last approximately one hour; in the other month, it will be video-recorded and last approximately two hours (thus for each informant in the longitudinal study, there will be approximately forty hours of good quality recorded data.) The interval of one month was chosen because in practical terms it appears difficult for both researchers and informants to meet for a fixed period more than once a month; furthermore, this period is short enough to give (in conjunction with accompanying observation) continuous data, while being long enough to keep the control effect L mentioned in 4 within reasonable proportions These encounters will serve to elicit different types of verbal interaction, and to obtain biographical information about the informants (age, social background, precise linguistic origin, job, etc).

The "experiments" incorporated into them range from *action interviews* where the informant during interview by action illustrates an experience he has undergone - preferably replicating an interaction the researcher has observed - to *self-confrontation*, in which the informant watches or listens to a previously recorded

event in which he himself took part, in order to give more fully his own interpretation of the event in question. Further small experiments are planned to elicit specific aspects of informants' TL knowledge, such as the means they have for expressing spatial relationships (cf. 3.4.), or their command of a particular lexical field (cf. 3.2.), etc.

To summarize, *participant observation* will give researchers a clear idea, not of the language an individual informant is exposed to, but the type of target linguistic environment in which informants live. *Accompanying observation* will give researchers a clear idea of the of interaction an individual informant is involved in, although the internal structure of the interaction will be changed by their presence. More details on the 'authentic' internal structure of these interactions may be obtained from self-recordings and discussion and comments about the interaction through *action interview* and *self-confrontation*.

The recorded conversation will provide the main body of data, and will be prepared in such a way that it naturally elicits different types of speech - dialogues, question-answer sequences, narratives, argumentation, phatics, etc., as well as essential biographical information, including informants' accounts of their communicative needs and wishes, and attitudes towards the society they live in. This combination will provide data giving some understanding of role of two of the three determining factors in each informant's acquisition (cf. 1.3.), namely propensity factors and exposure to language.

The set of elicitation techniques is completed by tasks of a more experimental nature whose purpose is to elicit specific aspects of informants' communicative competence - the expression of spatial relationships, for example - and to allow a deeper insight into the third set of determining factors in acquisition mentioned in-1- 3 ;, namely cognitive/perceptual factors: self-confrontation is the privileged technique from this latter point of view.

## D. Summary

The following table summarizes the practical organization of the project by country, language, and type of informant:

European Science Foundation Project. Ecology of Adult Language Acquisition 1982-1986.

Project coordinators: Wolfgang Klein & Jens Allwood; inter-project information officer. Clive Perdue; ESF coordination: Monique Flasaquier.

ORGANIZATION	Part. Countries	Great Britain	Germany	Netherlands	France	Sweden	
	Affiliations	NCILT Southall	Heidelberg University	Tilburg Kath. Hogeschool	Université de Paris-Vincennes	University of Göteborg	
	Local Coordinators	Tom Jupp	Rainer Dietrich	Gus Extra	Colette Noyau	Jens Allwood	
LANGUAGE	Target Languages	English	German	Dutch	French	Swedish	
	Source Languages	Punjabi	Italian	Turkish	Arabic	Spanish	Finnish
INFORMANTS	(1) Longitudinal Group (initial learners) 4 per SL	X	X	X	X	X	X
	(2) Control Group (initial learners) 4 per SL			X	X	X	X
	(3) Long Residence Group (Advanced learners) 6 per SL	X	X	X		X	X
	(4) Native Group 4 per TL	X	X	X	X	X	