

Bureau for International  
Language Co-ordination

CONFERENCE  
REPORT  
1984

BRUSSELS, BELGIUM

BILC SECRETARIAT

Bundessprachenamt  
D 5030 HÜRTH  
Federal Republic of Germany

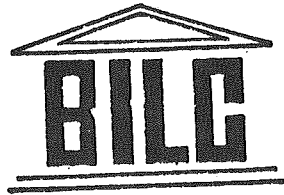
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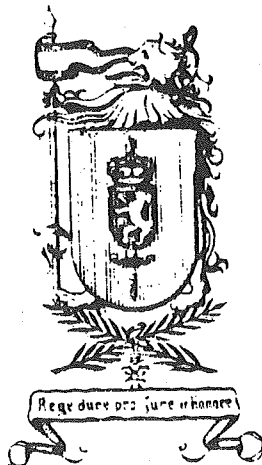
ECOLE ROYALE MILITAIRE  
KONINKLIJKE MILITAIRE SCHOOL

150 JAAR  
150<sup>ème</sup> ANNIVERSAIRE

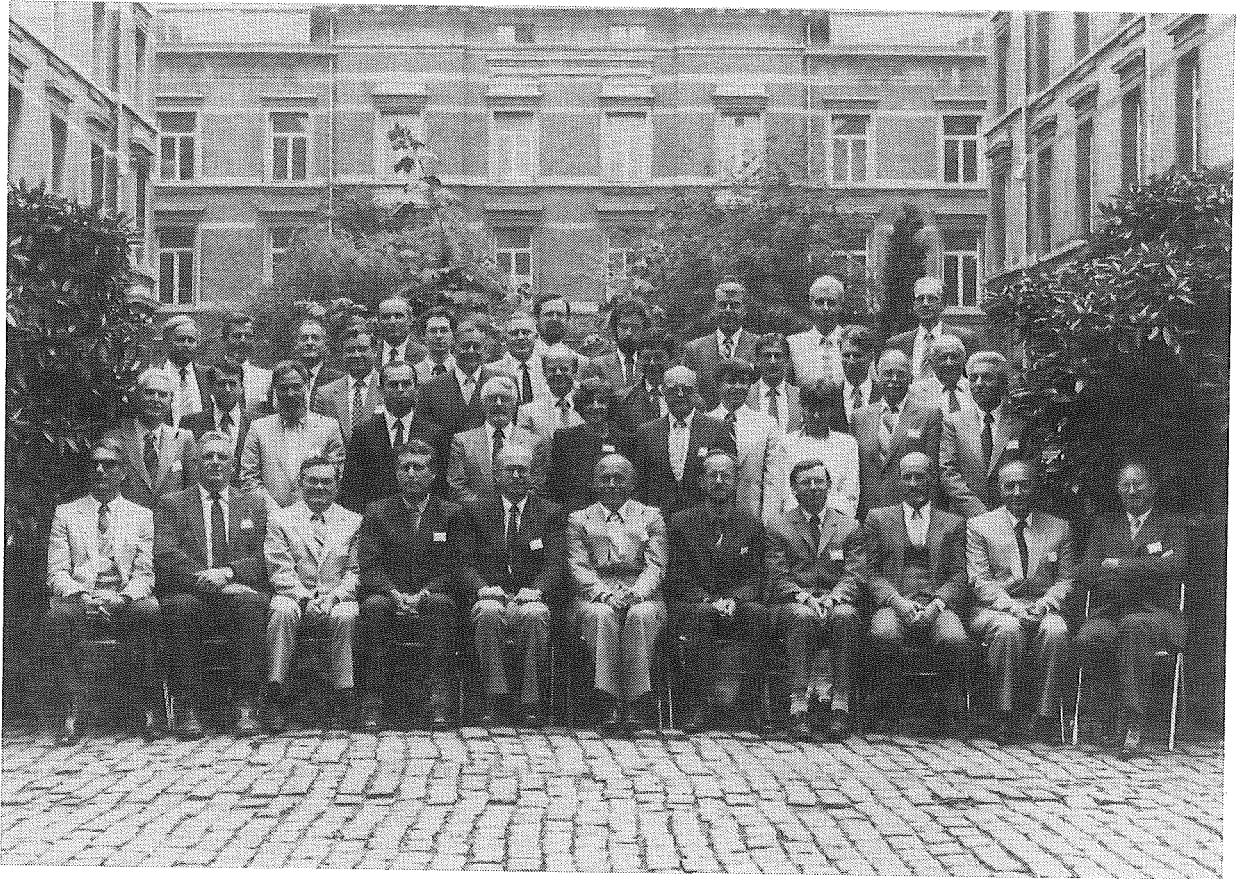
COLLOQUE INTERNATIONAL  
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LANGUAGE  
CO-ORDINATION



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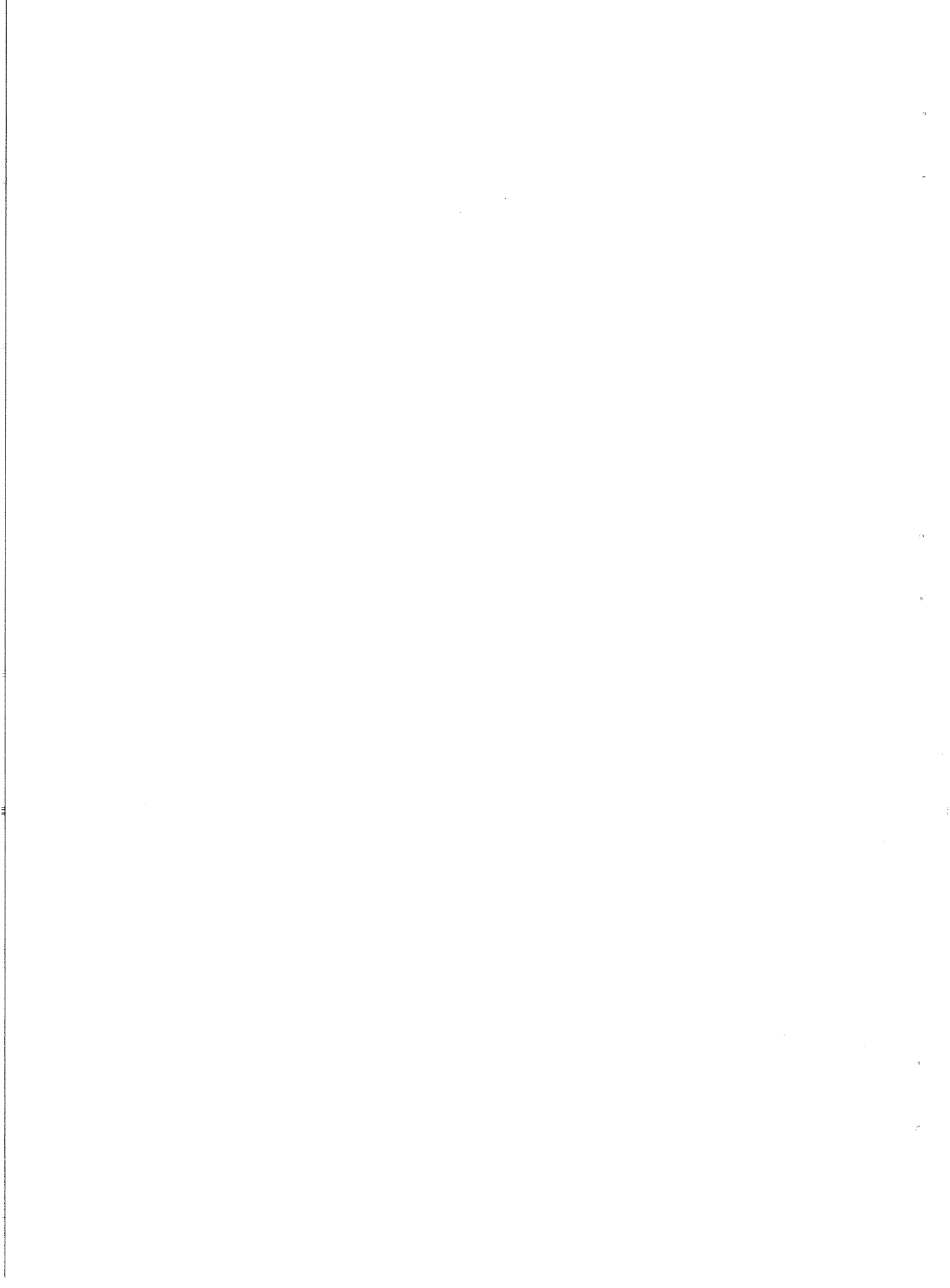


Front Row: (left to right) LtCol Barbeaux, Col McNerney, Maj Préfontaine, LtCol Roque de Cunha, LRDir Rohrer, Prof. Dr. van Passel, CDR Smith, Maj Noordsij, Mr. Ellis, Col Lenci, Cdt Filleul

Second Row: LtCol Constandakis, LtCDR Cottone, Maj Mutlu, Dr. Rollason, Mme Lefrançois, RDir Leben, Mr. Melady, Miss Hamacher, Mr. Kozoriz, LtCol Arcella

Third Row: Col Magaldi, Mr. Ratliff, Col Kilborn, Mr. Worrall, M. Schwarz, Dr. Curica, Cdt Tancre, Mr. de Lespinois

Rear Row: Lt Detroy, LtCol Bellillo, LtCol Barré, CDR Rollo, Mr. de Rijck, Cdt Joos, Dr. Isselé, Dr. Helbo, LtCol Brace, Maj (ret) Walinsky, SqnLDR Bishop



PROGRAMMEBILC CONFERENCE 1984

Date	Time	Event	Remarks
03 June	1400	Arrival and accommodation of delegates	
	2000	Evening meal	Mess E.A.
04 June	0915	OPENING ADDRESS : Major-General R. BOUDIN Commandant Ecole royale militaire Brussels	Conference Room
	0930	ADDRESS 1 : "Towards Greater Efficiency in Foreign Language Teaching - A Survey" Prof. Dr. VAN PASSEL	Conference Room
	1030	Coffee, administrative briefing, photograph	
	1115	"The 150th Anniversary of the Ecole royale militaire - A Historical Review" Cdt. Dr. DEVOS (Dep. of History)	Conference Room
	1200	Lunch	
	1400	National Reports 1	Conference Room
	1530	Coffee	
	1600 - 1730	ADDRESS 2 : Brain and Memory Research "Mécanismes cérébraux et processus d'apprentissage : la pédagogie des langues vivantes à l'écoute des recherches sur le cerveau". Madame TROCME	Conference Room
	1800	Reception at Ecole royale militaire Supper	Bar E.A. Mess E.A.

05 June	0830 - 1000	<p>WORKSHOP 1 :                      Workshop on Brain and Memory Research :                      Atelier-échange sur les profils d'apprentissage.                      Madame TROCME.</p>	Q14
		STEERING COMMITTEE MEETING 1.	CCTV
	1000	Coffee.	
	1030	<p>ADDRESS 3 : "Inner Speech"                      LR Dir ROHRER.</p>	Conference Room
	1200	Lunch.	
	1400	<p>ADDRESS 4 : "The Role of Proxemics and                      Kinesics in the Foreign Language                      Classroom"                      Mrs. O'REILLY.</p>	Conference Room
	1530	Coffee.	
	1600 - 1730	National Reports 2.	Conference Room
	Evening	<p>Visit of Grand'Place de Bruxelles,                      Reception at Maison des Brasseurs and supper in                      typical restaurant.</p>	
06 June	Morning	<p>Visit of NATO HQ and NATO Briefing                      Visit of Control Data Corporation and Workshop</p>	Departure 0830
	After- noon	<p>Visit of Ghent followed by supper in typical Ghent                      restaurant, organised by the Belgian Atlantic Associa-                      tion Committee - East Flanders</p>	Back by 2400
07 June	0900	<p>WORKSHOP 2 : Workshop on Non-verbal                      Aspects                      Mrs O'REILLY</p>	Q14
		STEERING COMMITTEE SESSION 2	CCTV
	1030	Coffee	Q14
	1100	<p>STUDY GROUP SESSION 1 (subthemes)                      STEERING COMMITTEE SESSION 3</p>	E.A. CCTV



	1200	Lunch	
	1400	ADDRESS 5 : "Multicultural Approach in Foreign Language Teaching" Prof. Dr. DE GREVE	Conference Room
	1530	Coffee	
	1600	ADDRESS 6 : "Quelques aspects du développement génétique de la capacité d'abstraction selon Maistriaux et Piaget". Maj. Dr. BESURE Chargé de Cours	Conference Room
	1700 - 1800	STUDY GROUP SESSION 2 (subthèmes) STEERING COMMITTEE SESSION 4	E.A. CCTV
	1930	BILC Dinner - Ecole royale militaire	Bar and Mess E.A.
08 June	0900	STUDY GROUP SESSION (Writing Reports) STEERING COMMITTEE (Writing Report)	E.A. CCTV
	1000	Coffee	Hall Conf. Room
	1030	STEERING COMMITTEE REPORT STUDY GROUP REPORTS	Conference Room
	1130	CLOSING ADDRESS - Maj Gen BOUDIN	Conference Room
	1200	Lunch	
	1400	Open Forum, Closing Remarks Departure of Delegates.	



BILC CONFERENCE 1984

LIST OF PARTICIPANTS

CONFERENCE CHAIRMAN

Professor Dr. Frans van Passel      Director Language Centre  
Royal Military Academy  
Brussels

NATIONAL DELEGATIONS

BELGIUM

Head of Delegation	Commandant D. Filleul (Daniel)	Head, English Department Language Adviser and Proficiency Testing (MoD) Lecturer
Members	Mr. J. M. Rossbach (John)	Head, French Department Maître de langue principal Professeur à l'Ecole Officiers de Gendarmerie
	Mr. J. B. van Craen (Jan)	Head, Dutch Department Maître de langue principal
	Dr. A. Helbo (André)	Maître de langue principal Chargé de cours à l'Université Libre de Bruxelles
	Commandant G. J. Ingels (Georges)	Maître de langue principal
	Commandant N. A. Delanghe (Noël)	Assistant, Dutch Department
	Commandant L. Joos (Louis)	Assistant, English Department
	Commandant J. Tancre (Jacques)	Assistant, English Department
	Lieutenant P. Detroy (Philippe)	Assistant, French Department
	Mme. M. Tron (Nadine)	Assistant, French Department
	Drs. M. Isselé (Mark)	Assistant, Dutch Department
	Mr. W. Wauters (Willi)	Assistant, Dutch Department

CANADA

Head of Delegation	Major R. Préfontaine (Renaud)	Directorate of Language Training (DLT) National Defence Headquarters
Members	Dr. B. Rollason (Bryan)	Head of Program Evaluation and Research (DLT)
	Mr. J. J. Melady (Jim)	Senior Staff Officer Language Training, Canadian Forces Training System Headquarters (CFTSHQ)
	Mr. G. Kozoriz (George)	Academic Director Foreign Languages, Canadian Forces Language School (CFLS)
	Mme. J. Lefrançois (Jeanine)	Commission Fonction Publique du Canada - Division Enseignement des Langues Directrice des Services d'Orientation

FRANCE

Head of Delegation	Lieutenant Colonel E. H. Barbeaux (Edouard)	Officier pédagogie du Centre de Langues et Etudes Etrangères Militaires (CLEEM), Paris
Member	Lieutenant Colonel B. F. Barré (Bernard)	Chef de la section audiovisuelle du CLEEM, Paris

FEDERAL REPUBLIC OF GERMANY

Head of Delegation	Regierungsdirektor E. Leben (Erwin)	Deputy Head, Language Training and Language Services Section, MoD Bonn
Member	Mr. M. P. M. Schwarz, M. A. (Michel)	MatDevlpt Sectn: Principles of LngInstr and MatDevlpt Bundessprachenamt (BSprA)

ITALY

Head of Delegation	Colonel F. Lenci (Frederico)	Commandant, Airforce Foreign Language School
Members	Colonel G. Magaldi (Guglielmo)	Commandant, Army Foreign Language School
	Lieutenant Colonel S. Arcella (Salvatore)	Director of Studies, Army Foreign Language School
	CDR F. Rollo (Francesco)	Navy - General Staff Training Branch

Lieutenant Colonel  
G. Bellillo (Gianmarco)

Air Force - General Staff  
Training Branch

Lieutenant CDR  
G. Cottone (Gregorio)

MoD - General Staff  
Training Branch

NETHERLANDS

Head of Major Drs.  
Delegation L. Noordsij (Leen)

School Militaire  
Inlichtingendienst,  
Harderwijk

PORTUGAL

Head of Lieutenant Colonel  
Delegation E. Roque de Cunha (Eduardo)

General Staff - Armed Forces  
Language Teaching Coordinator

Member Dr. R. M. S. Curica (Rui)

Air Force Academy of Portugal

TURKEY

Head of Major  
Delegation N. Mutlu

Staff Officer, SHAPE

UNITED KINGDOM

Head of Commander  
Delegation J. R. Smith (Russ)

Language Training  
MoD (Navy)

Members Squadron Leader  
J. M. Bishop (Max)

Language Training  
MoD (RAF)

Mr. G. G. Worrall (George)

Language Adviser, Directorate  
of Army Education

UNITED STATES

Head of Colonel  
Delegation D. A. McNerney (David)

Commandant, Defense Language  
Institute, Foreign Language  
Center (DLIFLC), Presidio of  
Monterey, California

Members GS 14  
P. J. de Lespinois (Pierre)

Assistant Dean for Instruction  
(DLIFLC)

Mr. J. Ratliff (John)

Associate Dean, Foreign  
Service Institute

Colonel  
J. M. Kilborn (John)

Commandant, Defense Language  
Institute, English Language  
Center (DLIELC), Lackland

Lieutenant Colonel  
R. Brace (Richard)

Dean of Academics (DLIELC)

SUPREME HEADQUARTERS ALLIED POWERS EUROPE (SHAPE)

Head of Delegation	Mr. D. Ellis (David)	Head, SHAPE Language Centre (SLC)
Members	Mr. M. Aston (Michael)	Principal Teacher of English (SLC)
	Mrs. J. Lawrence (Joyce)	Administrator, Teacher SHAPE Language Circle

OBSERVER

Lieutenant Colonel	S. Constandakis (Spyridon)	Army Language School, Athens
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CONFERENCE ORGANIZATION

Commandant	D. Filleul (Daniel)	Conference Organizer
Commandant	J. Tancre (Jacques)	Deputy Conference Organizer
Commandant	J. Joos (Louis)	Conference Finance Officer
Mrs.	Cl. de Bruecker (Claudine)	Conference Secretary
Mr.	F. de Ryck (Filip)	Conference Secretariat

CHAIRMAN STEERING COMMITTEE 1984

Leitender Regierungsdirektor	J. Rohrer (Josef)	Head, Language Training, BSprA Chairman, BILC Secretariat
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BILC SECRETARIAT

Mr.	H. Walinsky (Herbert)	BILC Secretary
Miss	M. Hamacher (Monika)	Assistant BILC Secretary

- 11 -

LIST OF SPEAKERS

Major Dr. J. Besure  
Chargé de Cours à l'Ecole Royale Militaire  
Chaire de Psychologie  
Ecole Royale Militaire  
Brussels, Belgium

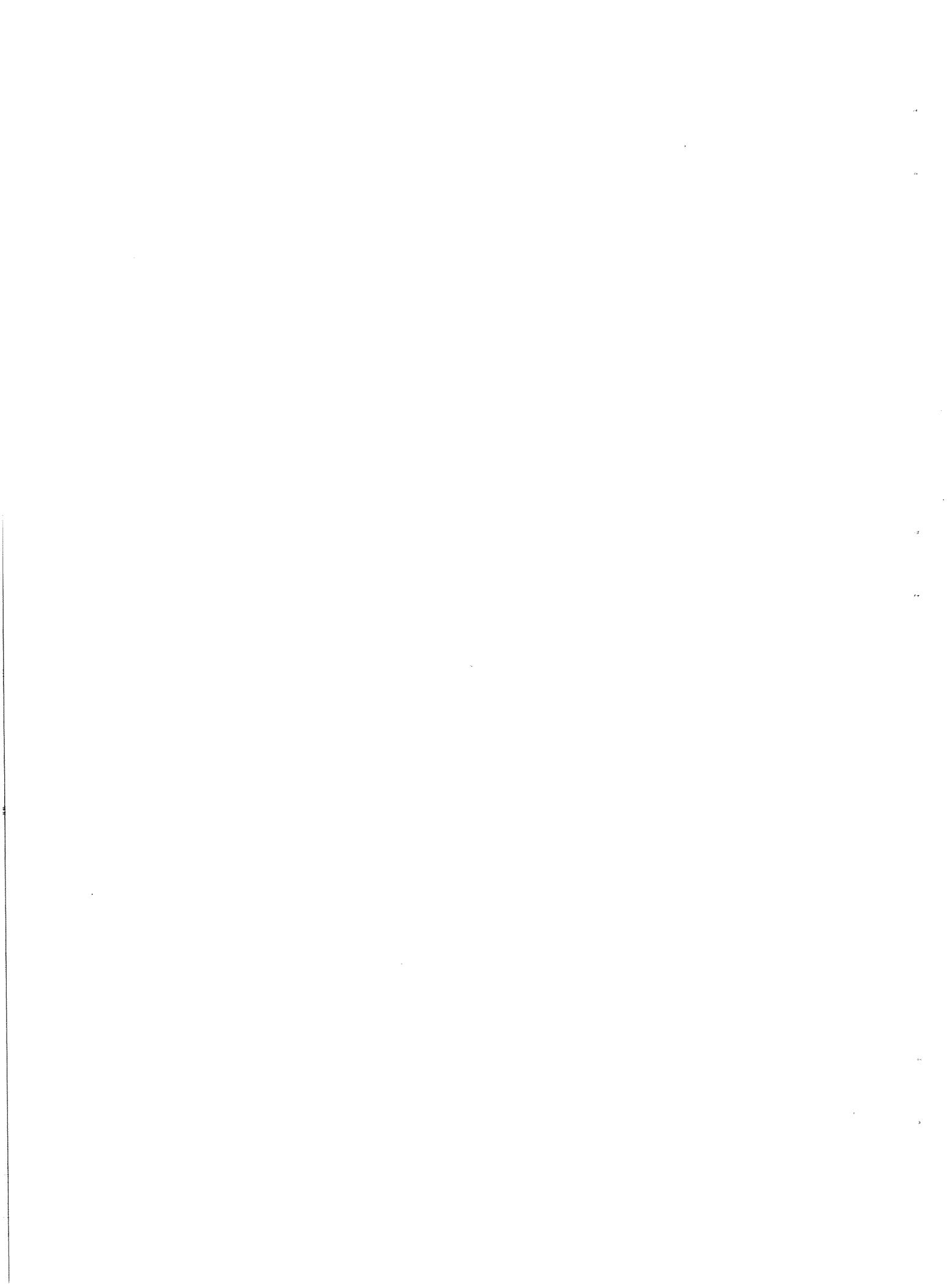
Prof. Dr. M. de Grève                      (manuscript not available at  
University of Ghent                      time of publication)  
Ghent, Belgium

Mrs. M. O'Reilly  
Teacher Trainer and Materials Writer  
(Communications Management)  
Brussels, Belgium

Prof. Dr. F. van Passel  
Head, Language Centre  
Ecole Royale Militaire  
Brussels, Belgium

LRDir J. Rohrer  
Head, Language Training  
Bundessprachenamt  
Hürth, F. R. of Germany

Madame H. Trocmé  
Maître-Assistant  
Université de Poitiers-La Rochelle  
France





Towards Greater Efficiency in Foreign Language Teaching:

A Survey 1950 - 84

Frans van Passel

This opening speech is divided into two parts. First of all I want to give you a personal comment on the linguistic and applied linguist's turmoil in the field of language teaching during the last three decades, and I will draw up a balance-sheet with reference to the efficiency of modern theories and methods; and secondly, I will try to present some fundamentals for more efficient language learning and/or teaching that can guide us in further discussions.

For a better understanding of the program and the general atmosphere of our conference, it may be interesting to know that the vast majority of our members are very much result-oriented. Through their military experience, they have learned to ask the three most important questions for each operation:

- a) What are we going to do? (This means how can we express our goals in measurable items, understandable to all the participants in this process?)
- b) How are we going to do it? (This means in how much time, with which supporting techniques, which routes are we going to follow, etc. ...?)
- c) How do we know we really did what we wanted to do? (What we usually call the evaluation of the operation).

In order to draw up that balance-sheet of recent trends and developments in methods and techniques, and in accordance with military methods, I must first remind you of the six different long-range objectives in FL learning/teaching. The priorities ascribed to these objectives will vary from country to country, from period to period, but each of the six will appear, either in implicit or in explicit form, among those listed in a program. These six objectives are as follows:

- a) to develop the student's intellectual powers through foreign language study, realized mostly at the level of secondary education,
- b) to increase the student's personal culture through the study of great literature and philosophy to which a foreign language is the key, mostly at university level,
- c) to increase the student's understanding of how language functions and to bring him to a greater awareness of the functioning of his own language,
- d) to teach the student to read the language with comprehension so that he may keep abreast of modern writing, research, and information, an objective mostly realized at the level of research study,
- e) to bring the student to a greater understanding of people across national barriers by giving him a sympathetic insight into the ways of thinking of the people who speak the language he is learning; this should be one of the most important objectives in a bilingual country,
- f) to provide the student with skills which will enable him to communicate orally, and to some degree in writing, with the speakers of another language and with people of other nationalities who have also learned this language; this is done in our armies and in the conference we are having here this week.

Each of these objectives has at some time or in some place predominated in the stated aims of FL learning.

We in BILC are interested in research and development and many of our language training centres have done fine work in the theoretical field, but none of us can forget the importance of immediate applications in the daily life of the forces and of the men. The proof of the pudding is in the eating, and that is why we stress applicability more than the inspired splendour of a new theory. And here we have to face a few facts; never in the history of language learning has the gap between theory and practice been so disastrous as in the past three decades. So much has been going on in the field of theory, but what is the practical and visible outcome?

I think it is better to speak here about one's personal experience than to quote authors, and that is why I am going to summarize some methods as I have come to see them in action.

I began my career as a language teacher in the postwar period. But my training was very poor. My generation had the kind of text-books I have here on my desk. The lesson went as follows: Before us on the page is a reading selection with, above it, two or three columns of new vocabulary items with their pronunciation in phonetic transcription. The teacher began either with the phonetic drill or, at best, with a short presentation on the blackboard of the difficult words.

We spelled the foreign words, the teacher read a paragraph in a very clear voice, the best student tried to imitate him, the poorer ones came afterwards, etc. Then began the process of translation or explaining the words and the idioms. The result was two long columns of bilingual items we had to learn and drill. The result for us as future language teachers was a painful lack of mastery of the spoken language. On many occasions I still meet the survivors of that treatment.

When I finally got into my own classroom, I met with a definitely superior and brand-new textbook, quite different from the motivation-killer I had been educated with. What had happened? On the level of the language the course took into account vocabulary selection in order to do more and better with fewer language materials. It took the pupil on a touristic trip to the foreign country and let him meet youngsters of his age in his own surroundings and culture, in fact it met most of the objectives I mentioned at the beginning of my speech.

The method described was the direct method: the teacher introduces the subject, always in the FL, has pictures at hand to illustrate the situation, presents the new words and their correct pronunciation, makes the pupils repeat those words and asks questions to make them use the words. When the learners seem to have understood the material and have shown evidence of being able to use it orally, they read a passage or one of similar content aloud from their books, reading after the teacher at first and then individually.

If you ask my opinion honestly, I am convinced it was the best method I ever used - I must add, however, that most teachers abhorred the method, because it kills those who have not mastered speaking and good breathing techniques. At the end of the day they were all exhausted, but the results were good.

After three years of teaching I had the opportunity to tour a part of the country and to visit a large number of classes. In my youthful innocence I was surprised to observe the difference between theory and practice, between a lesson given in presence of the school principal and during his absence. I will come back to that phenomenon later.

You can easily imagine the situation in evening schools, where the exhausted teachers came to end their teaching day, where they used the textbooks that are meant for youngsters in adult classes, where they applied the same method with the same objectives, etc. ... The result was a disastrous desertion of evening courses all over the country and as far as I know all over the world. The poor result in language acquisition in those evening classes was fertile soil for those many private schools which provide full-time courses for adults with specific objectives; you know their names: Berlitz, Assimil, Languaphone, etc. ...

The situation depicted was the normal one at the end of the fifties, immediately before the great turmoil started with the audiolingual invasion, the audio-visual structuro-global method of Saint-Cloud-Zagreb, the generative grammar method, the notional functional modernism, not to speak of the influence of tape recorders, language laboratories, video recorders, etc. ... the use of visual materials, transparencies, etc. ... I do not mention here or do not dare to mention the methods, silent method, suggestopedia, etc. ...

Audiolingualism as we all know was in fact a heritage of the language program of the armed forces. The novelty was the learning of dialogues based on everyday life, preferably under control of a native teacher. The students learn without any written support, they imitate and repeat, and only in a later lesson are the dialogues read and analysed. The students are asked to act out the dialogues and to combine the separate elements for use in slightly different conversations, etc. Here at hand, I have one of the best audiolingual textbooks. The assumptions were based on the learning theories of Skinner and the conditioned reflexes. Different new types of programmed instruction and multiple choice questions followed rapidly. I am sorry for the abruptness of my presentation, that may shock some people in the audience, but the allotted time does not leave me any choice.

The audiolingual method came to Europe supported by the language laboratory, although in fact, the tool had nothing to do with the method. It is, however, very clear that the objective 'communicative skills' set forward by the audiolingual method stressed the need for oral support, be it tape recorders with native voices or doubletrack recorders, which made it possible to compare one's own pronunciation with the example set by the native.

It soon became evident that the use of tapes does not guarantee the effective development of listening and speaking skills. The language laboratory is not a teaching machine, it does not perform miracles although many school principals, parents and laymen seemed to believe that. Large sums of money were spent for the benefit of the language teacher and his work seemed to rise to the level of scientific work in a real laboratory.

Most army language training centres found the proper use for a lab, because they were able to create the necessary environment and to control most events they organised full-time courses, they knew how much time to spend in the lab and what to put on tapes.

The west wind brought us the audiolingual method, the east wind the one with the barbarian name "The audio-visual structuro-global method of Saint-Cloud-Zagreb", that I have here at hand in its Sunday suit "Voix et images de France" edited in the USA. Considering the different elements, I think there is only one fundamental point of difference between the audiolingual method and the Saint-Cloud-Zagreb one. It is the systematic phonetic approach, the work of a phonetician and based on a comparative study between the sounds of French and the mother tongue of the learner.

It starts also with a dialogue, it is orally presented, it does not allow the use of a written support, it is learned through repetition and transformational drill. In order to avoid translation, visual supports are used, not only in the classroom but in the textbooks too. The method found its origin in adult full-time teaching with small groups. Again it met with difficulties when applied under different circumstances, e. g. in secondary schools, at a rate of three hours a week, etc. However, it met with a certain success, but only few teachers were concerned. The purpose of this opening address is not to make a critical analysis of these methods: It took Wilga Rivers more than 400 pages and yet others did not find that enough and wrote their own criticisms. Today I want to say one thing: none of these methods meets with the top-priority of most adult learners, I mean oral understanding or listening comprehension. That is the only skill we need to understand what is being said here today, it is the most important skill in a bilingual country and in its army, not to mention in international meetings and business. Moreover, for oral comprehension the objectives must be set very high and much higher than for any other skill. To avoid misunderstanding, I repeat: for adult learners, in most armies, in most countries.

There is something more to it. With our military cadets coming from all over the country, from different schools with different methods and different backgrounds, we get an enormous amount of information on levels of attainment, the successes and failures. We will express our opinion in a very simple way: there is no difference at all between cadets with audiolingual, structuro-global or training according to any other method after six years of language learning, and the results in the seventies were not any better than those in the fifties. Neither were they worse. This is in fact a cruel statement, but I am ready to prove it.

And then came Noam Chomsky, first with a slashing critique of Skinner's theory on language acquisition. The first thing we have to admit is that without audiolingualism, Chomskyan theories would probably not have been written. Because it was first of all a reaction: "There is very little in psychology or linguistics that we can accept on faith. It is difficult to believe that either linguistics or psychology have achieved a level of theoretical understanding that might be able to support a technology of language teaching."

I am not going to develop any theory here; older linguists know that competence and performance, deep structure and surface structure existed a long time before Chomsky, but a crew of young research assistants threw themselves on the latest fashion. These new grammarians were pictured by Maurice Leroy as fashion designers: "Si l'on veut recueillir l'adhésion des lecteurs ou auditeurs béats, on doit structurer sa pensée, même si elle est profondément vide, selon les normes impératives d'un des nombreux structuralismes à la mode, dont la structuration est exposée dans un style aussi jargonnant que possible."

Let us consider some new French vocabulary introduced by these fashion designers. They replace *pronom* by *substitut*, *conjonction* by *outil*, *article* by *prédéterminant*. Terms like *l'indicateur syntagmatique initial* and *indicateur syntagmatique dérivé* clearly explain to the students "comment engendrer les tournures impersonnelles comme 'il manque un bouton à mon manteau'".

And then came the notional functional wave, every national and international organisation had its research program, the Council of Europe invented the Threshold Level 30 years after the American Forces and Unesco stimulated research, etc., etc. ...

It is almost time to come to the end of this first part. I hope you did not expect me to give an exhaustive outline of FL teaching in the last thirty years. I hope I did make one thing clear: there exists a disastrous gap between theory

and practice, between research people and persons in the classroom. Whoever expects that revolutionary techniques will inevitably reach the classroom does not know the innate resistance, the obstructional attitude of the most conservative body in society, the teaching corporation.

To summarize, now in the eighties, vocabulary selection and rational use of the most frequent language elements is not yet in use, half a century after its first appearance. The insistence on communicative competence and strong attachment to real life situations does not yet convince everybody. Technology has lost the support of most schools and parents, results are in general not better than in the fifties.

Now I would like to read you a short poem that depicts rather well this gap between theory and practice, between research and application; it is by a Dutch poet, and I will try to translate it as far as my competence reaches:

The Ballad of the Ploughman

Three crosses rose on Golgotha,  
But the ploughman? Plough he did.  
Madelon, Maria, Veronica,  
But the ploughman? Plough, he did.  
So many dreamed a dream,  
But the ploughman, plough he did.  
Termopylae, Troy, Salamis,  
But the ploughman, plough he did.  
Napoleon crossed the Alps,  
He saw the ploughman plough.  
Abroad he went on final trip,  
And the ploughman? Plough he did.

And so I come to the conclusion of my first part: not many elements of scientific discovery, not many elements of linguistic theory have contributed to more efficiency in language learning. The only visible exceptions are met with in full-time, well thought-out classes in specialised training centres.

That is why I am going to describe a number of elements, which may explain our successes and failures and which seem to be in my opinion the parameters of good language learning.

(Presentation continues in French on following page.)

De ce qui précède, nous déduisons que les méthodes d'enseignement et d'apprentissage nous laissent sur notre faim et n'influencent pas profondément les résultats. Aussi sommes nous obligés de procéder à une observation poussée de l'apprentissage chez l'étudiant pour déterminer les éléments qui décident de l'efficacité et du succès de l'apprentissage. Politzer et Weiss dans leur étude "The successful FL learner" soulignent l'importance du rôle de l'enseignant. D'après eux, le succès est dû

- a) au professeur qui offre aux élèves la possibilité de s'exprimer librement, de traiter des questions intéressantes et ouvertes,
- b) au professeur qui change plusieurs fois d'activité au cours d'une seule séance,
- c) au professeur qui a suffisamment de patience pour écouter et subir les erreurs des élèves adultes et enfin,
- d) aux moyens didactiques appropriés.

Par contre, le grand pédagogue un peu méconnu, Harold Benjamin met l'accent sur l'apport personnel et mental de l'élève qui d'après lui

- a) doit disposer d'une grande liberté d'expression,
- b) doit vaincre la crainte de l'échec,
- c) doit donner la priorité à la communication plutôt qu'à la forme correcte,
- d) doit témoigner du désir de vouloir rompre avec la tradition classique pour donner une nouvelle impulsion ludique au processus d'acquisition,
- e) doit rendre le travail plus attrayant par des jeux de rôle et arriver ainsi à un apprentissage intégrant la réalité.

Personnellement, je penche pour la position de Harold Benjamin, parce qu'elle introduit la notion de créativité et délègue une responsabilité plus grande à l'élève.

J'admets, bien sûr, qu'il s'agit surtout chez Benjamin d'une vision, tandis que chez Politzer et Weiss nous trouvons des indices importants concernant la réussite et donc l'efficacité d'une méthode dans des circonstances classiques.

#### L'AUTORITE

Afin de schématiser systématiquement les éléments importants, je vous propose d'utiliser le carré logique des facteurs dans l'apprentissage d'une langue étrangère. Au lieu du triangle classique, matière - enseignant - élève, je propose d'ajouter comme quatrième facteur déterminant l'autorité organisatrice. Ce quatrième facteur, souvent oublié, crée pourtant le cadre général de l'apprentissage et en détermine souvent l'efficacité. C'est en effet souvent l'autorité qui fixe les objectifs à long terme de l'enseignement, qui décide de l'investissement en temps et qui octroie les moyens financiers et didactiques. Est-il nécessaire d'ajouter qu'elle ne le fait pas toujours en connaissance de cause et qu'elle ne crée pas toujours le cadre pédagogique, psychologique et linguistique approprié? Il me suffit à ce propos de citer une loi belge, qui définit la connaissance approfondie d'une langue étrangère comme le niveau obtenu par un élève de 18 ans en langue maternelle à la fin de ses études secondaires.

Ajoutons à cela que l'autorité voit parfois l'apprentissage d'une langue comme l'assimilation d'une matière.

La répartition d'une matière scientifique sur quatre ans par exemple est défendable parce que le problème de l'assimilation se pose. Mais l'apprentissage d'une langue n'est pas comparable à l'assimilation d'une autre matière. Les spécialistes de l'enseignement des langues aux Etats-Unis, en Allemagne, et en Grande-Bretagne savent qu'un cours intensif, donc à temps plein a un rendement infiniment supérieur à trois fois le même nombre d'heures réparti sur un an ou deux. La confirmation de cette thèse, je l'ai sous la main. Les résultats (quoiqu'il serait dangereux de ne pas distinguer entre les élèves du secondaire et les élèves adultes) lors de l'examen d'admission après quelques 800 heures d'enseignement sont souvent inférieurs à ceux obtenus par des étrangers qui ont suivi un cours d'été de trois semaines seulement.

Malgré cette évidence, l'autorité continue un peu partout à maintenir des cours du soir sur quatre ans à un rythme de deux heures par semaine. Je connais un établissement non loin d'ici, qui inscrit chaque année 4000 adultes avides d'apprendre une langue étrangère. A la fin de la première année, il en reste un peu plus de 40. Déçue par un apprentissage qui ne correspond pas à ses objectifs, par un travail à long terme sans fin, la majorité abandonne et est perdue. Ce manque d'efficacité est dû à une autorité qui reste aveugle devant l'évidence et se crée un alibi en accusant les adultes d'un manque de motivation ou de volonté.

Serait-il pourtant si difficile et si révolutionnaire de créer un système souple d'unités capitalisables avec une série d'objectifs adaptés aux niveaux et aux intérêts immédiats des adultes?

Un éventail de possibilités flexibles et un enseignement à court terme prépareraient chaque fois à une multitude de besoins situationnels. La condition préalable de réussite est donc la collaboration avec une autorité compétente.

#### L'ENSEIGNANT

La deuxième condition sine qua non d'un apprentissage efficace est la compétence de l'enseignant. Ce qui implique que l'enseignant reçoive une formation adaptée à sa tâche.

Hélas, je dois constater que partout en Europe, la formation universitaire ne semble satisfaire personne à cet égard.

La preuve, c'est que toutes les grandes entreprises organisent actuellement leurs propres cours de formation pour suppléer à la lacune laissée par l'université. Dans ces centres, l'apprentissage des langues étrangères prend une place importante. Nous savons qu'il existe des endroits privilégiés, comme le centre de Monterey, où les enseignants reçoivent la formation adéquate à leur travail avec des adultes, mais ces centres sont rares.

Quelles sont maintenant les compétences indispensables à l'enseignant pour rendre son travail efficace?

J'essaierai de vous donner une liste qui ne se veut pas exhaustive et chacun d'entre vous pourra encore la compléter.

- a) Il doit d'abord avoir une bonne connaissance des différents types d'apprentissage d'une langue chez les adultes (visuel-manuel).
- b) Il doit avoir une bonne connaissance des difficultés énormes qu'éprouve l'adulte devant cette masse inerte de la connaissance linguistique jamais finie; un bon professeur devrait de temps en temps entreprendre un voyage dans un pays étranger dont il ne connaît pas la langue afin de se mettre en situation et de subir la lourde et pénible charge de l'apprentissage d'une langue inconnue. Plus les enseignants s'éloignent de leur propre apprentissage, moins ils se rendent compte de ces difficultés d'assimilation, de mémorisation et de compréhension. Celui qui fait honnêtement cette expérience

n'imposera plus jamais à un élève de prononcer correctement dès la première heure les sons barbares d'une langue étrangère.

- c) La troisième compétence est de pouvoir reformuler pour les élèves adultes leurs propres objectifs à court terme, chaque fois dans un délai maximum de trois semaines ou toutes les deux ou trois leçons. En effet, l'élève adulte veut comprendre ce qu'il fait et pourquoi il le fait.
- d) Pour l'enseignement, une bonne connaissance du processus de mémorisation est indispensable; elle comprend entre autres:
- le nombre de répétitions requises pour une mémorisation à court terme;
  - le maximum d'efforts de mémorisation à prévoir par séance en fonction du groupe ou de chaque cas; il se pourrait que cela se limite à trois ou quatre essais par heure;
  - les formes de support que la mémorisation nécessite pour chaque cas individuel; en effet, certains élèves retiennent les mots surtout en les copiant lentement, d'autres, par contre, doivent dire chaque phénomène nouveau à voix haute, de préférence en chœur;
  - le respect du silence nécessaire après chaque stimulus pour que l'esprit puisse saisir le stimulus, l'assimiler et essayer de le reproduire, en effet, trop d'enseignants harcèlent les élèves ce qui a donné naissance à une réaction: la voie silencieuse, méthode qui interdit à l'enseignant d'ouvrir la bouche plus de sept fois pendant une heure de cours;
- e) Le cinquième élément est une qualité caractéristique: avoir le courage de rompre avec certaines traditions qui constituent des freins à l'apprentissage. Ainsi, la lecture d'un vrai journal en salle de classe exige un certain courage, parce que l'enseignant voit cet exercice comme non-contrôlable et comme perte de temps. (Il devrait quand même se rendre compte que la photocopie d'un article n'aura jamais le même impact et par ce fait n'obtiendra pas le même résultat.) Il faut aussi du courage pour utiliser certains moyens audio-visuels parce que cela implique de doubler le temps de la préparation: l'exploitation d'une émission radiophonique ou télévisée nécessite, en effet, une écoute et une vision préalable. Faut-il que je vous dise que l'obstacle le plus sérieux qui empêche l'utilisation de certains supports se situe à ce niveau-là? Ainsi: rendre l'enseignement plus efficace impose une formation continue et adaptée de l'enseignant. Il est inutile de parler d'une réforme quelconque sans cette condition préalable.

#### LA LANGUE

Un coin de mon carré pédagogique concerne la langue et bien que n'ayant pas eu l'intention de m'étendre là-dessus, il faut quand même que je vous fasse part du résultat d'une de nos recherches, qui nous imposera entre autres de revoir certaines idées sur le vocabulaire fondamental. Je pourrais poser la question ainsi: Où en sommes-nous avec le vocabulaire fondamental? Devons-nous en tenir compte, et tient-il ses promesses?

Ma réponse est plus que nuancée: il va de soi que le débutant doit apprendre ce qui est le plus fréquent et le plus utile, et cela pour des raisons de mémorisation, de succès immédiat, etc... J'appuierai même le point de vue que le niveau de la connaissance élémentaire doit se limiter aux 1000 mots les plus fréquents. Nous devons tout de même mettre fin à la légende qui affirme que quelques 500 mots suffisent pour la connaissance vitale de la langue. La situation au niveau de la connaissance fondamentale est plus grave. Dans le développement de notre certificat d'études, un groupe de travail a vérifié le taux de compréhension obtenu en ce qui concerne des tranches successives du vocabulaire fondamental.



Un grand nombre de réalisations langagières, de conversations, de débats, d'émissions radiophoniques, etc. ... a été mis sur ordinateur et comparé avec une tranche de 1800 mots soit-disant les plus utiles de la langue, ensuite avec une tranche de 2400 mots et une dernière fois avec une tranche de 3000 mots. Je résume les conclusions de cette recherche:

- La liste des 1000 mots les plus fréquents ne permet pas de comprendre une conversation ou un débat; 57 % des formes employées doivent être devinées ou recherchées dans le dictionnaire.
- La liste des 1800 mots les plus fréquents laisse toujours 30 % de formes à deviner et ce qui gêne le plus c'est que ces formes portant le message du texte ne sont presque jamais comprises, ni devinées.
- Si la liste s'accroît de 600 termes et en propose 2400, trois mots supplémentaires de tout notre inventaire de textes sont compris; l'addition d'une nouvelle série de 600 vocables entraîne un gain de deux mots. Pour une expansion de 1200 mots du vocabulaire fondamental, le bénéfice net est de cinq mots seulement.

Nous pouvons donc conclure qu'une extension supérieure (du vocabulaire fondamental) se révèle inutile dans le cas du registre fréquentiel. De plus, il est apparu que pour la compréhension d'un journal télévisé par exemple, un vocabulaire spécifique est indispensable. L'étude d'un corpus important nous en a fourni quelques 300 !! Il est évident que chaque sujet entraîne un certain nombre de formes, qui n'appartiennent pas au tronc commun.

#### L'ELEVE

D'autres auteurs auront encore l'occasion de vous parler de certains problèmes propres à la langue et je m'en voudrais de vous en parler plus longtemps aujourd'hui. Cela me permet de regarder de plus près le quatrième coin de mon carré pédagogique: l'élève ou "l'apprenant" comme on dit souvent depuis quelques temps. Trop longtemps, il est resté l'élément passif d'un processus qui fait pourtant de lui son sujet et son objet, surtout lorsque nous parlons d'un apprentissage efficace. Pour gagner du temps, j'éviterai de vous faire un exposé approfondi mais trop long et j'irai directement au but en quelques points:

- a) L'efficacité implique de rompre avec le réflexe conditionné de la salle de classe et de l'enseignant. Rien n'est plus dangereux que d'enfermer l'apprenant dans une salle protégée contre la réalité. Vous connaissez tous un certain nombre de bons élèves en classe qui perdent leurs moyens en balbutiant quelques sons en anglais après leur arrivée à Londres; l'anglais de l'autochtone n'est pas compris, etc. ... et la déception est grande, elle devient une source de frustration dangereuse.

Si la situation le permet, lorsque le cours se fait dans le pays de la langue cible par exemple, il est conseillé de fixer des objectifs concrets et pratiques (par exemple la connaissance numérique des prix, distances, heures, etc. ...) et de prévoir des missions sur le terrain après une introduction et un apprentissage sommaire en salle de classe. Chaque mission doit être suivie par une évaluation, qui en soi complète l'apprentissage et le corrige, si nécessaire.

- b) "L'apprenant" doit mettre toutes ses facultés humaines en jeu pendant l'apprentissage: les mouvements, les gestes, l'écrit, afin d'apprendre à parler pendant une action, pendant un travail, comme c'est le cas dans les situations réelles. Démonter un instrument, ouvrir une boîte de conserve et expliquer ce que l'on fait aux collègues qui ont des difficultés à décrire ces objets est un apprentissage plus efficace que de préparer n'importe quelle leçon.

c) L'efficacité impose aussi que l'élève devienne conscient de sa responsabilité dans le processus d'apprentissage. L'enseignant est souvent pris, trop tard hélas, comme l'alibi de celui qui veut bien apprendre, mais qui refuse l'effort personnel. Trop d'élèves attendent que l'enseignant fasse le travail pour eux: deviner et prévoir leurs difficultés, rendre la tâche aussi facile que possible, cela a toujours été leur conception de la bonne pédagogie. Est-ce vraiment la bonne, chers collègues? Nous devons convaincre l'apprenant:

- que le résultat dépend de son effort personnel et prolongé.
- que l'apprentissage se fait pour lui et par lui, que l'enseignant n'est qu'un conseiller technique.
- que le nombre d'heures n'est pas comptabilisé comme à l'usine ou au bureau et que l'acquis dépendra toujours de l'investissement personnel et de l'assiduité.

Pour réussir le passage du type d'élève classique au type d'élève responsable, il faut diminuer le rôle explicatif de l'enseignant et développer systématiquement un système d'autodidaxie, qui permet d'appliquer une stratégie individuelle d'étude. Nos amis américains comprendront moins peut-être ce que j'appelle le mal européen, c'est-à-dire l'enseignant qui se dépasse en voulant faire tout, mais même eux savent que ce que je préconise ici nécessite beaucoup plus qu'un exposé comme celui d'aujourd'hui.

d) L'efficacité impose aussi la formation à l'étude continue, ce qui implique que l'élève devra suivre son apprentissage après la fin du cours, sinon le risque est grand de voir se perdre les fruits d'une longue peine. De plus, comme nous le savons, l'apprentissage d'une langue est une tâche sans fin qui dépasse largement les objectifs et les possibilités d'une salle de classe.

La condition de l'obtention de cet esprit de formation continue la création d'une ambiance tout à fait spéciale dans les cours, ainsi que l'acquisition de nouvelles habitudes, voire à une nouvelle mentalité. De ce point de vue, nous ne pouvons pas sous-estimer l'importance d'une lecture régulière d'un journal dans la langue étrangère ainsi que l'importance de l'écoute journalière du journal parlé ou du journal télévisé ... en classe. Le but n'est pas l'étude de la langue en premier lieu, mais bien l'acquisition d'une nouvelle stratégie d'auto-apprentissage. Pour cette raison, je m'oppose à la photocopie d'un article de journal ou à l'étude d'un extrait du journal télévisé.

Je déplore chaque jour que la majorité de nos cadets, qui vivent dans une ambiance bilingue, en profitent si peu. Rares sont ceux qui lisent les journaux dans l'autre langue, plus rares encore ceux qui écoutent les émissions de la radio. Et pourtant, c'est l'acquisition de cette stratégie d'apprentissage que je considère comme la condition première d'un apprentissage efficace.

e) Je terminerai en disant quelques mots sur la motivation, si souvent évoquée comme la condition nécessaire de la réussite, donc de l'efficacité. Nous ne nions pas l'importance de ce facteur et il serait possible d'y consacrer un congrès, sans crainte de nous trouver sans arguments. Je me limite à quelques remarques:

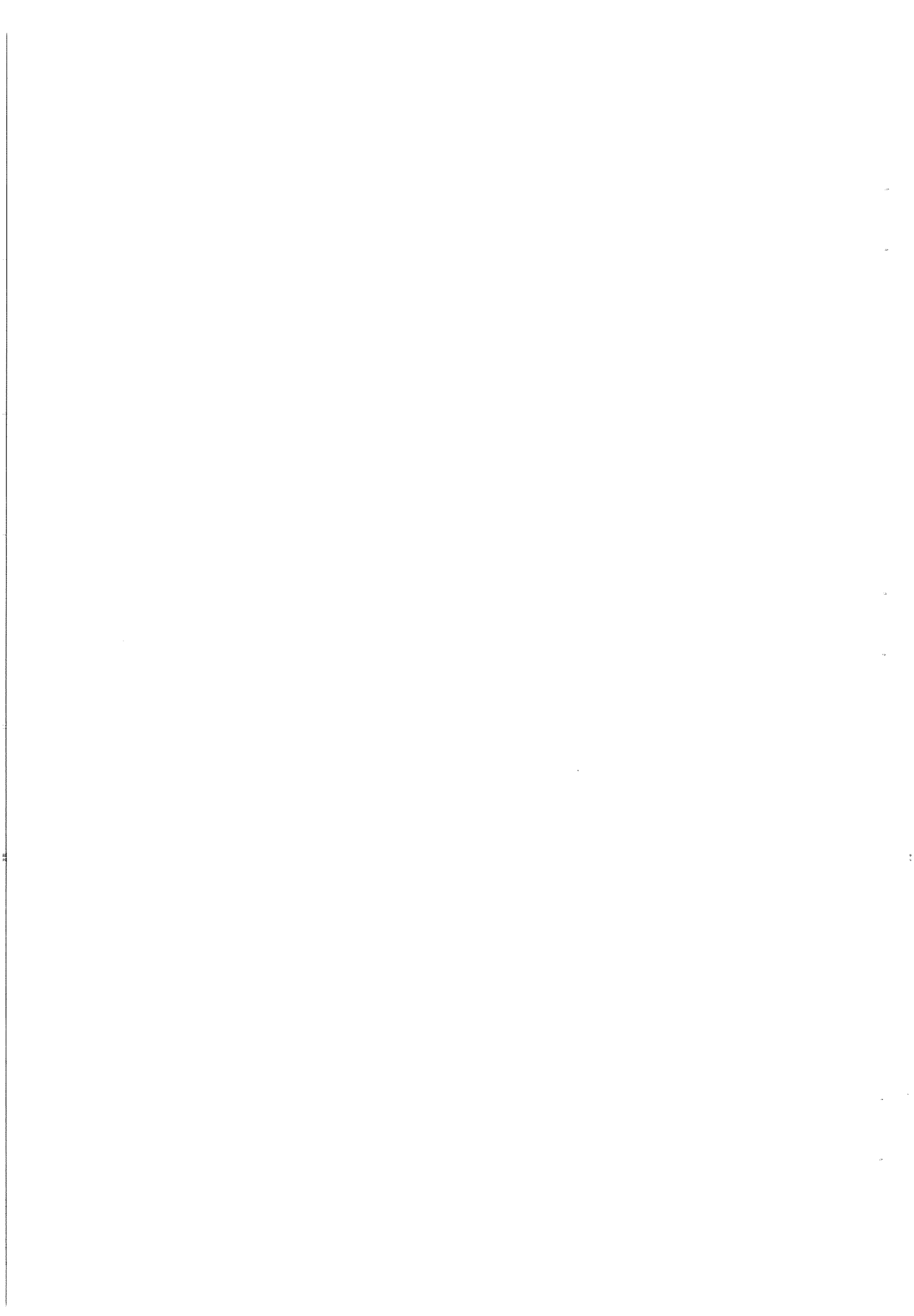
- Un plaidoyer chaleureux ou un exposé sur la motivation n'ont jamais réussi à motiver un public; la vraie motivation est toujours suscitée et entretenue par une série d'activités réalistes et réelles, qui donnent à l'élève la conviction qu'elles conduisent directement à un but qu'il trouve suffisamment valable pour faire un effort soutenu.

- Comme le chemin est long, pour ne pas dire sans fin, il doit être parcouru en petites étapes avec des objectifs réalisables en peu de temps pour que la réussite joue le rôle de feedback positif et rassure l'élève quant au succès de son entreprise.
- Le choix des activités, du travail d'apprentissage devrait souvent être une source de satisfaction profonde, d'encouragement amical et cordial.

En guise de conclusion je reprends les quelques thèses envisagées qui me paraissent les plus importantes:

- 1) Les méthodes ne semblent pas avoir contribué à l'efficacité de l'apprentissage.
- 2) L'autorité souvent oubliée joue indiscutablement un rôle décisif dans l'efficacité de notre enseignement par
  - la formulation des objectifs,
  - l'investissement et l'organisation du temps et les moyens qu'elle propose.
- 3) Pour que l'enseignant puisse remplir efficacement son rôle il doit avoir une bonne connaissance des stratégies d'apprentissage des élèves et il doit créer une ambiance pédagogique qui prévoit des objectifs à court terme, des approches psychologiques adéquates.
- 4) Il doit développer "l'autodidaxie" et insister sur la formation continue et permanente.
- 5) L'élève doit arriver à assumer la responsabilité de son apprentissage et se créer un nouvelle mentalité.

Lorsque ces conditions seront réunies, à savoir  
une autorité compétente,  
un enseignant conscient de sa mission,  
une "autodidaxie" acquise,  
une formation continue assurée,  
et un élève assumant la responsabilité de ses actes, nous aurons atteint l'efficacité optimale humainement possible.



Mécanismes Cérébraux et Processus d'Apprentissage  
dans l'Acquisition d'une Langue Etrangère

Hélène Trocmé

Permettez-moi de commencer cette communication par une note personnelle et vous dire à quel point je me suis réjouie lorsque j'ai pris connaissance du thème de votre Conférence. Il me semble, en effet, que malgré le très grand effort pour renouveler les matériaux, les contenus, les approches, les méthodologies .. le territoire pédagogique de l'enseignement des langues étrangères a gardé encore une partie de son mystère.

Il semble qu'il existe un décalage, une "faille géologique", un fossé entre, d'une part, les réalisations des apprenants et, d'autre part, les ressources; entre les acquisitions des élèves et leurs attentes; entre les résultats obtenus et les efforts fournis par les partenaires (enseignant et apprenant); entre l'importance accordée aux résultats et l'importance accordée aux processus; entre les applications pédagogiques et les connaissances dont on dispose actuellement concernant les mécanismes cérébraux impliqués dans l'acte d'apprendre.

Je pense essentiellement aux lois de la Mémoire, aux mécanismes de la perception auditive et visuelle, au processus d'attention et ... aussi aux mécanismes de blocage et de freinage, à la panoplie des moyens qu'un apprenant invente - avec une créativité tout à fait remarquable! - pour se protéger, résister ou même fuir.

L'apprentissage d'une langue étrangère est bien autre chose que l'acquisition d'un lexique ou d'une grammaire. Le fait d'apprendre une autre langue que sa langue maternelle déclenche un comportement nouveau, un système de relations nouvelles avec soi-même et avec les autres. Tout apprentissage est une rencontre: celle d'un système (l'apprenant) avec un autre système, une autre structure. Apprendre une langue étrangère, c'est accepter ce qui est différent de soi, ce qui dérange les habitudes, les automatismes de penser et de voir le monde extérieur.

L'une des raisons du décalage dont il a été question (qui se manifeste non seulement dans les relations de l'apprenant et de l'enseignant mais chez l'apprenant et chez l'enseignant), c'est notre résistance au changement.

La résistance au changement est la réaction d'un organisme dont l'environnement change. L'organisme doit, pour survivre, maintenir sa structure en tenant compte d'un environnement différent: il doit agir différemment, coder et décoder autrement une réalité qu'il aimerait garder identique ... Devant tout changement, deux attitudes sont possibles: celle prônée par Aristote pour qui "il ne peut exister de devenir de devenir" - c'est-à-dire que le changement EST l'essence de la VIE, du REEL.

Devant l'échec, nous trouvons deux attitudes: l'une de passivité, négative. L'autre dynamique, active, pour laquelle l'échec est une étape indispensable à tout projet d'existence.

Peu d'élèves (et peu d'institutions et d'enseignants ...) admettent la deuxième. Et pourtant ... l'erreur peut être transformée en tremplin pour amorcer un dialogue sur la stratégie, sur le parcours, sur les outils d'apprentissage.

A ceux qui se complaisent à répéter que "de leur temps ... on apprenait par coeur, on n'avait pas toutes ces méthodologies nouvelles ... que l'apprentissage se faisait bien sans les moyens dont on dispose actuellement", il faut rappeler que l'environnement a changé.

Nous vivons dans ce qu'Alvin Toffler a appelé "l'infosphère", qui se caractérise par une explosion d'informations visuelles et auditives - et nous ne pouvons ignorer le contexte dans lequel notre enseignement est donné.

La paysage sonore et le contexte visuel dans lequel nous vivons sont en pleine évolution - quantitative et qualitative.

Quantitative: le monde sonore comporte de plus en plus de décibels. Le contexte visuel est de plus en plus dense. Les heures de visionnement devant un écran (l'image mobile est beaucoup plus prégnante que l'image fixe) atteignent des chiffres incroyables par jour et par habitant (on parle de 5 heures quotidiennes aux Etats-Unis).

Evolution qualitative: le paysage sonore est de plus en plus "technologique", c'est-à-dire qu'il comporte de moins en moins de bruits naturels ou humains. Quant à l'image, elle devient de plus en plus rapide et omniprésente: dans la technique des "vidéo-clips", technique qui semble fasciner la jeune génération, la vitesse de l'image atteint des effets hypnotiques. De plus, cette technique déconnecte le message oral et le message visuel.

Les moyens de transmission électronique des messages auditifs et visuels sont en train de modifier profondément notre système nerveux, car c'est lui qui est chargé de nos relations avec le monde extérieur, avec notre environnement. Siège de nos moyens d'apprendre, organe de l'apprentissage, notre cerveau forge de nouvelles habitudes perceptives inconsciemment dont les conséquences sont déjà visibles:

- au niveau comportemental, on constate un attrait pour tout ce qui est nouveau, une exigence pour la diversité, un manque d'intérêt pour le "déjà vu", pour l'approfondissement, pour tout ce qui dépasse le niveau du descriptif.
- on constate également une importance de plus en plus grande accordée au quantitatif, au mesurable, au linéaire, au logico-analytique, au "digital", et ceci, au détriment de l'autre type de gestion, celle qui laisse la parole à l'affectif, au différé, à la durée, au rythme individuel, au temps biologique - en un mot au "sous-cortical".

Dans l'apprentissage d'une langue étrangère, il est difficile de se passer de ce deuxième type de gestion.

Pour en revenir à la "faille", une troisième raison (et non la moindre) en est notre méconnaissance des données scientifiques qui concernent:

- a) les ressources et le potentiel dont nous disposons
- b) le fonctionnement des mécanismes cérébraux impliqués dans l'acte d'apprendre (la prise d'information, le traitement de l'information et l'utilisation de l'information acquise)
- c) la gestion des ressources - c'est-à-dire nos habitudes perceptives dominantes, nos "canaux" préférentiels, nos systèmes de représentation intérieure de la réalité extérieure.

Il existe certainement d'autres raisons, ... et d'autres failles.

Je vous propose de nous occuper de la troisième raison (la méconnaissance de notre potentiel et de nos processus de base), et de nous poser les deux questions urgentes suivantes: "comment apprend-on?" et "quelles sont les meilleures conditions d'apprentissage?"

Le domaine est si vaste et la complexité du cerveau est si redoutable qu'il est irréaliste de tenter d'établir une théorie que l'on pourrait appeler "une neuro-pédagogie de l'apprentissage des langues". Mais les données des neurosciences, même provisoires et incomplètes, suffisent amplement pour que nous puissions chercher à élucider les mécanismes mis en jeu dans l'acquisition d'une langue étrangère, et dans tout acte d'apprentissage.

Les enseignants - et les institutions - oublient trop souvent une réalité toute simple: c'est que le cerveau existait bien avant la première salle de classe et le premier enseignant ... aussi loin que l'on remonte dans l'histoire, aux écoles hellénistiques ou même Sumériennes. Le premier acte d'apprentissage remonte sans doute à 100 millions d'années, lorsque cet ancêtre inconnu, commun aux oiseaux et aux mammifères ... devint un animal à sang chaud. Cet ancêtre devint le maître de son système de régulation thermique: il dût apprendre à connaître et à reconnaître un environnement qui se refroidissait ou se réchauffait. Il dût s'adapter, inventer la nidation, la migration et les moyens de survivre. Apprendre, entrer en interaction, survivre, maintenir l'équilibre de la structure vivante devinrent synonymes.

En 1984 il est bon de se souvenir que l'acte d'apprentissage est, à l'origine, essentiellement destiné à maintenir l'équilibre de la structure vivante, qu'il est fondamentalement synchronie, accord de deux rythmes: le rythme intérieur de l'organisme et le rythme extérieur. L'acte d'apprentissage n'est possible que s'il y a interaction entre l'organisme et son environnement. C'est un acte "écologique" dans le sens étymologique du terme, qui, s'il n'avait déjà beaucoup servi, pourrait nous servir de bannière pour une croisade "pour une pédagogie écologique des langues vivantes" ...

N'oublions pas, non plus, qu'apprendre est un acte culturel. Chaque peuple, chaque culture a sa propre conception de ce qu'est l'apprentissage. Pour certains apprendre c'est "imiter"; pour d'autres, "agir"; pour d'autres "démontrer"; pour d'autres encore "mémoriser par coeur". Lorsque nous avons à faire à des groupes multi-ethniques, de nombreux problèmes naissent tout simplement à ce niveau.

#### Potentiel et ressources

Il est bon que les deux partenaires de la situation d'apprentissage (apprenant et enseignant), connaissent les ressources dont ils disposent pour recevoir, traiter, transmettre l'information, l'utiliser.

Peu d'apprenants et de personnes qui se plaignent de manquer de mémoire résistent au réalisme des chiffres qui les concernent:

- 30 à 100 milliard de neurones
- 16 kms de fibres nerveuses assurant les connexions et les associations qui sont la base du mécanisme cérébral
- $10^{14}$  ou  $10^{15}$  synapses, c'est-à-dire des possibilités illimitées d'établir des connexions en tous sens, à tout moment, à une vitesse pouvant aller jusqu'à 120 m/sec.

La transmission de l'information cérébrale est de nature électrochimique. Elle se propage le long des axones des neurones et passe d'un neurone à l'autre grâce à des substances chimiques, les neuro-transmetteurs. La découverte de la double nature du fonctionnement cérébral a bousculé de nombreuses croyances, rencontré de fortes résistances ... mais elle n'a pas provoqué suffisamment de questions ni de points d'interrogation sur les conditions optimales, les situations favorisant l'apprentissage, ni sur l'hygiène de l'apprentissage.

Le cerveau est une véritable usine qui fonctionne en utilisant 0 litre, 8 de sang par minute: il consomme à lui tout seul 1/5 de l'oxygène du corps, alors qu'il ne représente qu'1/50 du poids du corps. Une question toute simple: pense-t-on apporter au cerveau, simultanément à tout contenu nouveau et à toute tâche qu'on exige de lui, l'énergie dont il a besoin?

### Processus de base

On compare souvent le cerveau et l'ordinateur. L'analogie est utile pour comprendre la notion de codage et le processus de la prise d'information, de traitement et de production ou de l'utilisation de l'information fournie. Elle est exacte en ce que l'un et l'autre extraient l'ordre du désordre, reconnaissant les différences et les similitudes, fonctionnent grâce à des programmes. Mais elle n'est pas exacte en ce qu'il n'est pas possible de parler en termes "d'input" mais "d'intake" pour le cerveau, car il s'agit bien de PRISE d'information dès la perception sensorielle. Les organes des sens sont des filtres, comme le langage, comme la motivation (ou la démotivation ...), comme les expériences passées. L'individu prend (beaucoup plus qu'il ne reçoit) l'information.

L'originalité du cerveau réside en ce qu'il "ne distingue pas le software du hardware", comme l'explique J. P. Changeux. Le cerveau est capable de s'auto-organiser, développer des stratégies autonomes, anticiper les événements à venir traiter ET mémoriser à la fois simultanément. Il peut, surtout, fonctionner à plusieurs niveaux.

Le processus de base de nos activités mentales est essentiellement associatif. Notre cerveau détecte des "patterns", des relations en structures dans notre environnement. Il organise les données du monde physique en structures significatives pour lui. En effet, de multiples expériences confirment que le sens d'un document, d'une information, d'un événement, d'un objet n'est pas dans le document, l'information, l'événement etc. ... mais dans le récepteur, le spectateur, l'auditeur. Celui-ci construit un sens à partir de son expérience sensorielle, son domaine de connaissances antérieures, son système de valeurs. Ceci est extrêmement important non seulement dans l'enseignement mais dans toute communication. Ceci explique bien des incompréhensions, des malentendus, des blocages, des conflits, "A chacun sa vérité ..." comme nous le rappelle Pirandello.

Le fonctionnement du cerveau par "modules" ou, selon les termes de J. P. Changeux, par "assemblées de neurones", nous invite à ne jamais oublier qu'un cerveau qui fonctionne, et reçoit des stimuli de l'environnement s'ENRICHIT et ... inversement, dans un contexte pauvre, simplifié, filtré artificiellement ou préalablement, le cerveau s'appauvrit.

Chaque cerveau est unique, différent de son voisin: la pédagogie différenciée n'est pas une idée à la mode; c'est une réalité biologique.

Le rôle du formateur est d'ACCEPTER, de RESPECTER, de PREVOIR la diversité des réactions et des potentiels des apprenants. Son rôle est également d'éviter tout cloisonnement d'activité et toute progression linéaire, toute simplification qui sont beaucoup plus des inventions pédagogiques que les réalités cérébrales. Cela ne signifie pas qu'à un certain stade du processus de compréhension ou de traitement de l'information, l'on ne soit pas amené à classer, normaliser, trouver et établir des relations entre certains éléments. Bien au contraire. Il est construit pour extraire l'ordre du désordre, pour extraire un sens de la complexité. Le rôle de l'enseignant sera donc d'accompagner ce processus de simplification, de mise en relation, indispensable à la mémorisation, d'apprendre à l'apprenant à repérer, sélectionner, détecter, découvrir la successivité, les relations, la structure. Apprendre à apprendre, apprendre à celui qui a soif à creuser un puits plutôt que de lui donner à boire; apprendre à celui qui a faim



à pêcher plutôt que de le faire à sa place ...

### L'organisation de l'information

Le cerveau est une structure biologique à 3 niveaux. On l'oublie trop souvent, surtout lorsqu'on enseigne. On est très souvent tenté de ne s'adresser qu'à un seul de ces niveaux, le plus "noble", le plus récent à la fois dans l'évolution phylogénétique et dans le développement de l'embryon. Tout se passe comme si nous avions à notre disposition 3 types de ressources. Selon l'image qu'emploie Leslie Hart (consultant à New Rochelle, N. J.), le premier type de ressources serait un dictionnaire de poche, prêt à parer au plus pressé. Le deuxième serait une encyclopédie. Le troisième la Bibliothèque Municipale de New-York. Ces trois types de ressources, ces 3 niveaux de traitement de l'information correspondent aux 3 cerveaux de la théorie de Paul McLean (Bethesda, Maryland) qui peut se résumer par le schéma suivant:

R = Cerveau "reptilien" ou primitif:

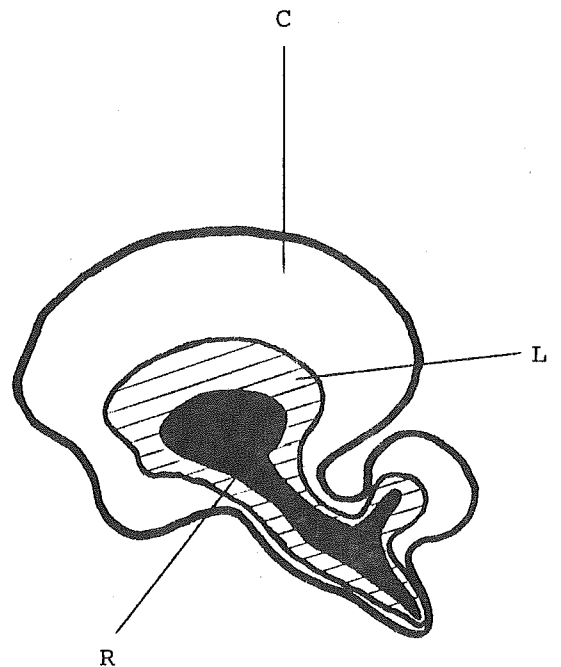
- sens du territoire
- individualité
- auto-préservation
- instinct
- imitation des prototypes

L = Cerveau limbique ou émotionnel:

- conscience et relations sociales
- appartenance, empathie
- préservation du groupe
- mémoire

C = Cortex (néocortex)

- orienté vers les stimuli externes
- discrimination sensorielle
- pensée rationnelle, séquentielle
- décisions, mémoire



L'équilibre entre ces 3 cerveaux est fragile: certains comportements (de l'apprenant et de l'enseignant) peuvent s'expliquer par la "prise de pouvoir" de l'un ou l'autre de ces 3 niveaux. L'un d'eux peut jouer la carte de la domination. Certains blocages que nous prenons pour des incapacités intellectuelles peuvent s'expliquer par un "barrage" au niveau sous-cortical. Chacun de ces 3 niveaux a un rôle et est responsable de certains comportements: L'attachement à des habitudes, à une place précise dans la classe, chez soi, le besoin de se conformer à un modèle, l'imitation de prototypes, la défense du territoire ... sont des manifestations du cerveau reptilien dont le rôle est de répondre au plus urgent, et d'assurer la survie. La peur de l'échec, de la faute, la peur de s'ennuyer, de décevoir, l'adaptation à l'environnement, l'appartenance au

groupe, le souvenir de ce qui est agréable ou désagréable sont des attitudes propres au cerveau limbique ou émotionnel. Il est indispensable à la mémorisation. La demande constante d'informations nouvelles, la prise de risques, l'exploration, l'interprétation, les vérifications, les discriminations sensorielles, la pensée rationnelle, la mémoire, les projets, la conceptualisation ... sont dictées par le cortex.

La théorie de McLean a été appliquée au Colorado par Dee Joy Coulter (Boulder, Col.) pour lutter contre l'échec scolaire et la délinquance. En partant des symptômes et signes extérieurs du comportement de jeunes adolescents en rupture de société et de scolarité, Coulter propose des stratégies d'intervention qui consistent à rompre la boucle de la réponse immédiate au stimulus. Elle entraîne ces jeunes à introduire dans leur comportement ce que Luria, le célèbre neurologue russe, appelle "la barrière fonctionnelle", c'est-à-dire qu'elle leur enseigne à retarder la réponse au stimulus, à insérer un moment, une durée très courte tout d'abord, qui s'allongera ensuite au cours de l'apprentissage, afin d'éviter une réponse réflexe (qui n'est pas la réflexion), permettre l'entraînement à l'attention et la concentration, et également l'intériorisation de la pensée, tout en diminuant l'impact d'un environnement perçu comme agressif.

Cette théorie est très utile pour comprendre et rappeler que nos pensées naissent de nos émotions: Henri Laborit le souligne également: le processus cérébral, le circuit va du limbique au cortical, de l'émotionnel au cognitif et non l'inverse. Le cerveau limbique est un véritable relais. Nos organes des sens captent des stimuli, c'est-à-dire des variations énergétiques qui surviennent dans notre environnement, qui sont transmises et conduites vers les zones corticales sensorielles VIA les deux autres cerveaux: le siège de la défense du territoire et le siège de l'affectivité.

Je voudrais insister sur la nécessité de réconcilier le cortex avec sa base sous-corticale, insister sur l'importance de reconnaître à chacun des trois cerveaux son rôle dans l'apprentissage, insister sur l'importance de ménager un contexte non-menaçant, chaleureux et enrichissant dans lequel l'apprenant se sente interpellé totalement. Ce sont là les conditions essentielles pour un équilibre harmonieux et un apprentissage efficace.

#### Activités corticales, activités langagières

Depuis une dizaine d'années, des procédés révolutionnaires ont été mis au point qui permettent de suivre l'activité des zones corticales d'un sujet qui lit, écoute, parle etc ...

On sait en effet depuis longtemps que le débit sanguin varie en fonction du métabolisme et du degré d'activité des tissus de l'organisme. Une augmentation d'activité correspond à une augmentation de consommation d'oxygène et de glucose et DONC à une augmentation de l'apport de sang oxygéné. En étudiant les variations du débit sanguin on peut localiser les fonctions cérébrales. C'est ce que révèlent les recherches de Niels Lassen et de ses collaborateurs à Copenhague. Le procédé utilisé consiste à injecter un gaz isotope radio-actif dans la carotide interne. L'apparition, la répartition et la disparition de la radio-activité (3 à 5 millicuries) sont suivies pendant une minute par un caméra à positron reliée à un ordinateur qui intègre et traduit les informations sous forme de graphique en couleur. Seule l'aire visuelle primaire reste invisible sur l'écran car elle est irriguée par l'artère cérébrale postérieure. (1)

(1) Les diapositives représentant différents idéogrammes ont été réalisées avec l'autorisation de la Revue "Pour la Science".

Certains idéogrammes intéressent tout particulièrement les enseignants de langue:

#### Idéogramme de repos de l'hémisphère gauche et de l'hémisphère droit

Il est surprenant de constater que lorsque le sujet a les yeux fermés, dans une pièce anéchoïque, c'est-à-dire sans stimulus auditif, dans une position confortable de détente, la partie frontale de son cerveau est notablement plus active de 20 à 30 % au-dessus de la valeur moyenne et a un débit de 50 % supérieur au débit des zones occipitales et postérieures. Le débit, dans ces zones, étant inférieur à la valeur moyenne.

Il est bien connu que le lobe frontal est responsable de la programmation, de la planification, de la structuration de l'information et qu'il joue un rôle très important dans la mémorisation. L'idéogramme de repos, tel que les études de N. Lassen le révèlent, indique pendant l'état de conscience éveillé, une activité très nette de programmation et de sélection. Par contre les fonctions motrices et sensorielles, dans les autres régions, ne sont pas très actives - et peut-être même inhibées.

Depuis que j'ai eu connaissance de cette recherche en 1979 lors d'un Congrès de Phonétique à Copenhague, j'ai cherché ce qu'elle pouvait signifier pour ceux qui se préoccupent de l'intégration de l'information. Il me semble que nous pouvons nous interroger sur le rythme auquel nous soumettons les apprenants lorsque, pendant un cours entier, sans relâche, nous leur apportons des stimuli visuels, auditifs, parfois kinesthésiques, et que nous exigeons qu'ils accomplissent des tâches, qu'ils appliquent des données théoriques, qu'ils "passent à l'action" immédiatement après avoir reçu l'information.

Leur laissons-nous le temps de structuration, d'évocation, de former des images mentales qui prennent place dans leur système de référence et leur système de valeurs?

I. Prigogine, Prix Nobel Bruxellois, estime que les conditions optimales d'apprentissage sont atteintes lorsque les fluctuations des ondes cérébrales sont plus amples, c'est-à-dire lorsque nous émettons des ondes alpha, plus amples et plus lentes. Il souligne également l'importance de ménager une alternance entre les moments de prise d'information "en direct" (qui correspondent à une émission d'ondes betha) et les moments d'intériorisation, d'évocation mentale (ondes alpha). Encore une fois, dans notre pédagogie, nous sommes trop pressés et tentés de nous limiter à la prise d'information sensorielle, branchée sur l'extérieur: savons-nous demander à nos élèves d'évoquer, les yeux fermés, ce qu'ils ont lu ou entendu?

Perception visuelle (idéogramme). Lorsqu'un sujet suit des yeux un objet en mouvement, le cortex visuel associatif (et le cortex primaire), la zone oculomotrice, l'aire motrice supplémentaire entrent en activité. L'idéogramme serait différent si l'objet était fixe.

Perception auditive (idéogramme). Le sujet écoute des sons neutres, des monosyllabes ou des mots: outre les cortex auditifs associatifs et primaires, d'autres zones s'activent à mesure que le langage entendu devient plus complexe. La zone de Broca (production du langage) peut s'activer bien que le sujet ne prononce rien. On voit que les fonctions langagières sont physiologiquement reliées et que l'audition n'est pas sans influence sur la parole. Ceci plaiderait en faveur d'une longue période de compréhension, de "stockage", de ce que James Nord (Michigan University) appelle "listening fluency".

## L'attention discriminative

Des recherches récentes poursuivies à Copenhague par l'équipe de Nils Lassen, tendent à prouver qu'il existe un mécanisme de discrimination sélective, qui se manifeste par une augmentation du débit sanguin, (donc de l'activation de certaines zones cérébrales (2)) lorsque le sujet est stimulé par 3 sources: visuelle, auditive et kinesthésique. Ce mécanisme est anticipatoire, indépendant de l'intensité et de la fréquence du stimulus et il dépend de la tâche accomplie. Ce qui est remarquable, c'est le rôle de l'hémisphère droit qui, au repos, manifeste une valeur de débit sanguin moins élevée (donc une activité cérébrale moins grande) mais qui, lors d'une tâche discriminative sensorielle (surtout auditive) manifeste une plus grande augmentation d'activité que l'hémisphère gauche.

La parole (idéogramme) met en activité 3 zones dans chaque hémisphère (le cortex somato-sensitif et moteur, l'aire motrice supplémentaire, l'aire auditive). La différence entre les 2 hémisphères réside en ce que l'aire de la bouche-larynx-langue est moins distincte dans l'hémisphère droit et se confond avec le cortex auditif. L'aire motrice supplémentaire est plus actives dans l'hémisphère gauche.

Les enseignants de langue seront intéressés de connaître les recherches d'Elliott Ross (Université du Texas) sur la localisation de l'expression et de la compréhension de l'affectivité. Deux zones de l'hémisphère droit, correspondant aux zones de Broca et de Wernicke dans l'hémisphère gauche, seraient les bases anatomiques de ce que nous avons longtemps appelé la "prosodie".

Il semble que de nombreuses recherches convergent actuellement pour affirmer que l'hémisphère droit est beaucoup plus impliqué dans la parole qu'on ne l'a supposé tout d'abord. Certains disent même qu'il est indispensable à la synthèse de la parole.

Lecture silencieuse et lecture à haute voix (idéogrammes) il est tout à fait remarquable de constater que même en lecture silencieuse la zone de la parole (Broca) est activée légèrement, ce qui tendrait à prouver que la subvocalisation est une réalité physiologique.

La lecture à haute voix fait intervenir 14 zones: 7 dans chaque hémisphère. C'est une activité très "riche" en termes d'activation cérébrale.

Langage intérieur (idéogramme) Lorsque le sujet compte mentalement plusieurs fois de 1 à 20, les régions frontales, dont l'aire motrice supplémentaire, sont activées, et non les aires dévolues normalement à la parole. Il s'agit donc de la représentation de la manifestation physiologique d'un phénomène purement mental.

Il me semble très important que les enseignants et les formateurs sachent que les activités langagières correspondent à des modifications locales de l'activité des neurones et du métabolisme local, mais surtout qu'elles correspondent à des circuits différents. Une autre remarque que les neurophysiologistes nous permettraient sans doute de faire est que les tâches complexes déclenchent une activité cérébrale accrue, et donc, pour que le cerveau "comprenne" le monde environnant et participe à des tâches complexes, le cortex cérébral doit être activé non seulement localement mais en totalité: c'est-à-dire que le contexte doit être "multisensoriel" et les phénomènes de synesthésie utilisés. Les recherches sur la synesthésie, et l'action complémentaire des circuits auditif, visuel, et kinesthésique ... font espérer que l'on parvienne à compenser cer-

(2) P. E. Roland localise cette activité dans la partie préfrontale (supéromésiale) du cortex. (Journ. of Neurophysiol. vol. 48, n° 5, No. 1982, pages 1059 - 78.

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tains déficits perceptifs ou de traitement (logique, linguistique ...) en améliorant la perception d'autres domaines, comme celui des relations spatiales. A Los Angeles, Marianne Frostig et Phyllis Maslow travaillent dans ce sens, intégrant les deux gestions, logique et holistique, et développant chez l'élève en difficulté la gestion qui lui manque, tout en lui laissant les "béquilles" de sa gestion initiale.

### Intention et attention

D'autres recherches menées à Copenhague, en Australie, en Allemagne permettent de penser qu'il existe une base anatomique de l'intention. Cette zone s'activerait une seconde et demi avant l'aire motrice. C'est une découverte capitale aux yeux de John Eccles, prix Nobel (1963) car nous aurions là la preuve que le mental agit sur le neural, la pensée sur le cerveau. Cela nous autoriserait à confirmer la nécessité d'une pédagogie de projet, mieux, de contrat, afin que les deux partenaires puissent prévoir, anticiper, organiser, projeter une stratégie d'apprentissage et une stratégie d'intervention.

Quant à l'attention, sur laquelle tous les pédagogues et formateurs s'interrogent, il est extrêmement difficile d'en parler sans aborder tous les domaines impliqués dans ce que Pribram définit comme étant à la fois un processus et un état. Il s'agirait d'un double processus: l'un de rétroaction (correspondant à la mise en éveil (arousal) et à la rapidité de réponse (readiness); et d'autre part à un processus de proaction, dynamique, processus d'effort qui, lui, serait de nature cognitive alors que le premier serait de nature émotionnelle et motivationnelle.

Pour Henri Laborit il y aurait également deux sortes de réaction d'attention: l'une "tonique", persistante, diffuse, sensible à l'habituation (la répétition d'un stimulus pourrait l'inhiber); l'autre "phasique", plus sélective, discriminative. Selon Laborit, 30 % des neurones de cortex visuel et auditif seraient des "neurones d'attention" qui ne répondraient pas à des stimuli répétés mais seulement à une nouvelle sonorité ou un renforcement de l'information visuelle.

Il est donc important que les pédagogues veillent à renouveler les canaux d'information, évitent les répétitions consécutives (ce qui n'exclut nullement les réactivations), éveillent la motivation en reliant la tâche demandée à l'expérience passée (c'est-à-dire rattachent l'information nouvelle aux connaissances déjà acquises), indiquant l'objectif poursuivi et l'utilité de la tâche.

### Les deux hémisphères

Les Egyptiens les avaient déjà découverts et savaient que chaque hémisphère recueillait les sensations de l'hémicorps opposé. Ils avaient conclu au rôle distinct de chacun. Des milliers de cas cliniques et d'expériences en laboratoire ont permis de dresser une carte des localisations de certaines fonctions cérébrales et des deux grands types d'intelligence ou de pensée: analytico-logique à gauche et holistique à droite ... La distinction entre l'hémisphère dit "dominant" et "non-dominant" est devenu classique: /Calcul-écriture-parole-chiffres, sons du langage-catégories-reconnaître, discriminer, sélectionner, compréhension sémantique/ sont les performances généralement reconnues à l'hémisphère gauche. /Le langage automatique, stéréotype, les sons non verbaux, les mélodies, les bruits, les rythmes - les relations spatiales - la compréhension intuitive/ sont les caractéristiques de l'hémisphère droit telles que les observations de dysfonctionnement, ou la commissurectomie les révèlent.

Il est à mon sens plus profitable de recueillir les résultats des chercheurs qui ont observé un cerveau normal, en activité normale, comme l'a fait Justine Sergent de McGill University, (Montréal). Elle apporte un éclairage nouveau au

problème de la latéralisation et aux fonctions spécifiques des hémisphères droit et gauche. Pour Sergent, la différenciation entre les deux hémisphères ne se situe pas au niveau du traitement analytique à gauche, holistique à droite, mais au niveau d'autres paramètres tels que la nature et les caractéristiques des stimuli, la durée d'exposition aux stimuli et le type de performance demandée au cerveau. Pour ce chercheur, la différence fondamentale entre les deux hémisphères réside dans le traitement spécifique de la fréquence émise par le stimulus (hautes à gauche, basses à droite); l'hémisphère droit traiterait l'information brève, l'image pauvre, de grande dimension. Il se chargerait des opérations plus élémentaires et servirait de cadre aux opérations de l'hémisphère gauche qui, lui, se chargerait du traitement des détails, des informations plus petites, plus complexes, plus riches et exigerait un temps de traitement plus long.

Nous trouvons dans les conclusions de Sergent une confirmation de la nécessité d'aller du global au structural, du contexte au détail, du général au particulier. C'est aussi une invitation à construire des programmes de plein emploi pour le cerveau, sur la base d'une coopération des deux hémisphères, dont la véritable relation est de complémentarité et non de dichotomie.

### Vers une stratégie efficace

Motivation, référence aux connaissances existantes, objectif clairement défini: trois éléments qui interpellent le cerveau dans sa totalité, corticale et sous-corticale.

L'atelier prévu à la suite de cette communication aura pour objet de proposer quelques outils pédagogiques susceptibles d'aider un formateur à repérer les causes d'échec, d'oubli, les profils d'apprentissage, les moyens de développer la mémorisation.

J'emprunterai à Paul Watzlawick une image pour conclure cette tentative d'éclairer une stratégie d'apprentissage efficace.

Lorsque nous nous trouvons dans une automobile et que nous estimons qu'elle ne va pas assez vite, nous avons à notre disposition deux moyens. Le premier, c'est d'appuyer sur l'accélérateur, c'est-à-dire d'agir directement sur l'apport d'énergie (pour le pédagogue donner un flot d'informations, d'instructions). Le second est de changer de vitesse, c'est-à-dire de s'adresser au moteur, à son aptitude à utiliser l'énergie à l'intérieur d'un certain régime, établir une relation efficace entre l'énergie et la consommation d'énergie. Ce deuxième moyen constitue un changement plus efficace que le premier car il s'agit d'un changement de comportement et non d'un changement d'état.

Les avantages de mieux connaître les mécanismes impliqués dans l'acte d'apprendre sont, pour l'enseignant, de trois sortes:

- c'est être capable d'établir le contact avec l'apprenant en tenant compte de sa stratégie, des outils qu'il utilise ou n'utilise pas.
- c'est devenir capable de déceler son propre style d'intervention et de transmission des connaissances.
- c'est se donner les moyens de jouer pleinement son rôle de facilitateur dans l'acquisition des connaissances et le développement de toutes les compétences de l'apprenant.

Pour l'apprenant, être informé de ses ressources et de son potentiel, c'est découvrir ses stratégies de réussite et d'échec. L'expérience prouve qu'une simple information sur soi-même fait céder les résistances et les freins. En découvrant sa propre gestion préférentielle et ses limites, l'apprenant pourra développer d'autres stratégies, développer d'autres prises d'information, élargir son champ perceptif.

L'histoire de Mulla Nasrudin, le derviche de la légende soufi qui cherche sa clé (perdue dans sa maison) non pas là où il sait l'avoir perdue, mais là où il y voit mieux ... (3) rappelle à l'enseignant et à l'apprenant qu'ils ont en eux-mêmes la clé qui ouvre la connaissance de leurs propres mécanismes et donc de leurs propres richesses. L'avenir de l'apprentissage et de l'enseignement dépendra de la faculté et de la volonté que les uns et les autres auront de se connaître eux-mêmes. J'aime imaginer l'enseignant dans le rôle de l'ami de Mulla, l'ami qui pose la vraie question: "Où as-tu perdu ta clé?". On ne peut aller nulle part si l'image de soi est brouillée, si l'on ne connaît pas les ressources dont on dispose, et si l'on ne sait pas où chercher ni où aller.

Notre vraie conquête n'est-elle pas de devenir ce que nous sommes? Notre seule liberté n'est-elle pas de collaborer à notre propre histoire?

(3) "There is more light here" ...

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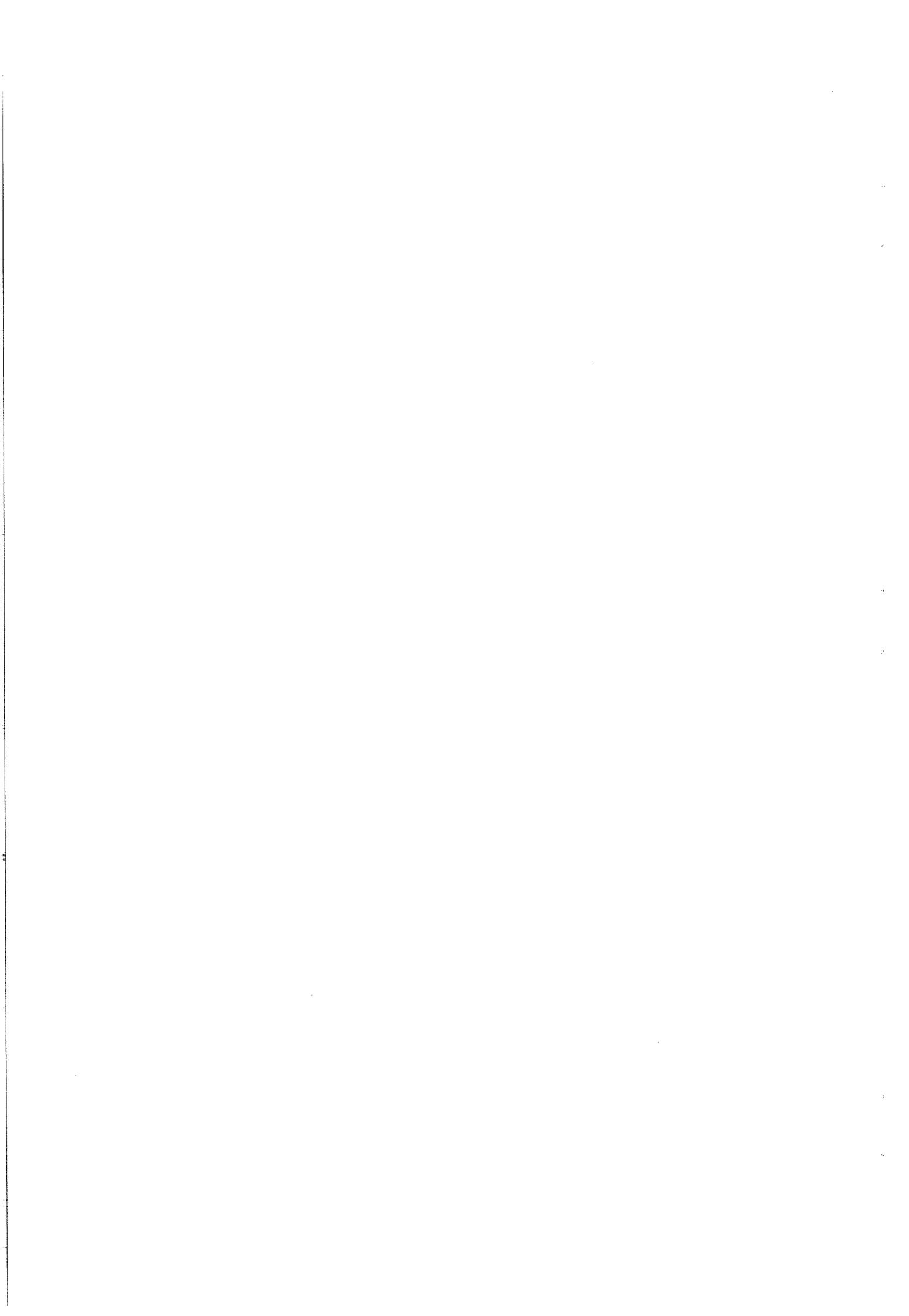
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The first type I would like to call monitored inner speech. In monitored inner speech we plan spoken utterances, we plan written utterances, we read silently, we rehearse silently, and we translate from one code into another. At the opposite end of the imaginary line is what I would call unmonitored inner speech. From a philosophical and psychological point of view this is probably the most important manifestation. It is autistic in nature and probably an existentially necessary element of our covert mental activities. Its importance is apparently taken for granted. This is among other things borne out by the fact that it has long been an accepted literary technique known as "interior monologue". Schopenhauer: "The more inner and the less outer life a novel presents, the higher and nobler will be its purpose . . . . Art consists in achieving the maximum of inner motion with the minimum of outer motion; for it is the inner life which is the true object of our interest." The quotation is from Cohn (1978) who presents an in-depth discussion of the role of inner speech in literature.

Somewhere on the line between monitored and unmonitored inner speech we find translation of utterances into meaning, articulation of the unsaid, anticipation and reconstruction.

With the exception of unmonitored inner speech, all other manifestations are of direct relevance to the learning of other languages.

Within the limited scope of this paper I would like to point to some of the more obvious uses of monitored inner speech in learning and using one's own and other languages.

#### 1. Reading

It seems that when we are reading we usually speak the text silently, that is we subvocalize.

When I am dead  
I hope it will be said  
His sins were scarlet  
His books were read.

Hilaire Belloc

Someone who smiles on reading these lines must have been subvocalizing. The more difficult a text, the more distinctly do we subvocalize. Subvocalization seems to be particularly strong when we are reading in languages other than our own. There are those who say that we read with our eyes *and* our ears (Dechant and Smith, 1977). This seems an overstatement, though a plausible one, because if we look at written texts, we can observe that they lack almost completely those auxiliary features that help us understand spoken texts. Volume, pitch, speed, fluency, etc. enable us to understand far beyond the spoken utterance as such. It is small wonder, therefore, that when we are reading we can make ourselves listen to the writer and construe meaning from the text that we hear subvocally. When we are reading the text of a speech that was made by a well-known politician, for example, somebody whom we hear almost every day on radio and television, we can internally hear his voice read the text. Esper (1973) speaks disparagingly of "processes i. e. inner speech which occur particularly and perhaps peculiarly in persons who lecture and write books". But maybe he, too, would have smiled reading Belloc's lines. It seems plausible that we should make the fullest possible use of the potentials of our mind when we are involved in the study of language and languages. Also the ordinary language learner is involved. If it is true that sound features help us extract meaning from an utterance, we are justified in concluding that we should listen to and imitate spoken models of written text in order to become effective readers. In practice this means that listening to texts read by competent native speakers and reading texts aloud are any-

thing but trivial exercises. Such exercises help us speak internally in other languages.

2. Rehearsing

Learning a text by heart and rehearsing it overtly and covertly is a special way of planning spoken utterances. We still do this when we have an important speech to make in circumstances where reading from a manuscript is not socially accepted. We used to do this at school at a time when we took for granted that learning demanded a certain measure of effort. Jill Johnson (1984) in an article entitled "Speaking, the inefficient language-learning strategy" suggests "why not plunge straight in with that major speech you would like to give in the foreign language ... Of course, you could not write it yourself but you have an informant to produce your text for you, to record it for you so that you have a model to imitate, and to help you rehearse it". Such exercises could be done under the rubric "What I always wanted to say in English but never got around to".

3. Internal Translation of Utterance into Meaning

A well-known contemporary German philosopher (Stegmüller 1975, pp. 64 - 65) thinks it a scandalous shame that we should have had to wait 2500 years until J. L. Austin discovered that we can do things with words and how we do it. Since Austin (1962), speech act theory has been elaborated by Searle and many others. Their novel way of looking at the uses of language will probably be regarded as a major breakthrough in linguistics in the 20th century.

To my knowledge, speech act theorists have never associated concepts like illocutionary intent with the phenomenon of inner speech. However, it seems to me quite plausible to do so. When a hearer is told "This room is sound-proof" he knows that he is actually being told something else; he also knows that he is supposed to know that he is expected to draw an inference from the statement of fact; he is aware that it is the inference that is the real message. Our knowledge of the world tells us that a possible meaning of the statement is "We can talk here". We would consider it conversationally appropriate if the hearer responded by saying "You mean we can talk here?" By articulating the inference he may want to make sure that he has inferred what he thinks he was intended to infer. I suggest that even though the inference may not be articulated in outer speech, it is articulated as a planned utterance in inner speech. What we are assuming here is that people can and do perform complex mental operations very rapidly, generally unaware of the details of what they are doing. "This assumption may be objectionable to those who reject the idea of mental operations altogether or to those enthusiasts of introspection who believe that every mental state is subject to its possessor's awareness. We know of no way to appease dogged behaviourists on the one hand or die-hard Cartesians on the other hand and can only challenge them to account for people's ability to identify communicative intentions without appealing to such complex cognitive processes as those we are assuming to take place" (Bach and Harnish, 1979, p. 92).

In learning to speak another language, exercises that consist in overtly translating utterances into meaning and vice versa should be effective because they meet a number of significant criteria. They are:

- serious because we cannot but recognize that this is one of the important ways in which we use language. Anyone will agree that the question "Do you have a coke" could well mean "I am thirsty. Please give me a coke"; also he would agree that a hearer's appropriate response might be to go and get a coke. It would be considered conversationally inappropriate if the hearer answered "Yes, I do" and left it at that. It would be appropriate, however, if the hearer verbalized presupposed shared knowledge about the circumstan-

When somebody means ...	(s)he might say:
I want you to turn on the light.	It's getting a little dark in here.
You're responsible for what I do.	You're the boss.
I'm going to say something that I think is very important.	Could I have your attention, please.
I'm not going to wear any of the dresses I have.	I don't have a thing to wear.
I don't want you to drop the ash on the floor.	There's an ash-tray on the table.
I should warn you that the hotel is very noisy.	The hotel is conveniently located in the center of Santa Cruz.

#### 4. Articulating the unsaid

So far I have discussed utterances and the hearer's possible reactions to them. Internal reactions often consist in translating an utterance into meaning. We have seen that we are even capable of verbalizing hypothetical internal reactions to hypothetical utterances. The fact that we can do so justifies the assumption that we have so-called scripts stored in our memory which enable us to construe plausible patterns of verbal behavior.

I can now go one step further and include overt responses in our discussion.

We have looked at the utterance "I live in an unsafe neighborhood." It seems there are three different types of overt response possible to this utterance:

##### 1. Utterance-related Direct Response:

S: "I live in an unsafe neighborhood."  
H: "What part of the city is that?"

The hearer has not yet made up his mind whether to respond to the speaker's meaning ("I want you to see me home") or not. He's hedging, i. e. he has resorted to the gambit of literal comprehension.

##### 2. Meaning-related Direct Response:

S: "I live in an unsafe neighborhood."  
H: "That's no problem. I'll see you home, of course."

The hearer indicates that he has understood the speaker's message ("I want you to see me home") by offering to do what she wants.

##### 3. Meaning-related Indirect Response:

S: "I live in an unsafe neighborhood."  
H: "My car is parked around the corner."

By saying something else, the hearer signals to the speaker that she is to translate his overt response into: "I'll see you home."

Such exchanges are easy to find:

S: *"My car's gone dead on me."*  
H: *"The buses are still running."*

(S's meaning could be "I want you to drive me home in your car." H wants S to understand "I don't want to drive you home" by saying "The buses are still running," from which his real meaning can easily be inferred. H could also respond to the literal meaning by asking "What's wrong with your car?" H could respond direct to S's meaning "I want you to drive me home" by saying "I'd take you home, but your place isn't on the way", meaning "I don't want to drive you home.")

S: *"I can get more beer from the cellar."*  
H: *"I have an important talk to give early in the morning."*

S: *"The Giants are on TV tonight."*  
H: *"The lawn needs sprinkling."*

S: *"Shall I take off my clothes?"*  
H: *"There's a hook on the door."*

Having the student formulate what the communicants did not articulate seems a worthwhile exercise because the student must go through the stages of planning an utterance internally, taking into account the script of the situation as he can recall it from his own experience.

What Wendell Johnson (1962, p. 108) wrote about learning to write can be applied to learning to speak. We could say, then, that trying to learn to speak by learning to say what has already been said is much like trying to learn to bake a cake by eating one, instead of by watching the baker.

The staleness of over-explicit textbook dialogues could perhaps be avoided by observing the rules that seem to govern real-life exchanges. We would then get dialogues in which little is said and a lot is left unsaid. The learning task would be to verbalize what had not been said. In doing so the students would be drawing on their own knowledge of the world, which could be more motivating than repeating or saying in other words what has already been said by somebody else, whether it is a teacher or the author of a textbook.

How we can say what we say can be determined by scripts, patterns of thought and communicative intent, to mention but the most important factors. Using a very simple classification, I suggest that scripts and patterns of thought can be universal, culture-specific, and idiosyncratic.

Culture-specific differences with regard to scripts can be sources of irritation.

When Germans who have happened into an American restaurant overlook, or do not understand, the sign "Please wait for the hostess to seat you" and make a bee-line for an unoccupied table, they are fairly certain to be stopped by a lady whose job it is to seat patrons according to what appears to be some secret master-plan.

Irritation can turn into ill-feeling or even hatred when it comes to differences in patterns of thought. "Mutual understanding and peaceful relations among the peoples of the earth have been impeded not only by the multiplicity of languages but to an even greater degree by differences in patterns of thought - that is, by differences in the methods adopted for defining the sources of knowledge and for organizing coherent thinking." (Glenn, 1962)

Imagine a German in America, who has just fallen down the stairs and broken a leg, being asked by an American "Are you o. k.?" The German would probably interpret the question as ironical. He would not know, if he had never been told, that the question is meant to convey genuine concern. In return, an American might feel insulted by a German's statement "Was Sie da sagen, kann ich nicht glauben," because he would feel he was being asked to translate it into "You are a liar." If the German was told why the American felt insulted, he would probably be surprised, since all he had wanted to signal was bewilderment.

"The concept of communicative competence must be embedded in the notion of cultural competence, or the total set of knowledge and skills which speakers bring into a situation." (Saville-Troike 1982, p. 23).

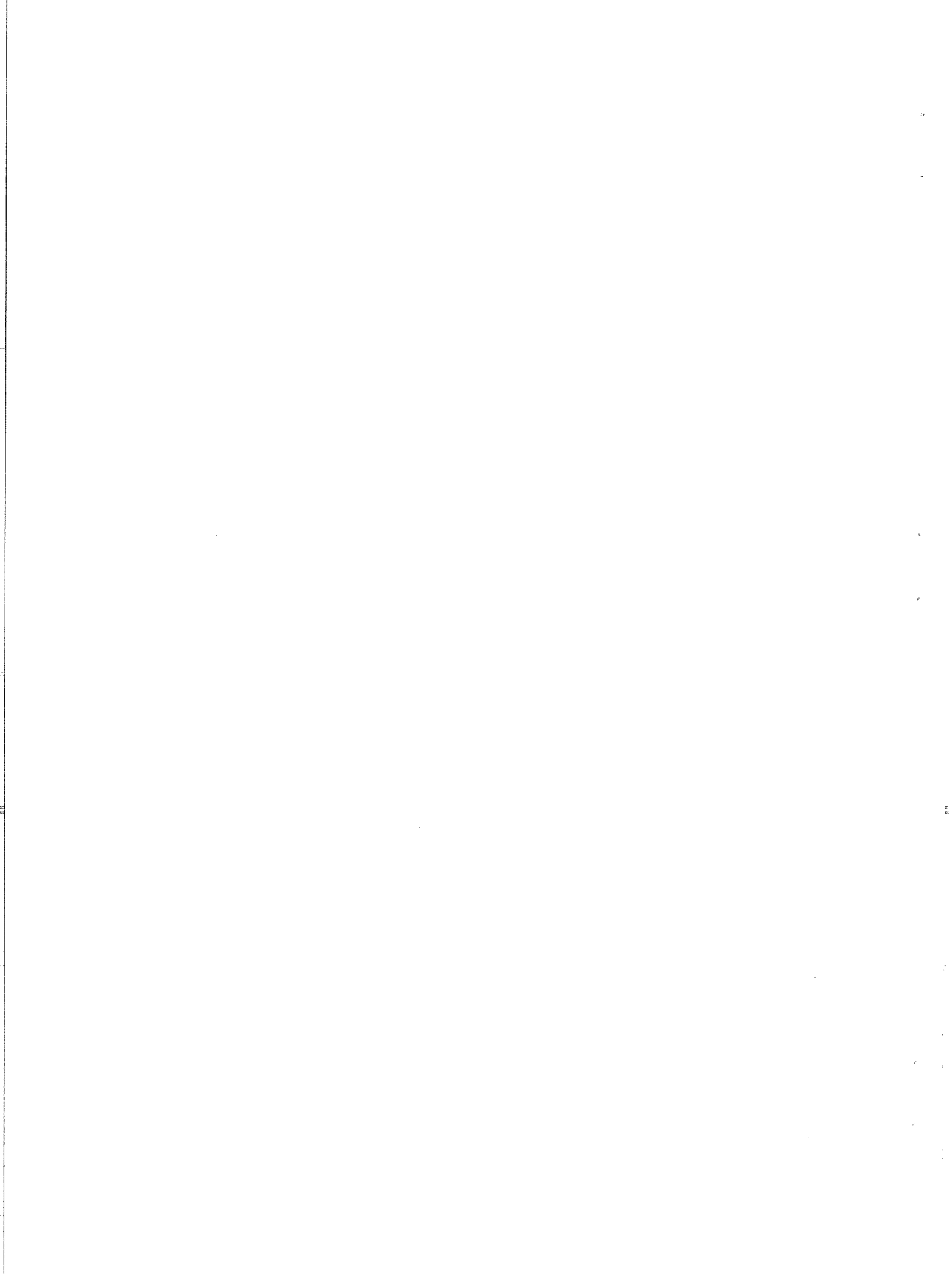
I have mentioned the notion of cultural competence because it seems to be the common denominator for our efforts.

I feel that our search for new ways to learn other languages is a never-ending task because, in the contexts in which we teach, there can be no one way. We dislike the well-trodden path. The familiar bores us. This is probably because being able to communicate in other languages is rarely felt to be a basic survival need. It is rather considered a skill which has its social and professional merits and which is therefore nice to have. As language teachers we are not like the cooks who feed the grateful hungry but rather like chefs in expensive restaurants who have to make a living by continually inventing new or modifying old recipes in order to whet the appetites of those who would otherwise not eat. We know, of course, that the basic ingredients always remain the same.



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## Proxemics and Kinesics

Maire O'Reilly

### Communication

Communication is what language teaching is all about. Therefore, let me define what I shall mean by that term.

To do this, I shall borrow the word "transaction" from Transactional Analysis. What is a transaction? When one person says, "hello", and another answers, then there is a transaction. When one person says, "hello", and the other does not answer, what then? There may be two reasons for this: either the second person did not hear the first, and in this case there is no transaction; or else, he did hear the first, and chose to ignore the greeting. In this latter case, if both persons are aware of the snub, then there is a transaction.

The essentials for a transaction are (a) an attempt at communication, which is recognized by the parties concerned, and (b) a reaction to the attempt, which is also recognized by both parties. Transactions do not depend on speech, as when one person smiles at another and gets a smile in return. As long as both people are aware of the communication circumstances (i. e. attempt + acceptance, or attempt + rebuttal), then a transaction takes place.

A transaction is not a mere interaction, since it requires that both parties be aware of all of the stages of the process, and also that each be aware that the other is aware. In a simple interaction, each may be aware of the spoken "hello": however, it is possible for the person speaking not to know whether the person being spoken to can hear.

As soon as we make the distinction between interaction and transaction, it becomes clear that (1) more real communication takes place during transactions, and (2) in order to maximize transaction possibilities, a study of distance is essential.

### Proxemics

Proxemics is a neo-science which sprang up in the United States, largely as a result of work carried out by an anthropologist, Dr. Edward T. Hall. It has to do with the way people structure space, and with the ways in which a set spatial arrangement will affect behaviour.

Proxemics is not an exact science, variations being dependent not only on culture, but also on individual personalities within a given culture. However, a certain number of facts seem to be applicable to everyone.

Each of us needs a personal safety zone, a little area of the world which we alone occupy, and within which we feel secure. Based on the work Dr. Hall did with North Americans, he has worked out a plan of distances radiating from the individual as these relate to the type of communication which is likely to take place.

With the person in the centre, moving out to a radius of 18 inches (47 cms), we have intimate space. This area is not encroached upon, except by invitation, the exception being when you happen to be in a crowded place which makes it impossible to respect such a distance. Travelling on the underground during rush hour, people are jammed into the trains cheek-by-jowl, without ever a thought for the intimate space of the individual, aren't they? Yet, a survey of general body language in such circumstances will immediately demonstrate

that everyone is conscious of a certain element of taboo about being so close to other human beings. Muscles are stiff; faces are blank; eyes stare into space, never focusing; and nobody - but nobody - stands directly facing anyone else! Body language, a term coined by Julius Fast, is used here to communicate in no uncertain manner that the proximity is not freely chosen, and is merely being tolerated for the duration of the journey.

Between 18 inches (47 cms) and 4 feet (125 cms), lies the personal space. Within this area, transactions are likely to be of a personal, friendly, conversational nature. This distance range is naturally chosen by those wishing to chat to each other, or by those who know each other fairly well. It is normally too close for those who don't know each other, though it can be imposed, as at a cocktail party. When this happens, then kinesics will adjust matters, just as happens on the underground. People will stand slightly sideways, often talking over your ear instead of directly to your face. This can be misleading, since some cultures teach that anyone who does not look you straight in the eye is dishonest. Even so, too much of a good thing can also be deceptive. It is a harrowing experience for an American to have an Arab park himself directly in front, and to literally breathe on you while carrying on a conversation; yet, all the poor Arab wants to do is show his good manners.

It is perhaps important to note for the purposes of language teaching that, whilst students working in groups with planned and interesting materials usually enjoy the course, a prolonged period of time spent in personal space with people you don't know very well tends to drain energy. This makes a good case for careful timing of different types of classroom exercises with a view of maintaining an optimum level of assimilation.

Social spaces fall between 4 (125) and 12 feet (375 cms). The closer you are to the individual, the more informal the social communication is likely to be. Formal communications (usually of an interactional nature) take place further away. Superiors haul subordinates over the coals at about 12 feet, but it's very difficult to bawl somebody out at 4 1/2 feet unless you are preparing for physical aggression, or - and this will bring us to the realm of kinesics - unless you are appreciably taller than he is.

Whatever the spaces, up to 12 feet, transactions are probable, the exact nature of the communication in a particular case not infrequently being dictated by the distance you have to maintain between yourself and whoever you're transacting with. However, outside of the 12 feet limit, you move into public space. There, by definition, communication in the sense of transaction is no longer possible. What takes place at 12 feet or more comes under the heading "interactions", a mere dispensation and clarification of information.

### Kinesics

Less easy to define than proxemics, kinesics covers body language in general; the way you "feel" physically in relation to the world around you. This neo-science is the brainchild of Dr. Ray Birdwhistell, who has honed the business down to the point where he talks about "kines" and "kinemes", likening language of the non-verbal to the verbal variety.

Kinesics compensates for the visual possibilities presented by distance, for instance. Looking straight in front of you, you can actually see a certain area, moving away from you and out on either side, to form a triangle with your head as one of the points (angles). Yet, you are aware of a great many people and things which do not fall within the scope of that triangle. What you can physically see falls within your span of vision. What you are aware of covers your span of actual vision plus a great deal more, picked up by kinetic "antennae" from peripheral stimuli (music, noises, colours, movements, etc.). This wider

area is called our span of perception.

An adequate discussion of the span of perception and peripheral stimuli is beyond the scope of the present paper. I will limit myself to topics relating to the span of vision and body language.

### Avoiding the double bind

It's not for nothing that we say, "Actions speak louder than words". A sure way of driving someone mad is to constantly behave in a way which belies your actions. For example, imagine a husband slapping his brow on a Thursday evening, complaining that there isn't enough money to pay the bills ... then coming home on a Saturday afternoon with the base for a garden fountain tied to the roof of his car, because the garden would look nice with a fountain! Or, closer to the job in question, imagine an administration imposing a particular "teaching" method, and demanding that the teacher "teach", when in fact the method is designed to be used by a group dynamist ... and will not work if you try to "teach"! In both of these situations, the person on the receiving end of the confused verbal/non-verbal signals is caught in a double bind, no-win situation. If you do what the words indicate, the non-verbals make you feel guilty, angry, miserable, or whatever; if you behave according to the non-verbals, you lay yourself wide open to criticism of a verbal variety. In such situations, of course, the gut reaction will always be to the non-verbal information. What we want to do is to ensure that we don't inadvertently set up double binds in the classroom.

Our personality and modes of behaviour are not totally separate from our physical appearance and general presentation, even though we frequently treat them as such. Rather, they are twin aspects of the same entity, the individual. Because Western cultures teach us very early on not to pay overt attention to things physical, we are inclined to be largely unaware of the tremendous impact body language can have, and of the great gap which sometimes exists between the message we give verbally and that which we are getting through by non-verbal means.

Dr. Abraham Maslow is known for his pyramid of human needs. All of these needs exist simultaneously. However, once those lower down the scale have been satisfied, even for a brief period, those higher up will claim attention. A much-simplified version of this pyramid goes from bottom to top as follows: biological needs; security needs (both physical and emotional); social needs or need for self-esteem; need for independence; and, finally, the need for self-realization.

In a foreign language class, with students of an elementary level, where only the target language is acceptable, we find (1) the individual is deprived of his usual means of communication; (2) the emphasis is shifted heavily in the direction of non-verbal elements of communication; (3) the (culturally) unacceptable weighting on the side of physical aspects of communication causes stress; (4) the student is, therefore, likely to spend much of his time in the zone of security needs, and these will be mainly of an emotional nature. This latter point has frequently been called infantilization, the regression common in discussions about Suggestopedia.

Logically, the only person to whom a student can look for emotional security is the teacher in traditional classroom settings. So, let's see the sort of thing which might need adjusting to maximize the probability of the right transaction taking place.

From the point of view of distance, if the teacher is more than 12 feet away from any student, then sustained transacting cannot be expected. The most we can hope for is a series of interactions which will, in the long run, allow the student to acquire enough knowledge, in a linear fashion, to meet the stated

class objective. This doesn't look very bright for those objectives requiring ultimate verbal skills. Too great a distance (i. e. more than 12 feet) between teacher and students will, in addition, create and/or maintain the feeling of "the teacher" and "the taught" ... which is not the atmosphere most conducive to learning speaking ability in a foreign language.

If another member of the class is within an individual's personal space, this will facilitate personal conversation, on the strict condition that both have been adequately prepared for the exercise. If they have not, then the lack of essential verbal elements will again place the emphasis on the body, and the resulting discomfort will sharply decrease the ability to assimilate.

If the teacher occupies a student's personal space, then there will be a marked increase in tension unless the teacher takes steps to (1) put himself at the student's eye level, and (2) talk to the student without letting the entire class overhear. Failure to do either of these things will aggravate the audience effect, and may well paralyse the unfortunate student.

Suppose that you stand inside someone's personal space, and the student you're standing beside is sitting down. Not alone does he have to contend with an "invasion" of his territory, but you are physically adopting a position which obliges him, literally, to look up to you. This carries with it a certain degree of intimidation for the student. It is very difficult to take a firm stand against someone standing over you.

The American psychologist, Virginia Satir, says that there are five basic modes of behaviour, and each one has a characteristic physical setting. Standing looking down at someone is a position which corresponds to Blamer mode, whilst looking up goes with the Placator. This is not to say that anyone looking down can automatically be said to blame. However, it does mean that, given the close tie between physical reality and behaviour, if you adopt a position associated with Blamer, then sooner or later you are likely to find yourself adjusting your behaviour to fall in with your physical position. The same is true for the Placator.

To illustrate the close connection between behaviour and body position, get a friend to do this exercise with you. One of you adopts the body posture and facial expression which goes with being angry, really furious. The other adopts the posture and facial expression that goes with being very happy, smiling. Now, the one who "looks" angry has to act as though he were very happy, while the one who "looks" happy acts as though he were angry! Try a conversation like that. You'll find it impossible.

To come back to our student, with requirements in the area of emotional security and a teacher operating in Blamer mode (or perceived as operating in this mode), then the student's tension is increased, with the corresponding decrease in learning ability.

It is useful to note that Blamer mode triggers off Blamer or Placator in the other person or persons involved in the communication process. Blamer-Blamer interaction cannot really be said to be anything resembling communication, since it is usually a screaming match in which neither will give an inch. Blamer-Placator is an endless round of perceived threat and inability to take a stand. If the Placator happens to be the teacher, then he becomes more interested in forestalling imagined disasters than in teaching; if it's the student, then the teacher can sometimes feel that he needs a stick of dynamite to get things moving, or can adopt Blamer mode, in which case he persecutes. This sort of polarization is most undesirable in a group of adults needing security.

### Eye contact

No mention of proxemics and kinesics would be complete without special attention being paid to eye contact.

A man called Dr. Adam Kendon concluded from his studies that the eyes act as a set of traffic signals in conversation. If a speaker pauses and looks away from the listener, then the listener will assume that the speaker is working out what to say next and will wait for him to continue. If the speaker pauses and looks at the listener, then the listener will take this as his cue to act ... either to give some sign of having heard what was said, or to start speaking himself. In cases where clear eye contact is not possible between the speaker and listener, as when either or both wear dark glasses, then there is a substantial increase in (1) hesitations, (2) restarting sentences or rephrasing them, and (3) cases where both people speak at once.

As points (1) and (2) are both used as indications that a learner is less than perfect during an analytical test of speaking ability, one might well ask to what extent the physical setting of the test is not partially responsible for lowering a grade. Are we marking students below the level which their real ability, in normal conversational circumstances with clear eye contact, would warrant?

Eye contact is essential if transacting is to be made possible. In cases where you cannot read eye signals clearly, you run the risk of responding to cues inappropriately, and the further risk of being unaware that you are doing so. This is most unsettling. A simple illustration might be that of a person waiting for a bus. He sees one in the distance, and thinks it's a No. 78. When the vehicle gets a bit closer, it looks more like a 75. However, there comes a critical point at which he sees that it's a No. 73, and only at that point is he in a position to decide whether to stop the bus or not. So it is with eye signals.

Quite apart from a distance which might permit clear eye contact, the placement of students and the exercises they are asked to do are very often completely out of alignment with what takes place under ordinary conditions of communication. You would not normally turn to a person fifteen feet away and ask whether he was in the habit of getting up at seven. Still less would you speak to the back of someone's head in an attempt to ascertain whether he had steak for lunch. And yet these are precisely the sorts of things which teachers in language classes ask their students to do with bits of memorized text! It would make so much more sense to shift the physical arrangements, given that the content of a course is not always open to discussion.

### Conclusion

What we want to do, then, is to create a situation which takes due account of all of the components of the communication process, and which allows them to mesh together naturally. To do this, it is not enough merely to train language teachers to know the target language better than their students. We must always inform them of a number of fundamentals in the area of simple human communications, and this is a critical requirement in the case of teachers having to deal with classes made up of different nationalities. But let us not forget, in any case, that one of the most sought-after qualities in a foreign language teacher is that he teaches his mother tongue. This, in itself, makes for cross-cultural confusion.

In 1982, I carried out a study into reasons for loss or lack of motivation in language learners. Of forty-two specific points listed, only fourteen related in any way to course content, materials or particular teaching strategies. All of the others were concerned with how the learners felt in class. Proxemics

and kinesics deal in a very concrete way with how people feel. The practical information which can be obtained by a study of their application in the classroom, if put to use, could go a long way towards ensuring that the way the students feel is best calculated to allow them to learn.



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Quelques Aspects du Développement de la Capacité d'Abstraction  
selon PIAGET et MAISTRIAUX

J. Besure

INTRODUCTION

La fonction d'enseignant place ses titulaires devant plusieurs méthodes pédagogiques, notamment les méthodes actives, les méthodes didactiques ou ex cathedra, les méthodes d'enseignement programmé et les méthodes intuitives utilisées par les adeptes de l'éducation selon la nature. Ceux-ci affirment qu'il faut partir du connu pour aller vers l'inconnu, du concret vers l'abstrait. Maistriaux, ancien chef de la chaire de Psychologie à l'ERM\* et Piaget (1), célèbre au niveau mondial, ont clairement démontré que le pouvoir d'abstraction ne s'acquiert que très progressivement et que les niveaux atteints varient considérablement selon les individus. Dans le cadre de cet exposé nous ferons ressortir l'importance des méthodes actives dans l'enseignement, celui des langues en particulier. Le Professeur Van Passel a mis l'accent sur la nécessité de recourir à de telles méthodes lors de son exposé du premier jour. C'est par la pratique assidue d'une langue, a-t-il affirmé, que l'on parviendra progressivement à maîtriser celle-ci.

Nous ferons une approche des théories des deux auteurs précités en ce qui concerne l'acquisition des conduites intellectuelles concrètes et abstraites. Nous développerons surtout la théorie de Piaget à ce propos, Maistriaux étant d'accord pour l'essentiel avec celle-ci. Nous mettons sciemment l'accent sur le terme d'approche car la production écrite de Jean Piaget atteignait à la fin 1966 le volume de 20.000 pages publiées.

Loin d'être exhaustifs, les aspects des théories Piagétienne et de Maistriaux que nous allons examiner veulent cependant illustrer et souligner la nécessité d'avoir recours au concret dans les activités pédagogiques et notamment dans dans la pédagogie des adolescents, voire des adultes à l'université et surtout à l'armée où il est indispensable de fixer des objectifs didactiques en termes d'activités observables. Il est tout aussi important, dans l'enseignement des langues, de connaître le niveau intellectuel de l'auditoire auquel on s'adresse.

Notre exposé comportera deux parties. La première fera ressortir l'enrichissement progressif des concepts durant l'enfance et l'adolescence. La seconde, plus succincte, mettra l'accent sur les propriétés intellectuelles qualitatives concrètes et abstraites relevées par Maistriaux lors de l'élaboration de son système caractérologique basé sur l'utilisation de questionnaires. Il distingue, en effet, deux grandes dimensions qualitatives dans les conduites intellectuelles: la généralisation et la particularisation.

1. L'acquisition des opérations symboliques et abstraites.

Nous précisons tout d'abord la définition de quelques concepts utilisés par Jean Piaget et nous soulignerons, d'ores et déjà, que les indications d'âge relevées par le savant suisse sont toujours des estimations moyennes. Les âges donnés servent à fixer les idées et non à établir des normes de développement.

a. La fonction symbolique à son début.

Piaget appelle "fonction symbolique" la capacité d'évoquer des objets ou situations non perçus actuellement en se servant de signes ou de sym-

\* Ecole Royale Militaire

boles. Il adopte cependant l'expression "fonction sémiotique" puisque, affirme-t-il, le symbole n'en constitue qu'un cas particulier, à côté du signe, et que le terme "sémiotique" se réfère à l'ensemble.

Les fonctions sémiotiques permettent toutes, à des niveaux d'abstraction différents, de désigner un ou plusieurs objets par "autre chose". On dira que ces objets sont signifiés par des signifiants. Parmi ceux-ci, Piaget distingue trois groupes: les indices, les symboles et les signes.

L'indice est une partie du signifié même. Ainsi, un signal particulier - tel que les pas de la mère qui annoncent le repas - est un indice qui fait en quelque sorte partie, dans le temps et l'espace, de l'objet, c'est-à-dire le repas. Le signifiant ne se distingue donc pas nettement du signifié.

Le symbole est défini par Piaget (selon un usage des linguistes utile à suivre en psychologie) (2) comme impliquant un lieu de ressemblance entre le signifiant et le signifié.

Le signe apparaît comme un signifiant complètement détaché du signifié; il est arbitraire et conventionnel dans la mesure où il comporte le langage, l'écriture, les notations mathématiques, etc. Jean Paulus est aussi de cet avis (3).

Piaget et Maistriaux voient la marque de la pensée naissante lorsque le jeune enfant parvient à différencier les signifiants des signifiés. Le propre de la fonction symbolique est en effet de permettre la représentation du réel par l'intermédiaire de signifiants distincts des choses signifiées. Aussi, vers deux ans, le langage s'acquiert-il dans le même temps que se constitue le symbole (4). L'emploi de signes verbaux et de symboles suppose donc une aptitude toute nouvelle qui consiste à représenter quelque chose par autre chose.

#### b. L'explication génétique de PIAGET.

La psychologie génétique se propose d'expliquer le fonctionnement des procédures d'adaptation les plus généralisables, c'est-à-dire le fonctionnement intellectuel, par l'étude de son développement chez l'enfant. Pour Piaget (5), "le développement de l'intelligence constitue un prolongement des mécanismes biologiques d'adaptation. Ceux-ci permettent aux organismes de s'adapter à leur milieu matériel, physico-chimique, par exemple en assimilant les substances nutritives qu'ils y trouvent ou en s'accommodant aux différences de températures. Le développement de l'intelligence généralise ces possibilités d'adaptation".

#### c. Les stades du développement.

Au cours de son développement, l'enfant parvient à se libérer de plus en plus des limitations imposées par le réel. Celui-ci est essentiellement individuel et concret. L'environnement réel permet à l'enfant de construire un système opératoire complexe et flexible grâce aux actions exercées sur les objets. Le jeune adolescent parviendra à se détacher progressivement des contraintes du monde matériel et des liaisons spatio-temporelles. Ce développement graduel de la fonction symbolique et d'abstraction suit une série de stades qui se suivent toujours dans le même ordre.

Les tableaux les plus succincts parmi les différentes versions des stades dans l'oeuvre de Piaget sont ceux de 1966 et 1967. Les principaux stades qui apparaissent sont les suivants: le stade sensori-moteur, le stade des

opérations concrètes avec une phase préopératoire (comportant le développement des fonctions sémiotiques et une phase des opérations concrètes proprement dites à partir de 7 - 8 ans). Le dernier stade est celui des opérations formelles et de l'apparition de la pensée abstraite et scientifique.

d. Le stade sensori-moteur.

Ce stade s'étend de la naissance à l'âge de deux ans environ (6). Il se caractérise par le passage des activités réflexes à des activités volontaires où les perceptions sont mises en coordination avec les activités du sujet.

Sur le plan d'une activité pratique, l'enfant parvient à coordonner les moyens dont il dispose avec les buts qu'il se propose d'atteindre. Il acquiert la capacité de se déplacer de manière efficace et de faire des détours ainsi que de manipuler des objets.

Il découvre ainsi les propriétés de ceux-ci. Il acquiert aussi des schèmes, c'est-à-dire ce qu'il y a de généralisable et de transférable dans une conduite. Le schème de la préhension, par exemple, s'enrichit progressivement. Inversement, l'enfant découvre qu'à un objet particulier on peut appliquer une série de schèmes, tels que regarder, lancer, prendre ... Cette articulation de l'univers est essentiellement pratique et ne permet pas encore l'établissement de concepts, abstraits par essence, ou de représentations organisées.

La période où l'enfant devient capable de former des concepts qui correspondent à la définition adulte de ce terme (7) est précédée d'une étape préconceptuelle. L'acquisition systématique du langage débute vers la fin de la seconde année ainsi qu'on l'a déjà dit (8). Dès l'apparition de celui-ci jusque vers 4 ans, l'enfant utilise des préconcepts. Ceux-ci sont des concepts simplifiés, des notions attachées par l'enfant aux premiers signes verbaux dont il acquiert l'usage. Son raisonnement obéit à un principe que Stern a appelé la transduction c'est-à-dire le mode de réflexion allant du particulier au particulier. L'origine du préconcept se trouve "dans la pauvreté des aspects que l'enfant parvient à manier mentalement (9).

Il perçoit certains traits qu'il reconnaît identiques dans certains objets qu'il peut rencontrer. Mais il ne parvient pas à y joindre clairement la notation complémentaire de la multiplicité de ces objets ou de leur identité dans le temps et l'espace. L'enfant prend donc pour absolue sa perception propre et immédiate (10).

Piaget (11) rapporte que de nombreux jeunes enfants croient que le soleil et la lune les suivent dans leurs déplacements. Ils sont très embarrassés quand on leur demande si ces astres accompagnent aussi d'autres personnes. Si au cours d'une promenade un enfant rencontre des limaces, il affirmera indifféremment qu'il a perçu "la" ou "les limaces" sans décider si les limaces rencontrées au cours d'une même promenade sont un seul individu ou une classe d'individus distincts.

Au niveau préconceptuel cependant, l'enfant devient capable de se servir des instruments de la représentation (le langage, le dessin, ...) mais il ne dispose pas encore d'une pensée "logique" proprement dite, qui débute vers 7 - 8 ans (12). A partir de ce moment, des abstractions plus riches deviennent possibles. Mais elles restent limitées. Elles peuvent porter sur des propriétés particulières des objets. Il s'agit là d'abstractions

simples pour Piaget. Celui-ci parle "d'abstraction réfléchissante" lorsque l'enfant peut raisonner à partir des propriétés liées aux actions.

e. Le stade des opérations concrètes.

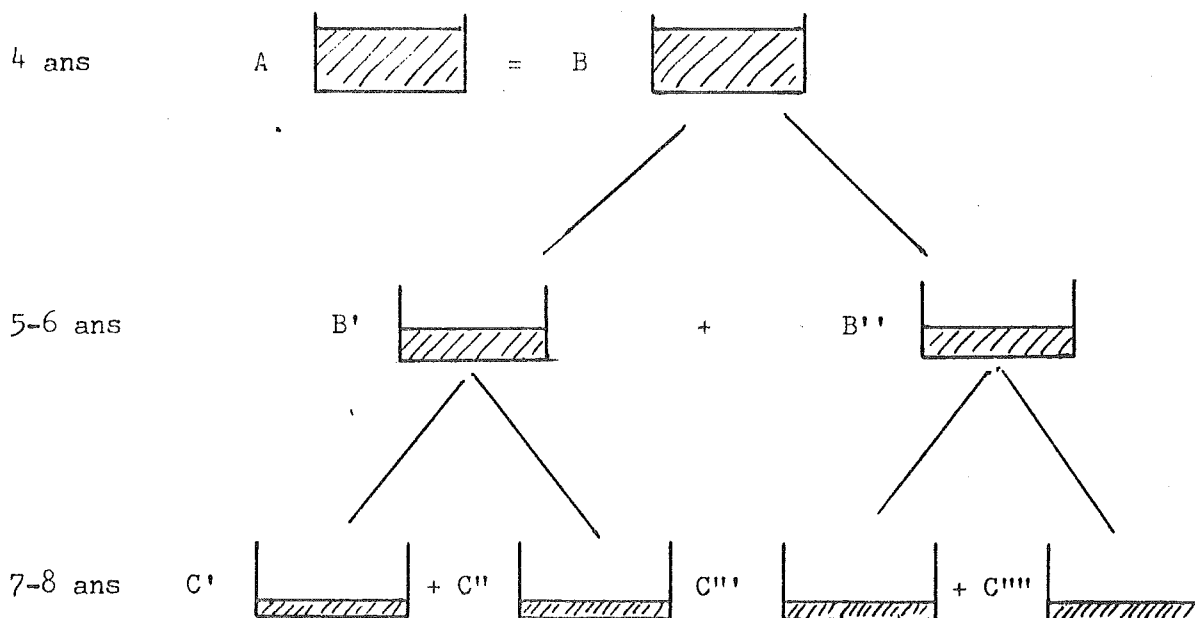
Le stade des opérations concrètes s'étend jusqu'à l'âge de onze-douze ans. Il comporte des subdivisions.

1) Durant la phase préopératoire (de 2 à 7 - 8 ans), l'enfant devient de plus en plus capable de se représenter des actions par intériorisation. Les premières opérations que l'on peut observer à ce stade portent d'abord directement sur des objets présents ou immédiatement représentés, et non sur des phrases ou des discours pouvant exprimer des hypothèses. L'enfant parvient cependant à classifier les relations entre cause et effet dans des situations concrètes et présentes.

2) Le stade proprement dit des opérations concrètes commence vers 7 - 8 ans. Les opérations sont des actions qui peuvent être intériorisées et elles sont réversibles.

L'enrichissement progressif des concepts entre 4 et 7 ans peut être illustré par l'exemple suivant cité par MAISTRIAUX et portant sur la compréhension de la valeur égalité (13).

L'expérimentateur utilise des verres identiques et un liquide coloré:



Il existe une compréhension de l'égalité dès l'âge de 4 ans; prisonnier du syncrétisme de sa perception, l'enfant de cet âge ne comprend plus la conservation de l'égalité après une simple division en B' et B''' (confusion de la hauteur et du nombre). Cette compréhension existe vers 5 - 6 ans, mais il faut attendre l'âge de 7 ans pour la maîtrise de la compréhension lors d'une double division. De 7 - 8 ans à 9 - 10 ans, l'enfant commence à maîtriser les opérations logico-mathématiques, c'est-à-dire

les mécanismes intellectuels qui permettent d'articuler un ensemble d'objets. Les notions d'invariance des différentes propriétés physiques et géométriques ne s'installent pas simultanément. La notion d'invariance de la substance est acquise vers 7 - 8 ans, tandis que la notion de la conservation du poids n'est acquise par la majorité des enfants que vers 9 - 10 ans. La notion de conservation du volume apparaît à l'âge de 11 - 12 ans (14).

f. Le stade des opérations formelles.

Le stade des opérations formelles s'étend en principe de 11 - 12 ans à 14 - 15 ans pour la grande majorité des sujets. C'est le dernier stade du développement intellectuel dans la perspective piagétienne. La pensée s'affranchit du concret. Ce stade conduit vers les formes les plus évoluées de la pensée adulte. Cependant, tous les adultes n'atteignent pas ce niveau.

A ce niveau, le sujet devient capable de raisonnements déductifs et inductifs. Il peut aussi traiter les objets comme substrats concrets pouvant servir à vérifier des hypothèses formulées dans l'abstrait.

A la fin du présent exposé, nous verrons un montage illustrant l'acquisition de la maîtrise des opérations combinatoires dans une perspective expérimentale.

2. Les formes abstraites et concrètes de l'intelligence selon MAISTRIAUX.

Robert Maistriaux, docteur en droit et en philosophie et Docteur Honoris Causa de l'université de RENNES, ancien chef de la chaire de Psychologie de l'Ecole Royale Militaire, est l'auteur d'une typologie ou d'une classification caractérologique fondée sur les propriétés qualitatives de l'intelligence (15). Après avoir formulé une théorie sur la nature de celle-ci où il se montre d'accord avec la théorie de Piaget, son ouvrage "L'intelligence et le caractère" met l'accent sur la distinction qu'il convient d'apporter entre les généralisants et les particularisants. Il est essentiel de signaler qu'il n'existe pas de types purs et que chaque sujet possède une certaine proportion de ces deux caractéristiques avec une prédominance de l'une d'elles.

Les généralisants sont orientés vers les théories, les valeurs spéculatives et l'abstrait en général. Les particularisants sont ceux qui se dirigent plutôt vers le concret, les choses et les faits. A cette notion fondamentale s'en ajoute une autre: les généralisants possèdent davantage le sens des nuances abstraites, et les particularisants celui des analyses concrètes. Ces formes de l'intelligence apparaissent, au surplus, comme étant les plus adéquates pour permettre aux généralisants et aux particularisants de poursuivre au mieux leurs objectifs propres.

La généralisation se traduit normalement par la tendance à développer volontiers des arguments abstraits, à orienter la conversation vers des considérations ou idées générales, à préférer les théories aux faits. Les particularisants s'entretiennent davantage de faits que d'idées. La valeur de l'expérience leur semble décisive. Devant un appareil qu'ils ne connaissent pas, leur souci est avant tout de savoir quel est son usage et comment s'en servir; les principes de son fonctionnement les préoccupent beaucoup moins. Ils sont enclins à rechercher partout le point faible.

Dans les questionnaires étudiés par Maistriaux, il a obtenu 250 réponses lui permettant de classer leurs auteurs dans la catégorie de la généralisation. Etaient considérés comme généralisants ceux qui répondaient favorablement selon un pourcentage de 67 % aux diverses questions relatives à la générali-

sation: Par exemple: "Exposez-vous en peu de mots des questions complexes?" ou "Exprimez-vous peu d'idées en beaucoup de mots; vous arrive-t-il de faire un exposé obscur de questions simples?" Un autre exemple: "Préférez-vous les théories aux faits?" ou "Préférez-vous les faits aux théories (vous intéressant aux faits plus qu'aux idées, au concret plus qu'à l'abstrait)?" Le questionnaire caractérologique de Maistriaux comporte en outre des questions en rapport avec l'émotivité, l'activité et le retentissement. Les questions sont similaires pour ces propriétés, à celle du questionnaire de caractérologie de Gaston BERGER (père de Maurice Bèjart). Néanmoins, par l'utilisation de l'analyse factorielle, Maistriaux a constaté que les propriétés intellectuelles sont indépendantes des 3 autres propriétés.

L'autre catégorie, celle des particularisants, groupait 1750 personnes parmi lesquelles l'auteur a encore distingué les facto-concrets et les verbo-conceptuels. Les conduites de ces derniers se rapprochent de celles des généralisants mais ils se réfèrent plus volontiers aux choses concrètes dans leurs raisonnements.

Comme conclusion à cette étude remarquable de R. Maistriaux, on peut dire qu'un orateur placé devant un auditoire hétérogène quant à sa formation, devra tenir compte qu'un pourcentage assez peu élevé de celui-ci sera sensible et accessible à des argumentations purement abstraites. Ce qui rejoint les remarques que l'on a formulées à propos de la théorie de Piaget. Voici notre conclusion générale:

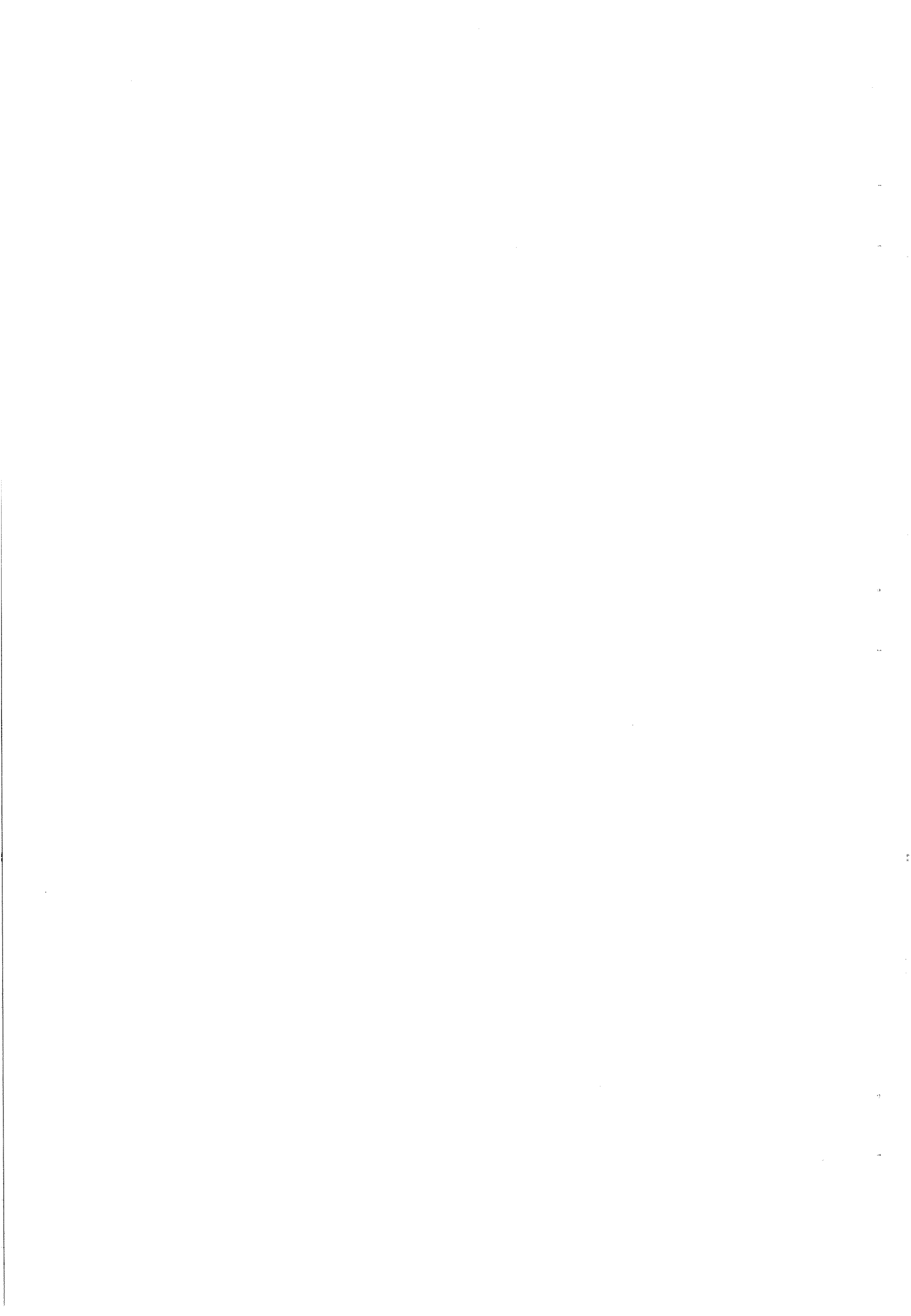
Lors de l'apprentissage d'une branche et d'une langue en particulier, il convient de s'assurer que les participants ont atteint un certain niveau d'abstraction. Il est important que l'enseignant contrôle régulièrement les connaissances de base dans n'importe quelle discipline, qu'il s'agisse des langues ou des sciences exactes et surtout qu'il vérifie si les concepts utilisés ont été assimilés de manière adéquate.

Il importe aussi que les professeurs fassent suffisamment appel aux méthodes actives d'enseignement et surtout n'oublient pas de recourir à l'un ou l'autre principe du conditionnement opérant, notamment celui du renforcement.



NOTES

- (1) R. DROZ & M. RAHMY, Lire Piaget, Bruxelles, Dessart, 1972, p. 7. Cet ouvrage ne comporte pas moins de 39 titres de livres fréquemment cités et dont les abréviations correspondent à celles utilisées dans le "Dictionnaire d'épistémologie génétique", Paris, P.U.F., 1966.
- (2) J. PIAGET, La psychologie de l'intelligence, Paris, Armand Colin, 1967, p. 135.
- (3) J. PAULUS, La fonction symbolique et le langage, Bruxelles, Dessart, 1969, p. 10. Il faut apporter une distinction "entre signaux, indices, symptômes, d'une part, images, symboles et signes de l'autre. Les seconds permettent d'adopter une attitude caractéristique, celle de penser à ce qui n'est pas présent".
- (4) R. MAISTRIAUX, L'intelligence noire et son destin, Bruxelles, Editions de Problèmes d'Afrique Centrale, 1954, p. 159.
- (5) M. REUCHLIN, Psychologie, Paris, P.U.F., 1977, p. 224.
- (6) M. RICHELLE & R. DROZ, Manuel de psychologie, Bruxelles, Dessart & Mardaga, 1980, p. 265.
- (7) H. PIERON, Vocabulaire de psychologie, Paris, P.U.F., 1963, p. 78. "Concept: représentation symbolique (presque toujours verbale) utilisée dans le jeu de la pensée abstraite, et ayant une signification générale valable pour un ensemble de représentations concrètes dans ce qu'elles ont de commun (concept d'arbre, par exemple, commun à toutes les sortes d'arbres). Synonyme: idée abstraite".
- (8) J. PIAGET, La psychologie de l'intelligence, Paris, Armand Colin, 1967, p. 133.
- (9) R. MAISTRIAUX, L'intelligence et le caractère, Paris, P.U.F., 1959, p. 100.
- (10) R. MAISTRIAUX, Les méthodes actives en terre d'Afrique, Bruxelles, Editions de Problèmes d'Afrique Centrale, 1954, p. 161.
- (11) J. PIAGET, Le jugement et le raisonnement chez l'enfant, Delachaux et Niestlé, 1956, pp. 175 - 176.
- (12) R. DROZ & M. RAHMY, op. cit., p. 54.
- (13) R. MAISTRIAUX, Les méthodes actives en terre d'Afrique, Bruxelles, Editest, 1960, p. 28.
- (14) J. PIAGET, Le développement des quantités physiques chez l'enfant, Delachaux et Niestlé, 2e édition, 1962 (avec INHELDER), p. XIII.
- (15) R. MAISTRIAUX, L'intelligence et le caractère, Paris, P.U.F., 1959.



NATIONAL REPORT - BELGIUM

Some Aspects of the Interlanguage of French Speaking Students Writing Dutch

As the main theme of this conference already suggests, in recent years there has been a growing interest in the efficiency of foreign language teaching and foreign language teaching and foreign language study. In this survey we will only deal with some practical aspects of this study field. If one wants to exert influence on the acquisition process with students learning a foreign language, one may start from two different points of view. On the one hand the results of a contrastive analysis may be used to construct courses. On the other hand one may direct one's attention towards the utterances of the learner himself and in that way try and shed more light on the learning process.

While such a contrastive analysis between French and Dutch is being carried out at the moment at Ghent University, we have found it useful to study language production by means of an error analysis of the written Dutch of French-speaking students.

In this context it may be interesting to point out that such a study has not been done yet in this country, although Belgium is a country with two official languages and the teaching of Dutch to speakers of French has a long tradition. So there are a large number of handbooks and grammars available, but all of them are based on personal experience or small scale investigation.

As a starting point for this research project there was the fact that up to now there did not exist an extensive investigation into the language production of French speaking people using Dutch as a foreign language.

Yet, as a teacher one is continually confronted with utterances that do not come up to the norm. So we felt that such an error analysis might provide useful information about the interlanguage of the learners of Dutch. This in its turn could be used to adapt our courses to provide more efficient language input to stimulate language acquisition.

From a more scientific point of view we wanted to combine the didactic and theoretical aspect of error analysis. So on the one hand the results of the project should benefit our teaching, but on the other hand we also wanted to study the different stages in the interlanguage of the learners and to describe the learning strategies used in the process. Besides, we wanted to check our results against the monitor and input theories of Krashen and find out to what degree his theories also apply to the acquisition of Dutch as a foreign language.

The nature of our research project was to be empirical and inductive. We wanted to reach a detailed description of the interlanguage of a group of foreign language learners, whose mother tongue was French, their target language Dutch. The statistical information would allow us to establish which forms and structures were the cause of most errors. A linguistic analysis would allow us to establish the exact nature of the errors and eventually lead to the causes.

For practical reasons we had to limit the study to written language as it had to be carried out within the framework of the language courses in this school. A further restriction was that only grammatical errors would be taken into account.

The test itself consisted of two parts: a multiple choice test on ten selected items of Dutch grammar which had proved to be major causes of errors and a composition. The multiple choice test made it possible to test language use under conditions where the attention of the testees was exclusively directed towards

Whereas there was no significant evolution for the multiple choice test, the total evolution for the composition shows a product-moment correlation of -0,90 which is significant at the 1 % level. The same can be said for groups 1 and 3, while the evolution is less clear with the other groups.

So there is clear proof that performances for the composition improved over the year, whereas the results for the multiple choice test showed no improvement at all.

If we want to interpret this discrepancy in terms of Krashen's input theory, the explanation could be the following: As the multiple choice test intended to check conscious knowledge about the language, and the testees knew the rules that could be learned already before they entered the course, little improvement could be expected. On the other hand, during the course, which was intended to stimulate language acquisition, students' mastery of the language on that level continued to increase, which shows in the amelioration of their performances.

Yet things are not as simple as that. The results for the composition relate to all items of Dutch grammar, while the multiple choice test had only singled out ten of the most difficult items. When we now do the same for the composition we notice that the results are not all that different.

Most of these ten items do not show a marked improvement in the composition as well. The only significant amelioration takes place for what in the MC-test was item 3: the choice of the correct preposition, while gender, the correct use of the article and inversion also show a slight tendency to improve. On the other hand, the ending of the article causes more errors as the year proceeds.

All in all we must conclude that for both kinds of tests, amelioration of the results seems to be limited to items for which there is no clear rule, or where possible use of the monitor is quite doubtful.

To end this first part of this report I would like to point out a remarkable feature in both the evolution for the multiple choice and the composition. As you have seen for both tests there was a clear rise in the number of errors after the third test. A possible explanation for this feature could be that between the third and the fourth test the students had had an interruption during the course of a month because of other examinations. If this explanation should be correct, then we must conclude that any longer interruption in the time spent in the study of a foreign language marks a clear deterioration in the language learning process.

Now that we have dealt with the statistical aspect of our research project, we come to the errors themselves.

In studying the circumstances in which errors are made, we want to draw the attention to two factors which, without any doubt, influence the correctness of the students' language.

A first instance in which the number of errors seems to be significantly lower than average is when the students can rely on a simple and clear grammatical rule. At the same time the context in which to apply this rule should be clear and unambiguous. Examples of this can easily be found in the multiple choice test. We notice that as far as gender is concerned there is an error rate of 4 % in the recognition of 'de'-words in general whereas there are only 14 % errors in the cases where the gender 'de' is determined by the ending of the word. The same tendency is to be found with the ending of independently used adjectives in the plural. A third example where fewer errors are made is the clearcut case of units of weights and measures that in Dutch do not take a

plural when preceded by a numeral.

On the other hand it is remarkable that no such examples were found in the items dealing with word order. A possible explanation for this will be dealt with later on.

The second factor playing an important role in determining the correctness of the utterance is the personal familiarity of the testee with the specific form or structure. Significantly fewer errors are made against forms and structures that occur regularly in the language input the learners are confronted with. In this context it is of no importance whether the form concerned is an exception to the general rule or, on the contrary, the perfect example of it. Examples of this phenomenon abound all over the corpus. We will suffice with mentioning only a few examples.

For example, Dutch, just like English, takes no article before uncountable nouns, whereas French does. Yet the number of errors in this instance varies greatly, according to the degree in which the specific word used is familiar to the testees. So, there are far fewer errors in 'beer is..' than 'he studies history'.

The same applies to the choice of the correct auxiliary. Dutch uses the auxiliary 'zijn' for the present perfect of verbs that denote a change in condition, where French always has 'avoir' for the same tense. Yet there are about five times fewer errors in a common utterance such as 'het is gebeurd' (it has happened) than against a less common such as 'de rivier is dichtgevroren' (the river has frozen over).

Word order too yields similar examples. We notice that after common conjunctions such as 'maar' and 'dat' there are far fewer errors than after less common conjunctions such as 'doch, terwijl' waarna'.

In this context we would like to point out that when a conjunction (or any other word for that matter) has two functions, the testees tend to prefer to use the best known function. So the conjunction 'of' can be the introduction to a co-ordination and a subordination. As the first use is the better known, in most sentences 'of' will be interpreted by the testees as being part of a compound rather than of a complex sentence.

A first tentative conclusion, then, could be that the correctness of an utterance is not as much influenced by the knowledge of an abstract structure or rule as by the familiarity with a specific utterance using specific words.

Now we will have a closer look at some of the causes of errors found in our corpus. As the multiple choice test was constructed mainly on the basis of the contrast between French and Dutch, it might be expected that the vast majority of errors would be due to direct interference from French. In reality, of course, a large number of errors was due to this interference, but as big a group of errors was due to other causes.

In general we distinguish four different causes of error: direct interference, where the utterance shows a clear parallelism with the mother tongue; indirect interference, where the testee tries to avoid the structure that parallels his mother tongue and in which case we speak about an avoidance strategy; overgeneralisation, where the testee uses a rule of Dutch grammar in cases where it does not apply; and last there are a number of cases where uncertainty and grammatical ignorance may be the cause of the error.

We will now pay a little more attention to each of these four causes of errors.

### Direct Interference

Most cases of direct mother tongue interference have been found with items such as the number of the noun, the choice of the correct auxiliary and the correct preposition. In no other item was direct interference the main cause of errors, certainly not where word order was concerned. Of course this result may be influenced by the fact that we studied written language and that in the multiple choice test attention was focused on the form of the utterance. We are not certain whether a test of oral language use would have yielded the same results.

Yet it is important to point out that the fact that a contrast exists between French and Dutch does not necessarily mean that more errors will be made. So we notice that there are few errors with the predicative adjective, although in French there is an ending but not in Dutch. Besides, there is an equal number of errors in the word order of compound and complex sentences, although the word order in the first instance is the same in both languages but differs in the second.

A last element we would like to mention in this context concerns a problem that is specific to our testees. A number of the errors they made may have been due to the language input they got from their Dutch speaking colleagues. When they don't pay attention to their language use, Dutch speaking Belgians are known to make a number of infractions of the general norms of the language. A number of these errors now have also been found in the interlanguage of our testees. So forms such as '3 maand', 'ik heb begonnen' and 'voor deze reden' may be due to interference from French, but as well to the influence of the language use of their friends and colleagues.

### Avoidance Strategy

The second common cause of errors was the use of an avoidance strategy. The testee very often realizes that there is a difference between Dutch and French and tries as often as possible to avoid the form or structure that runs parallel to the one in his mother tongue. Behaviour like this may of course be linked with the fact the testees knew their mastery of their second language was being tested, but we are convinced that this avoidance strategy is a main cause of errors in all kinds of language use, even in the choice of words in oral language for example.

Examples of this are very numerous in our corpus. We will only mention a few typical cases here. Articles are left away in situations where both French and Dutch do use them, ('hij heeft rond gezicht'). Where a particular preposition has to be used after certain words or expressions, testees often choose a preposition that makes the expression nonsensical rather than use the one that corresponds with the French expression: e. g. 'tevreden op, verkopen op' etc. In sentences in which the testees had to use an inversion, we notice that in incorrect sentences they often prefer to use the word order of the subordinate clause rather than the SVO order that corresponds with French. So it may be clear that avoidance strategy is a very common cause of errors.

### Overgeneralisation

Another cause of a lot of errors is overgeneralisation, where the testee wrongly applies a known rule. He knows the rule but is not aware of the exceptions and limitations to the use of the rule.

As this case is well-known in all languages we will just give a few examples from our own corpus. So we find that the testees often drop the article in front of nouns even in cases when they are used in a particular sense. Of course they know there is no article with 'België is' and 'kardinaal Glemp..' but they also

write 'België van morgen' and 'Poolse Kardinaal Glemp'.

Another example is the ending of the adjective. In some cases when the adjective and the noun together form a fixed more or less idiomatic expression, the ending is dropped, but yet we find cases such as 'het Koninklijke besluit'.

The same overgeneralisation is to be found in utterances that are exceptions to the rule that units of weights and measures take no plural after a numeral. So we find utterances like '3 maand' and '5 minuut'.

Lots of other examples might be given but in the context of this report it would take us much too far.

### Uncertainty and Grammatical Ignorance

The three causes of error dealt with up to now are fairly familiar to most teachers and are to be found in most cases of error analysis. They are also three of the best known aspects of learning strategies.

Yet they do not cover all cases of error in our corpus. It is necessary to distinguish a fourth important cause of errors: uncertainty and grammatical ignorance.

We notice that even if they know the rule the testees are not always sure when to use it. Sometimes the application of a rule is very irregular. For instance they use the article in front of 'China' but drop it in front of 'Sovjetunie' and 'België van morgen'.

We also notice that there are a large number of errors in the choice of the auxiliary in the passive voice (worden). Of course in this case, when they choose 'zijn', which is used in the French passive (être), it may be labelled as direct interference. On the other hand we must be aware of the fact that a large number of testees - even in their mother tongue - are not sure whether they are dealing with a passive or a perfect tense.

Also utterances like 'ik heb werken' instead of the correct 'ik heb gewerkt' must be explained in this way. When writing in their mother tongue, under the influence of the spoken language the testees sometimes produce forms like 'j'ai travailler', where they use the infinitive instead of the past participle, which in French are often homophones.

Most clearly this phenomenon shows in the word order. Even if they know which word order to use in which kind of clause, it is very often problematic for them to find out which kind of clause they're dealing with. We notice a definite deficiency in grammatical knowledge and awareness.

They also have problems with grammatical categories. As we have just mentioned they don't always know how to distinguish a compound clause from a complex one. Even determining which is the function of a certain word in a sentence causes problems. In the word order test we found sentences where the subject was to be found at the end of the sentence, or sentences where the form 'hij=he' figured as the object.

At the beginning we mentioned that it was our intention to check our results against the theories of Krashen. A first element of this is the role of what he calls the monitor. The three conditions to allow the monitor to function - attention to the form of the utterance, enough time, knowledge of the rules, were met. Our results seem to indicate that Krashen's remark that the monitor only can function with simple (morphological) rules, where no complicated transformations are involved, is correct.

One such case is the gender, which may be determined by the form and ending of the word. In this case there were fewer errors and a favourable evolution over the year.

On the other hand we notice that word order, for instance, remains a problem and that even the ending of the adjective remains a source of many errors. In these instances too many factors play a part and transformations are too complicated for the monitor to function effectively.

When we now broaden the perspective we notice that our results agree with Krashen's 'input theory'. To prove this we may mention two cases where rules are scarce and very complicated and yet the evolution surprisingly shows a significant decrease in the numbers of errors made. The two cases are gender in general and whether compound verbs are separable or not.

In these cases the monitor can only play an insignificant part. But these two items are considered by the learners to be important and difficult, so they pay a great deal of attention to them. In Krashen's terms this may indicate a lower filter so input will more easily be absorbed, which may lead to better results.

Conversely, points of grammar which are considered by writers of handbooks to be very problematic, and on which in each course there are lots and lots of exercises show no sign of improvement. Here we may think of elements such as word order. In this case too, the monitor can play no significant part. So the fact that there is no improvement in the results may indicate that the testees have not yet acquired the forms and structures. As a result we may conclude that also in Dutch there is such a phenomenon as 'natural order' in language learning and that also this language has to be acquired rather than learned to reach a more than elementary level.

#### Relation Language Study Background Results

While dealing with the testees we already mentioned that all of the students had already followed courses of Dutch at secondary school or elsewhere before entering this academy. As the number of hours dedicated to this language study varied from 360 to over 2000 hours, one of the purposes of this research project was to investigate whether there was any relation between this language study background and the actual results for our test. So we wanted to find a relation between the total number of hours dedicated to the study of Dutch and the number of errors (expressed in percentages) made.

To facilitate this investigation the testees were subdivided into five groups, whose individual results were already mentioned on the graphs.

First we checked by means of an analysis of variance whether there was a significant difference among the five groups as a whole. In this case, to be significant, the F-value should have been 2,5.

For the multiple choice test we reached a value of 1,74, for the composition a value of 2,33. In neither case does the value reach the minimum level for acceptability, so we may conclude that the five groups do not differ significantly.

The values given here apply for the global results, but an analysis of variance carried out for each of the six different multiple choice tests and compositions yields exactly the same results.

Such an analysis of variance only shows whether there is a difference between the groups taken globally, but does not indicate whether the difference between



two groups (e. g. the extremes, group 1 and 5) is significant.

To find out if that was the case we used Scheffe's method for mutual comparisons. Once again the significance level is 2.5. It is quite useless to cite the value for each individual pairing but suffice it to say that in none of the pairings was a significant difference to be found.

The conclusion is clear and inevitable: even though the language study background varies widely, we have found no proof of a difference in the performances of the five groups, neither in the multiple choice test nor in the composition.

A possible explanation for this result could be that the division into groups had been done on the wrong basis, or that the boundaries between groups had been chosen wrongly. To check this we proceeded to carry out an individual product-moment correlation between language study background and results for each of the 88 testees individually. But once again the result was the same, both for the global results and for the results of each test individually; both for the multiple choice test and for the composition.

The only conclusion possible for our group of testees was that it was impossible to prove any direct relation between language study background and number of errors made. So it would be wrong to expect that a greater number of hours spent at school on the study of a foreign language would automatically entail decrease in the percentage of errors made.

Of course, this constation made us curious to know whether there might be other elements, perhaps outside the field of language study, that did prove to have a significant relation to the performance of our testees.

To investigate this we collected their individual results for the examinations in general at the end of the first year of study at this academy. Then we computed an individual product-moment correlation between these results and the percentage of errors for the composition. To our surprise this at last resulted in a value of  $r=0,25$ , which means that it is significant at the 2.5 %-level. So there is a relation between the school results in general and the performance in our test.

This leads us to the final conclusion for this part of our investigation. It seems reasonable to state that the level one has reached in a foreign language is not directly related to the number of hours that has been spent on this language in class.

Tabel 1 : globale resultaten voor de zes M.C.-tests

A. aantal fouten

	niveaugroep					TOTAAL
	I	II	III	IV	V	
itemgroep 1	129	225	222	103	106	785
2	79	136	119	66	64	464
3	149	249	234	140	124	896
4	98	210	187	103	97	695
5	95	184	172	81	73	605
6	154	297	276	125	159	1011
7	144	247	226	118	123	858
8	121	232	201	120	113	<b>787</b>
9	141	275	225	124	119	884
10	98	189	185	112	81	665
totaal	1208	2244	2047	1092	1059	7650

B. percentage fouten

	niveaugroep					TOTAAL
	I	II	III	IV	V	
itemgroep 1	28,7	28,8	30,8	31,2	29,4	29,7
2	17,5	17,4	16,5	20,0	17,8	17,6
3	33,1	31,9	32,5	42,4	34,4	33,9
4	21,8	26,9	26,0	31,2	26,9	26,3
5	21,1	23,6	23,9	24,5	20,3	22,9
6	34,2	38,1	38,3	37,9	44,2	38,3
7	32,0	31,7	31,4	35,8	34,2	32,5
8	26,9	29,7	27,9	36,4	31,4	29,8
9	31,3	35,3	31,3	37,6	33,1	33,5
10	22,2	24,5	25,8	34,2	23,1	25,5
totaal	26,8	28,8	28,4	33,1	29,5	29,0

grafiek 1 : evolutie MC-test / evolution : n.c. test.

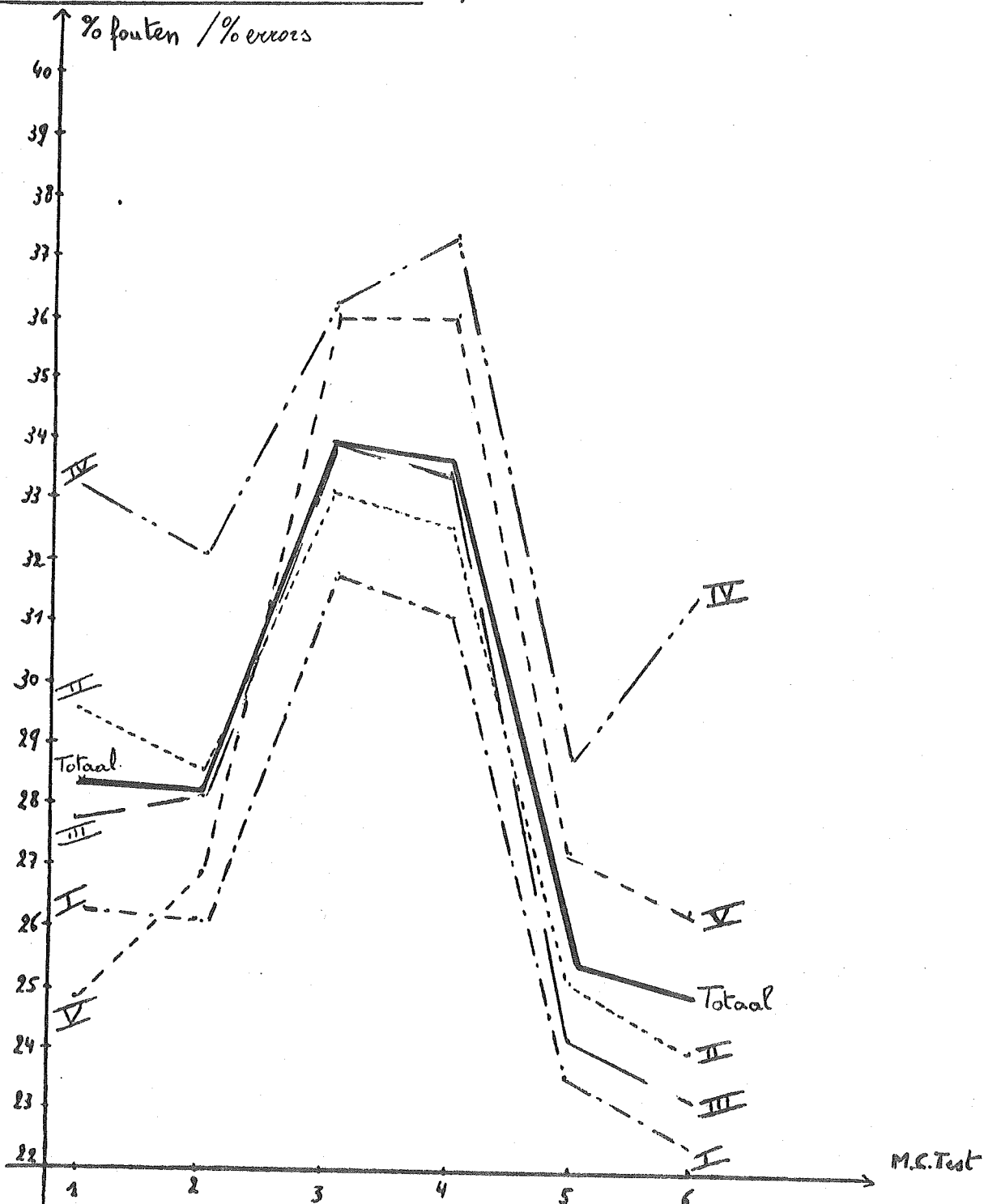
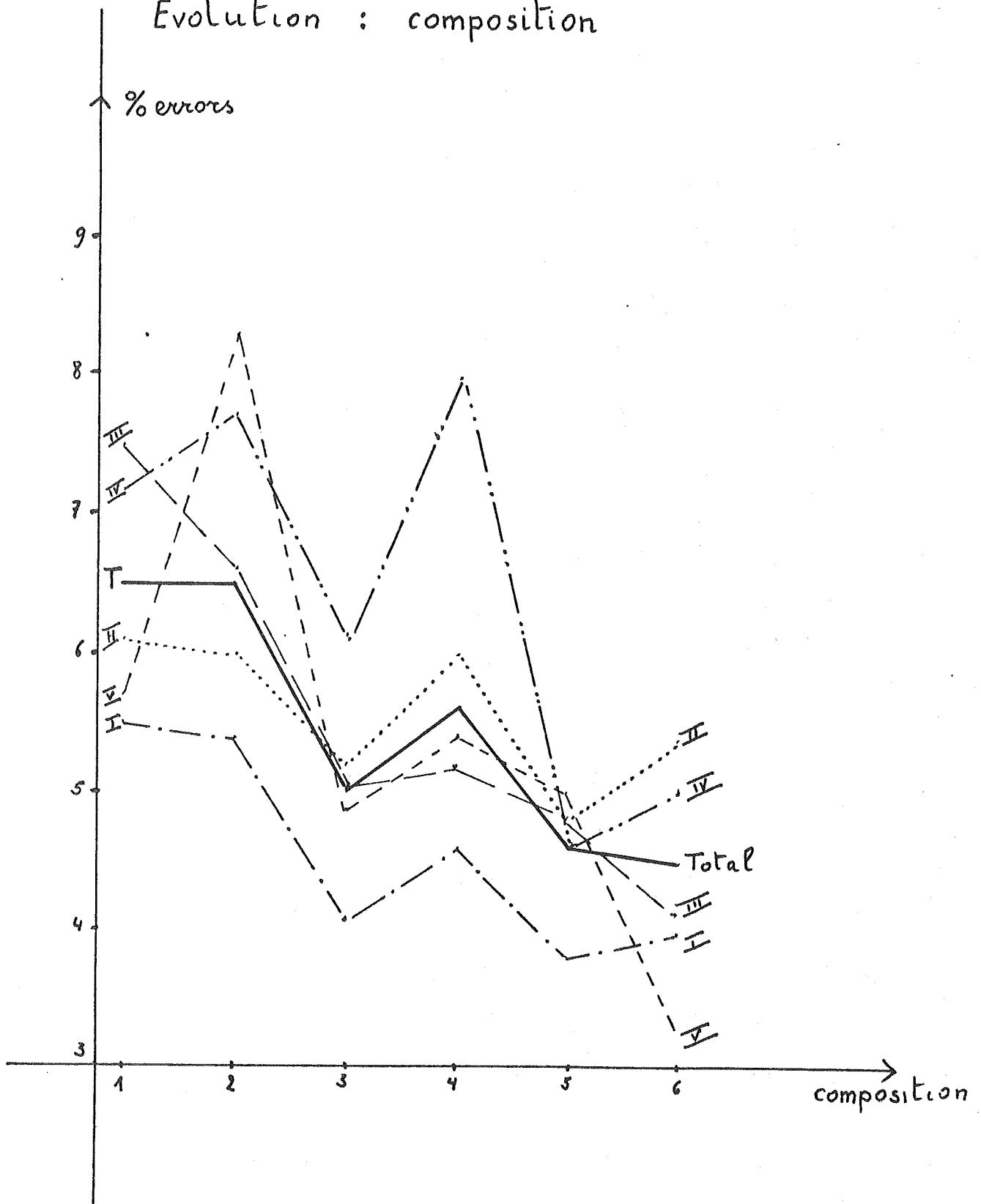


Table 2 : survey of errors in the composition

WORD ORDER	group					TOT
	1	2	3	4	5	
A.place of the verb						
simple sentence	14	59	39	28	16	156
coordinate clause	1	10	2	9	4	26
main clause	4	4	2	1	0	11
subordinate clause	29	71	57	34	23	214
B.verbal endgroup	2	5	5	4	3	19
C.place of objects and phrases	49	113	137	73	67	439
place of negation	9	28	10	9	11	67
place of preverbal part	15	17	20	9	15	76
Other errors						
A. verb : reflexivity	3	12	10	2	2	29
auxiliary	77	113	105	49	27	371
voice,tense, number	95	192	159	86	75	607
word formation	34	89	92	34	45	294
others	6	23	27	21	7	84
B.substantive: word formation	82	140	141	68	64	495
number	68	124	123	52	50	417
others	24	24	28	14	7	97
C.adjective: ending	77	118	129	48	58	430
word formation	9	39	40	9	18	115
others	8	8	10	5	3	34
D.numeral: word formation	9	24	13	9	10	65
others	3	15	6	14	4	42
E.pronoun:word formation	16	26	33	13	9	97
gender	24	43	38	25	15	145
others	49	90	97	45	48	329
F.article:gender	66	94	95	38	37	330
use	86	195	186	78	79	624
others	0	4	1	1	5	11
G.adverb	33	77	81	38	45	274
H.preposition:use	53	152	145	68	63	481
choice	93	203	211	76	80	663
I.conjunction	46	104	61	32	35	278
J;pronominal adverbs	8	17	20	8	10	63
TOTAL NUMBER OF ERRORS	1099	2250	2138	1011	947	7445
PERCENTAGE OF ERRORS	4.5	5.5	5.4	6.4	5.3	5.4

# Evolution : composition





NATIONAL REPORT - CANADA

PART I

A. INTRODUCTION

1. This report will be presented in two parts. I will cover the general aspects of the Canadian report and Dr. Bryan Rollason will present a paper on recent developments in computerized language learning and their implications for the Canadian Forces.
2. Language training in the CF is mainly concerned with the training in Canada's two official languages, English and French. Canada's policy, derived from the Official Languages Act and government objectives, is that the Canadian Forces shall be institutionally bilingual and representative of the two official language communities of Canada, while maintaining a one-force concept.
3. The goals and activities necessary to achieve the Canadian Forces policy are contained in the Official Languages Plan (Military) and are:
  - a. Objective 1 - to provide services to and communicate with members of the Canadian Forces, their dependants and Department of National Defence (DND) civilian employees, as well as with the public, in both official languages;
  - b. Objective 2 - to provide, to the maximum extent possible, the opportunity for members of the Canadian Forces to have a career and to work in the official language of their choice; and
  - c. Objective 3 - to ensure an equitable participation of both official language groups within the Canadian Forces.
4. In order to enhance opportunities for DND personnel to pursue a career and to work in the official language of their choice, units of the CF are identified as English Language Units (ELUs), French Language Units (FLUs) or National Units (NUs). NUs work in both languages in order to provide direction and support to FLUs and ELUs. The military manning objectives are:
  - a. to place 50 % of the francophone effective strength in FLUs (current level is 41,8 %);
  - b. to man the NUs with 74 % anglophones and 26 % francophones (currently 74 % / 26 %) (Note: this ratio is derived from the 1981 decennial census which places the National Representative Groups at 74 % anglophone and 26 % francophone); and
  - c. to provide improved linguistic opportunities for anglophones by increasing their presence in FLUs to 20 % in the province of Quebec and 10 % outside the province of Quebec (currently 5,9 % and 15,8 % respectively).

B. OFFICIAL LANGUAGE TRAINING

5. In-house language training provided to military personnel is not always directly related to a specific position. A total of some 12,000 bilingual military positions have been identified. In order to maintain the personnel rotation required for career progression about 21,000 military personnel are required to fill these positions. Presently there are approximately 9,500 bilingual francophones representing 48 % of the total francophone population and 2,500 bilingual anglophones representing 4 % of the total anglophone population. If the 12,000 positions are to be filled equitably by qualified personnel it is evident that many more bilingual anglophones are required.

Target Language English

6. Basic English language training is provided for all francophone enrollees except Other Ranks, that is not Officer ranks, assigned to the Combat Arms. Career status francophones in all military occupational areas are selected for extra English language training as operational requirements dictate. During the past year 1,435 francophones received English language training.

Target Language French

7. Basic French language training is provided for all anglophone officer cadet enrollees into the Military Colleges and to anglophone enrollees into subsidized university programs. Career status anglophones in all military occupational areas are selected for French language training as operational requirements dictate. During the past year 2,171 anglophones received French language training. More will be said of special French and English language training programs later.

C. MILITARY LANGUAGE TRAINING IMPROVEMENT PROGRAM

8. In last year's report, we made reference to a study of the Command and Control, Training and Infrastructure known as the McLaws report and its 42 recommendations. These recommendations have since been consolidated into 12 activities with definite objectives each further broken down into serials with an OPI for each. This program is now called the Military Language Training Improvement Program given the acronym MLTIP. Without going into all the details of each activity involved in this improvement program, I will give the highlights of the ones of interest to this gathering.

Training Objectives, Goals and Plans.

9. This activity will be concerned with the validation of bilingual annotations of positions, the validation of the second language level required by personnel in these bilingual positions, the identification and rationalization of outstanding language training problem areas and their interrelationship, and, to develop policy proposals on such aspects as types and relative priorities of training programs, requirement for refresher, maintenance and dependants training and employment subsequent to training. From these will follow the development of a long term training plan and the identification of plant facilities required by this plan. Some of the items of this activity are completed, others well underway. The target date for completion of all items of this activity is December 1986.

New Command and Control Concept.

10. The overall control of the language training program is exercised by the Associate Deputy Minister - Personnel in National Defence Headquarters with policy and guidelines coming from the Chief of Personnel Development through the Director General Recruiting, Education and Training (DGRET) for whom the Director of Language Training (DLT) works. Commanders of Commands, Canadian Military Colleges and the Commander of Canadian Forces Training System (CFTS) will advise on and execute the policies. The implementation of the policies will be the responsibility of the Commanders who will be given the resources necessary to carry out this implementation. The Chief of Personnel Development has tasked DGRET/DLT to develop the language training specifications and CFTS to develop the Course Training Standards (CTS) and Course Training Plans (CTP). In order to monitor the applications of the CTS and CTP throughout the commands, CFTS is forming a Language Standards Control Detachment (LSC Det). This new Command and Control concept will come into being on the 1st of July of this year.



#### Language Knowledge Testing

11. Up to December of 1983, language knowledge testing was carried out by a central agency under CFTSHQ. In order to free resources for the Language Standards Control Detachment mentioned above, an interim testing policy decentralizing testing came into being. The Commands and language schools are now responsible for language testing. With this decentralization and loss of a group of dedicated test specialists, the testing for oral expression ("B" skill test as it is commonly known) has been suspended except for personnel undergoing language training. Another effect of this interim policy is that language profiles will no longer be restricted to a five year validity period. During this interim period, DLT has been and will continue to be busy developing language testing specifications which will consider such aspects as testing along communicative competence lines, skills to be tested, scope of testing, etc. Testing specifications are scheduled to be completed in June 1984. From these specifications CFTS (LSC Det) will develop new tests with the object of completing them by December 1985.

#### Selection and Motivation

12. In order to improve the results of our official languages training programs and in particular the French program, an activity dedicated to developing a selection strategy for language training candidates and determining methods of motivating our personnel to want and to maintain a second official language skill was created. The task of developing a selection strategy has been given to the Canadian Forces Personnel Applied Research Unit (CFPARU) a unit of the Director Personnel Selection, Research and Second Careers who is working in this research with CFTS. To date this unit has prepared a working paper to validate the use of the Modern Language Aptitude Test (MLAT) as a selection tool for French language training. DFPARU and CFTS are also studying a number of potentially effective selection tests or indicators including the development of a means of measuring and/or assessing motivation for second language training.
13. In order to provide career managers with assistance in the selection of candidates for French language training and to provide a data base to be used by personnel managers to better plan for cost effective language training, we are presently administering the MLAT and "A" skill (listening) test to the majority of our previously untested anglophone CF personnel. This testing "blitz" started in March and is scheduled for completion in June. Testing is being administered by civilian contractors.
14. One aspect being considered as part of the proposed selection strategy is the combination of the MLAT and "A" skill score, called APTILIST (APTitude plus LISTening) as a predictor of success (rate of progression) and training hours required to obtain a given level. Statistics from our Continuous French Course, a ten month course, would indicate that this combination could be a valid predictor and could be used as an entrance criterion for language courses or for determining the amount of teaching hours required to obtain a given end result. For example an officer with an MLAT of A or B and a listening proficiency of 0 has a 70 % chance of being functional (3322) after 900 hours, while an MLAT of D requires a listening score of 2 for the same success after 900 hours of training.

#### Application of Canadian Forces Individual Training System to Language Training

15. The Individual System (ITS) constitutes a systematic approach to training, which means the application of a logical and interacting series of steps between the identification of a necessary task and the provision of a trained man or woman to do that task. The system is aimed at meeting legitimate training requirements by controlling the quantity and quality of training. NDHQ controls the quantity by setting the yearly training requirements. Quality

control of the pedagogical system is the responsibility of TSHQ and rests on five principles:

- a. training should have a direct link with the trade described in the classification or in the trade specifications;
  - b. training should be designed with the aim of achieving specific and detailed performance objectives;
  - c. pedagogical methods should be compatible with performance objectives; that is there should be a direct link between courses given and practical work;
  - d. tests should be accurate enough to determine whether trainees have achieved the performance objectives; that is whether they have passed or failed; and
  - e. each step of the training process should be constantly evaluated and validated.
16. This is therefore a very different system from that which we have known up to now in language training. However, this system is already being implemented in all other DND military training areas. It has been tried and tested, and it has the advantage of being familiar to and accepted by all service personnel. It can therefore be applied without fear, as our clientele already expects to receive a course structured in accordance with the same principles as those applied in all the other courses they have received previously.
17. The teaching of a second language however, is something special and one does not teach a language as one would teach a trade or a technique. The terms of reference do not correspond and the pedagogical principles are quite different. Hence, we need to take these factors into account and implement the ITS with caution and flexibility without, however, undermining its established principles.
18. You have no doubt noted that, both through its analyses and its audits, the ITS constantly refers to the work the student will be required to do in the target language. In our opinion, this constitutes a distinct advantage over existing programs. With the ITS, the motivational element will be increased and the student's involvement in his own training will be greater.
19. The application of the ITS involves the preparation of language training specifications, Course Training Standards, Course Training Plans and the audit of these standards and plans as mentioned earlier. The language specifications have been completed and both CTS and CTP are underway. A prototype teaching unit based on military situations and terminology is in the validation stage. We have set July 1985 as the target date to introduce the new curriculum.

#### D. PILOT PROJECTS AND NEW COURSES

20. As part of our Military Language Training Improvement Program, we have introduced some new courses on a trial basis. The evaluation of these pilot projects may lead to further changes in our official language training philosophy and policies.

#### French Language Training for Anglophone Recruits

21. As mentioned at the beginning of my presentation, English language training is compulsory for francophone recruits except for those joining the Combat

Arms. On the other hand, French language training is only given to anglophones as part of a career progression after they have been in the service for a number of years (minimum of five years) and only on a voluntary basis. (The only exception being Officer cadet enrollees into the Canadian Military Colleges and subsidized university programs.)

22. On a trial basis we will be offering 24 weeks of French language training to three control groups made up of 24 anglophone recruits per group. The training conditions and terminal proficiency standards (TPS) are the same as for francophone recruits, that is, 24 weeks of training with a TPS of 2211 or better. Language training is to be given immediately after completion of recruit training and before the trade qualification courses which are given in the individual's primary official language. On completion of basic trade training (8 to 12 weeks) these anglophone recruits will be posted to French Language Units or units in the province of Quebec where they will have to work primarily in French.
23. The evaluation will consist of following the career progression of these candidates for the first two to three years to determine: maintenance of language skills versus time, effect on trade skill progression, adaptation in the milieu and the cost effectiveness of this approach versus our present approach of training older military personnel. The conditions of service just outlined are no different than those given to a large number of francophone recruits who are placed in an English environment with the options of "sink or swim". As part of the trial project, we have one group that completed language training in July 84 and is now in field units. The second group will begin language training in July of this year and the final group in January 1985.

#### English Language Training for Combat Arms Sr NCOs

24. Since Combat Arms recruits (Infantry, Artillery and Armour) do not receive English language training, we have an increasing number of junior and senior non-commissioned officers (NCO) who are unilingual and restricted in their employment to French Language Units. In order to broaden the careers and employment opportunities of selected individuals, we have started a program of ten months of English language training for NCOs similar to our ten month Continuous French Course for anglophones. The evaluation will be concerned with determining the type and length of course required to train these candidates to a level of 3322 or as we call it, the functional level.

#### General Officers/Colonels Supplementary Program

25. The Chief of the Defence Staff has directed that 60 % of General Officers will achieve as a minimum a functional level capability in their second official language by 1987 and the majority by 1995. In order to meet this requirement we have two supplementary French language training programs. The first consists of 31 General Officers in NDHQ receiving four hours per week of individual training in their offices given by three language teachers under the control of DLT and hired on a yearly basis. The second program has 65 participants in both NDHQ and other headquarters and bases across Canada. Instruction is provided by contract with a civilian firm and consists of an average of four hours per week of individual training for General Officers and classroom instruction for Colonels where there are sufficient numbers to form a class, otherwise Colonels also receive individual instruction. Officers for these programs are selected by the Chief Personnel Careers and Senior Appointments and the Director Personnel Careers Colonel.

#### French Self-Study Package

26. In our continuing effort to offer language training to all interested personnel, we have purchased a self-study package for evaluation. The package selected is produced by Champion Language Studies of Toronto, Ontario. This

program was selected over other self-study packages for its Canadian content and accent, and because it offered a tutorial service. We have made this tutorial service compulsory for all persons wishing to receive this home study kit. The cost of this tutorial service is \$100.00 payable in advance and as an incentive for students to complete the course, we will reimburse the total cost under our subsidized language training program, only if the student completes the course in a reasonable length of time - six months. We have purchased 500 of these kits for distribution throughout Canada and our bases in Germany. Since initial distribution in December 1984, over 100 kits are now in use. Response has been favorable with the only problem being the time required to obtain correction of the tapes and papers, time required for transit by the postal system. Campion Language Studies in cooperation with the BBC are developing an English language self-study kit to our specifications.

E. FORMAL FOREIGN LANGUAGE TRAINING PROGRAMS

27. There have been no major changes in Canadian Forces Languages School (CFLS) Foreign Language Training since BILC 83. However, the purpose of this report is to give a short overview of our main programs and to highlight some new aspects within them.
28. All formal, full-time foreign language training for the Canadian Forces is conducted by CFLS Ottawa, Foreign Language Department. Currently, the school has the capability to teach 12 languages, namely:
  - a. Arabic
  - b. Chinese (Mandarin)
  - c. Czechoslovakian
  - d. German
  - e. Italian
  - f. Japanese
  - g. Norwegian
  - h. Polish
  - i. Russian
  - j. Serbo-Croatian
  - k. Spanish, and
  - l. Turkish.
29. The courses are normally between 205 - 230 training days in length and the average attendance is between 50 and 60 students in ten languages, ranging in rank from Colonel to Private. Our major commitment is in Russian and German which represents about 40 % of our student load.
30. CFLS is solely responsible for the evaluation and final selection of all pedagogical materials used in our foreign language programs. Close liaison is maintained with both the Defence Language Institute Foreign Language Centre (DLI FLC) and the Foreign Service Institute School of Language Studies (FSI SLS) in the United States.
31. Materials utilized by CFLS are designed for achieving a level 3 profile in the four skills by above average students after 47 weeks of instruction except in Arabic, Chinese and Japanese which require longer periods.
32. In addition to the above, CFLS is also tasked with refresher training courses, maintenance courses and short survival courses for approximately ten students on an annual basis.

Self-Study Packages

33. CFLS has made excellent use of DLI Headstart programs in German, Japanese and Turkish as orientation and language familiarization introduction to the respective Basic courses.

NATIONAL REPORT - CANADA

PART II

Recent Developments in Computerized Language Learning -  
Implications for the Canadian Forces.

A. INTRODUCTION

The second part of Canada's National Report will take the form of a summary of recent developments in Computer Assisted Learning in Canada. The summary will include work done in National Defence, in universities and in the private sector.

You will appreciate that it is not possible to give specific courseware details of each project in the limited time we have at our disposal. However, this paper has several Annexes which will be available when the Conference report is published. I shall refer to these Annexes at the appropriate time.

At the 1982 BILC Conference, Dr. David Stern presented a paper entitled "How to face the third wave: the impact of the new technology on language teaching". One issue which he raised was "to what extent is a communicative approach compatible with these recent technological developments and the descendants of the older technology?". This question was subsequently debated in the appropriate study group.

Dr. Stern affirmed that we do not expect a technological device, such as the micro-computer or even a multi-media system, to be everything to all learners at all times. He concluded his address by calling for more fundamental research in which language teachers and technologists cooperate in devising instruments and software which enhance language teaching, rather than language teachers being presented with new technological devices by communication engineers who seem to say: "Here is the new technology. Take it or leave it. Make the best use of it you can."

At the same conference, Professor Roger Kenner, of Concordia University Montreal, gave the background to developments in hardware, software and courseware and discussed PLATO in some detail.

Study Group C took up the major points raised in both papers and made a series of recommendations or conclusions. The final conclusion was as follows:

The future appears promising in the potential use of C.A.I. to permit exploitation of interactive video-disc systems in combination with micro-computers and random access audio devices that can simulate verbal communication to a degree never before realized. These and other developments, such as digitized speech, should broaden the areas in which various forms of C.A.I. can make substantial contributions to Second Language Learning. Such sophisticated systems, however, will require much more research and development before they are practicable for most language training programs.

Developments in Canada since BILC 82 have touched on the areas mentioned in the Study Group's conclusion, and have taken place at the following locations:

- a. Institut international de la communication;
- b. University of Toronto;
- c. National Defence and Sony of Canada;
- d. Collège Royal Militaire; and
- e. Control Data Canada Ltd.

The experiments and developments which have taken place at these institutions and companies will be briefly described and a full list of addresses and contacts is provided at Annex A.

#### B. INSTITUT INTERNATIONAL DE LA COMMUNICATION

This organization was established in 1975 with the help of the Canadian National Commission for UNESCO and the Quebec Education Department at the instigation of leaders in the fields of communication and education. The institute is under the direction of Dr. Jean Cloutier, communications professional and author of several books on communications. Institute members are communications practitioners and theoreticians directly involved in its many activities.

##### TELELINGUA

This project aims at developing a self-instructional language-learning package based on TELIDON Technology. This will permit an anglophone to learn French or Spanish, a francophone to learn English or Spanish and an hispanophone to learn English or French. The package can also be used for remedial or consolidation of the mother tongue.

The program can be broadcast by teletext or cabletext, micro-computer or multi-media ensembles, in a selfteaching mode, long distance teaching or as a resource in a school or centre.

This project, conceived as a trilingual package, can be applied to Official Languages programs as well as immigrant orientation services in Canada, US and in Europe.

The important aspect of this experimentation is that it is not simply a multi-media approach which is being grafted onto existing methodologies. The approach is new and is based on the specific characteristics of teletext and videotext. The bank system, linked to exercises and authentic resources which are the real bones of TELELINGUA, can be used separately and/or incorporated into existing learning packages. Further, the method permits full utilization of TELIDON with audiodisc and videodisc accessories.

TELELINGUA is based on a graphico-linguistic analysis of the target language. Several hundred structures are used to construct basic patterns which consist of 1 TELIDON page and 3 overlays. (One in English, one in French and one in Spanish). These basic patterns may be used with exercise or game software or with resource software which is used to solve problems. Each software package is self-testing.

Another aspect of the experiment is the linking of the basic outline to authentic documentation-TV programmes, reviews, periodicals etc., thanks to the vast banking capacity.

The total cost of the project over the 27 months projected for its completion is just over one million dollars. It is expected that revenue will be returned from November 1985 and it is expected that the project will be self-financing from June 1986, at which time integration with other videotex systems via cable or satellite is expected.

#### C. UNIVERSITY OF TORONTO

##### THE ACQUISITION OF PROSODIC FEATURES OF SPEECH USING A SPEECH VISUALIZER,

This information is taken from a paper published by Professor E. F. James (IRAL) Vol XIV/3 August 1976.

Recent research in the area of acquisition of prosodic features was started at the University of Michigan in 1963 with the invention of a system known as SAID (Speech Automatic Instruction Device). This consisted, in essence, of a tape recorder for playing model utterances, a pitchmeter to extract, in real time, the fundamental frequency (pitch) of the model utterances and that of the student and a computer for comparing the output of the student with that of the model. This comparison was effected according to data previously programmed into the computer.

Using this system a student would hear the model, copy the intonation pattern and, within a matter of micro-seconds, the computer would judge his performance and either permit him, by means of a system of signal light, to pass on to the next parameter, intensity, or make him repeat the utterance until the intonation was judged satisfactory. The percentage of error was indicated to the student by the deviation from zero of a needle on a dial.

#### The speech visualizer at the University of Toronto

Using the facilities of the Experimental Phonetics Laboratory of the University of Toronto, a similar yet greatly improved system was devised. This consists of a series of filters, constructed by Philippe Martin, which, in connection with a special computer programme written by Martin, are responsible for extracting, accurately and instantaneously, the fundamental frequency of the utterance being analysed. The essential element of this system is a two-track storage oscilloscope for presenting, visually, on the screen the intonation and intensity curves of both utterances, model and student imitation.

Under this system a student hears the model utterance and sees at the same time the intonation curve being traced on the upper track of the oscilloscope screen. At a given signal the student commences his imitation and sees, again at the same time, his own intonation pattern being traced on the lower half of the screen. He now has before him, on the screen, the curve of the model utterances and immediately below it the curve of his imitation utterance. The student then examines both, to detect any errors in his utterance and, if he decides to repeat his attempt, a voice-operated relay clears the lower half of the screen only, and his new imitation is traced on the screen, once again in real-time, so that the process of comparison and repetition can begin again. The results of experimentation may be summarized as follows:

1. a system which provides a student with an immediate reinforcement in the form of visual feedback of his own performance which permits comparison with the model is vastly superior to other methods;
2. there is scope for the development of articulation as well as speech prosody using this system;
3. the efficacy of visualization of intonation patterns in applied phonetics and the teaching of intonation;

Finally it should be noted that a cumbersome and expensive machine, first conceived and constructed in the Experimental Phonetics Laboratory has now been successfully miniaturized and is currently in use at the Faculty of Education at the University of Toronto.

#### D. NATIONAL DEFENCE AND SONY OF CANADA

This project, which is not specifically designed for application to language training, is described in the article by Major Serge Gaudreau and M. W. Chan, attached at Annex B. The possibilities for application to language programs are unlimited as will be realized upon your reading of the paper.



E. LE COLLEGE ROYALE MILITAIRE

The objective of the project under way at CMR is to explore the possibilities of using micro-computers to augment the teaching of French as a second language, to individualize teaching, to respond to the specific needs of students and to provide progressive testing and reinforcement techniques.

It is difficult in the time available to summarize the developments that have already taken place. This approach proposes the following as the basis of further development:

- a. automatic systematized control;
- b. teaching strategy based on student needs and compatible approaches;
- c. immediate interactive feedback;
- d. standardized references;
- e. situations, functions and notions based on future requirements of the students;
- f. link with test specialists;
- g. open files which can be expanded;
- h. complete on-line system;
- i. re-definition of the role of the teacher;
- j. modules attached to line of progression;
- k. authentic texts;
- l. participation by electronic pencil;

Currently material is being developed and validated in the acquisition phase, which has five subdivisions or tasks:

1. acquisition of generalized notions (text comprehension)
2. acquisition of specific notions (vocabulary)
3. acquisition of structures (interference)
4. acquisition of linguistic functions
5. acquisition of prosodic elements (visualization of intonation)

We are currently in the process of exploring the possibilities of linking the research done by Professor James in Toronto to the system. The equipment currently in use is listed at Annex C.

As a result of this project, currently being considered for a major research grant, other projects have been initiated. Professor Tremblay at CMR is currently examining the possibilities of creating a bank of information, texts and lexical items on the following:

- a. National Defence Language;
- b. Language of the air - on ground;  
in flight;  
traffic control;
- c. Combat Arms language;
- d. Land operations;
- e. Navy language;
- f. Naval operations;
- g. Support group language;

This project has excited the interest of pedagogues and administrators alike and we look forward to being able to participate with other researchers in the BILC organization.

F. CONTROL DATA CANADA LTD

Control Data Canada has developed several packages of interactive self-paced, one on one instructional systems. Recently four packages were released on the US market and from May of this year will be available in Canada.

These packages are:

- a. French vocabulary builder;
- b. French classroom words;
- c. French Travel vocabulary; and
- d. French vocabulary for shopping.

Each package teaches approximately 500 new words, through a variety of drills, exercises and games. Animated graphics are used to provide visual stimulation.

This system, supplied on floppy discs, will operate with Apple, Atari or Texas Instruments micro-computers.

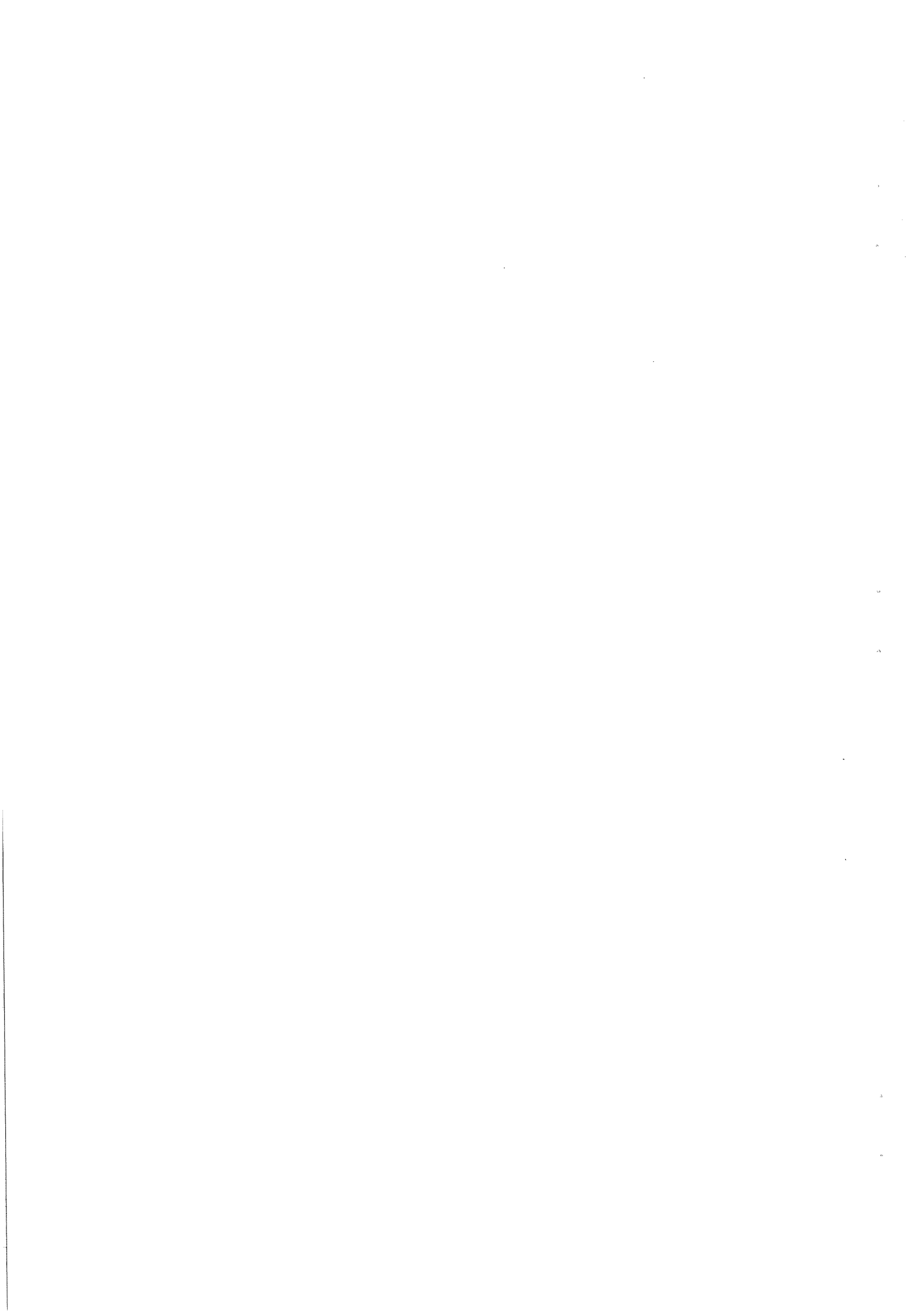
The immediate interest of packages such as these which are produced commercially, is not their application in their present form to our existing programs. Control Data's Plato based French, for example, has been obtained from the manufacturer to determine whether Canadian Forces authored material can be incorporated into the present format and whether selected elements of the commercial system can be used as supplements to other programmes now being evaluated.

#### G. CONCLUSION

This brief overview of recent developments in the CAL field in Canada has been presented not simply to inform members of the current situation but rather to encourage individual delegations to take advantage of the material submitted in the Annexes.

The Directorate of Language Training is conscious of the rapidity with which events will unfold in the near future and with this in mind we are attempting to ensure that researchers, courseware authors and commercial producers establish contacts at the earliest possible moment. DLT will be pleased to assist if members wish to establish further contacts with the institutions and companies mentioned. As a first step in this direction, DLT has compiled a preliminary bibliography which may prove useful. (Annex D)





VIDEO INTERACTIVE LEARNING SYSTEM (VILS)

Major Serge Gaudreau  
Department of National Defence

M.W. Chan  
Sony of Canada

Background

The Canadian Forces has a requirement to increase the efficiency and effectiveness unsophisticated equipments such as the Source Data Automation (SDA) terminals used by supply technicians in the automated supply system. One promising technique is the use of low-fidelity simulation where students are given a self-paced course incorporating visual material stored on a video tape recorder. The visual material simulates the actual equipment the student is learning to operate.

Objective

The central purpose of the VILS project is to develop the hardware, software, and courseware necessary to simulate the operation of the SDA device currently in use in the CF Supply System. The introduction of low fidelity simulation to replace the use of operational equipment in teaching personnel to operate these devices could result in considerable savings in money, equipment and time. To meet that requirement, microcomputer technology combined with video tape devices appears to offer the necessary interaction to ensure maximum efficiency.

Hardware

The configuration of the VILS is as shown in Fig. 1 and is adaptable to videodisc players.

The Master Control Station is made of:

- a Central Control Unit (CCU) comprising an SMC-70 micro-computer with two floppy disc drives and a communication card with a VC driver. The CCU is capable of independent operation while the learning stations are in use;
- a hard disc of 10 Megabytes capacity able to store the data file, the program file and the student record file;
- a printer to produce hard copy of files; and
- a video cassette recorder (VCR) and a monitor to test and implement the courseware.

Each learning station is made of:

- a terminal connected in series via RS 232 communication line;

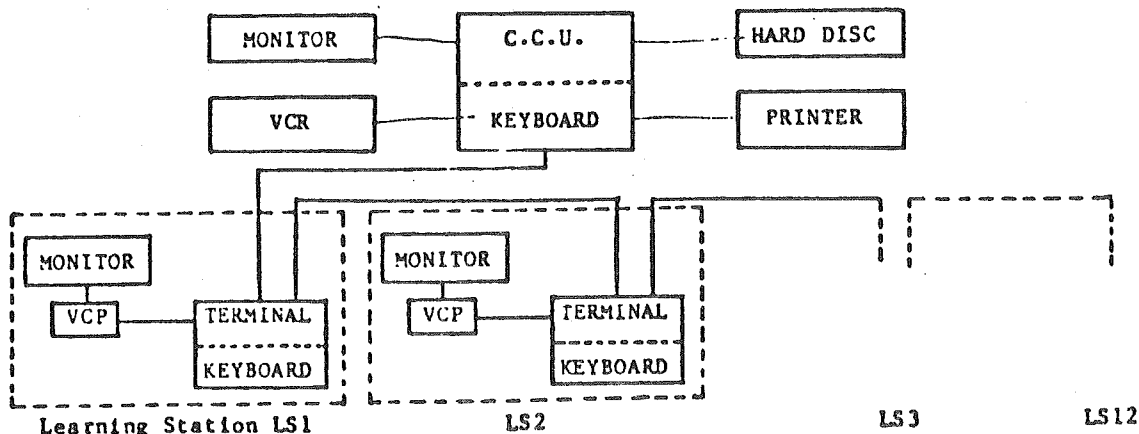


Fig. 1 - Video Interactive Learning System (VILS)

- a video cassette player (VCP) and a monitor, under the control of the terminal and the courseware, to supply the sound and visuals required; and
- a touch sensitive screen capability is being added to allow a higher degree of student interaction.

Since the system is designed for self-faced instruction, each learning station can function independently under its own courseware program downloaded from the hard disc file.

### Software

Since it is above all a Training Development Research Project it is critical to integrate software that is user friendly, fast to operate and easy to use in courseware design by instructional staff with no computer experience. Three different software packages are implemented: System Operating Software, Application Software and a Courseware Authoring Language.

The System Operating Software is written for speed of operation, ease of program development, and includes a HELP function. It controls the communication to the twelve Learning stations and comprises:

- a. a Data File Structure designed for minimum storage requirements and fast access times. The design of the structure takes into consideration the average human response time and ensures low latency by initiating interactive activity using character displays or video material from the VCP. Techniques of multiple dumps are a design feature when courseware control programs are exceedingly long. Such dumps are an integral part of the courseware control program.
- b. a Records File designed to feature minimum space, ensuring security and accessibility by authorized personnel. The scheme is capable of conforming to format requirements by the user and still efficient with standard practice of the Computer Industry. The Records File provides complete student file, time (sign on/sign off time), courseware evaluation and general progress of students. It is capable of providing Computer Management Instruction (CMI) features for about 500 students/year for 10 hrs of instructional

The Application Software is developed to simulate the functions of the SDA. The initializing procedures of the SDA Operator's Console functions i.e. function lamp test, key turn-on and sound alarm test, and power on procedures are simulated and displayed on the monitor.

The interaction function and result of the SDA keyboard and its message display unit is simulated by the terminal keyboard and the monitor. If the result of an input operation requires display of motion sequence, for example, the card reader/punch unit or lamps on the operator's console, the relevant sequence on the VCP is called up by the terminal and displayed on the monitor.

The inclusion of corresponding audio stimuli and video motion allows the student to realize articulatory movements. Colour video and graphics enhance reality and provide extended motivation.

The Courseware Authoring Language is user friendly and designed for efficiency, speed and ease of use. The language is capable of being used by instructional staff without computer background using the individual material designer process, e.g. stimulus prompts, stimulus instructive questions and confirmation.

The Authoring Language has the following features:

- a. it is page oriented:
  - pages are consecutively numbered;
  - a table of contents is used to define and list each by its page number, title and type;
  - branching, marking and other operational instructions are also defined and listed in the table of contents.
- b. has three major types of pages:
  - TEXT PAGE of 40 X 25 format, single key input to determine branching, graphics overlay and marking information.
  - FORMS PAGE of 80 X 25 or 40 X 25 format, graphics overlay, programmed field with hidden data, multiple key input to match hidden data and marking information.

- VIDEO PAGE that start and stop any where on the cassette and allow automatic branch back to digital page or wait for a key input.

c. has two types of graphics:

- DRCS (Dynamically redefinable character sets) stored in the font table with font editor provided
- VECTOR GRAPHICS using simple command format ie, LINE, CIRCLE, BOX, etc.

#### Courseware

This project is conducted at the Canadian Forces School of Administration and Logistics (CFSAL) at CFB Borden within the self-paced TQ 3 Supply Technician program. The courseware is designed by a contractor under the Sponsored Program Division of the National Film Board in accordance with the Systems Approach to Training. A task analysis was completed by the contractor and evaluated by DND staff. Learning objectives were then developed and have been grouped into six modules of instruction. Programming edit is carried out by the Training Development

Company of the Canadian Forces Training Development Centre to optimize the instructional strategy. Technical and grammatical edit is carried out by the Supply Training Company and Standards Company of CFSAL to ascertain the accuracy of the content material and ensure that the level of comprehension is appropriate for the target population. The production of the video material is being contracted through the Sponsored Program Division of the National Film Board. Each module of instruction is then entered into the system by the instructional staff of CFSAL using the authoring language. The evaluation of the courseware and of the overall project is performed by the Training Development Officer of CFSAL.

#### Conclusion

The VILS has been developed to meet the needs of a specific learning situation requiring a definite degree of simulation. The cost-effectiveness of this approach is being analysed and looks very promising in the initial stage of its application. Data is being collected and will be available by March 1984. Analysis of the results will determine to which extent this system may be implemented.





CONFIGURATION ACTUELLE

Nous comptons présentement dans notre logithèque:

a. Sous CCPM86 (Digital Research).

- Pascal MT86 avec éditeur SPP (Digital Research)
- ASM86 (assembleur INTEL)
- Microlink (communication, Digital Marketing)
- DR LOGO

b. Sous PCDOS 2.0.

- Interpréteur
- BASIC (Microsoft) + Compilateur + Utilitaire
- PERFECT WRITER (traitement de texte)
- MACRO-ASSEMBLEUR (Microsoft)
- DBASEIII (DBMS)
- PERFECT LINK (Communication)

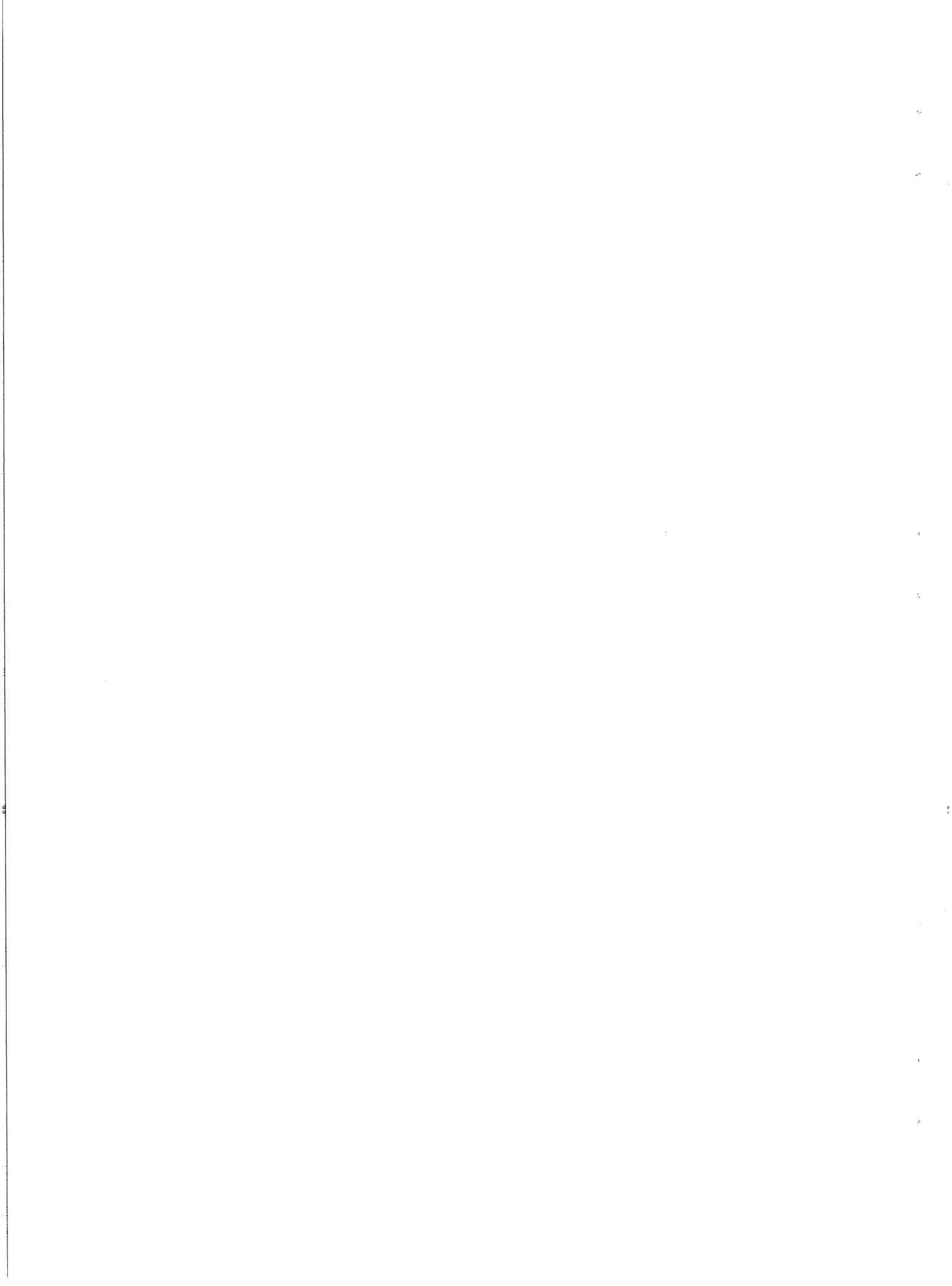
Notre système est configuré autour du IBM PC. Voici la liste des périphériques:

Première console (utilisateur):

- 320K RAM
- 2 sorties série (RS232)
- 1 sortie parallèle (Centronics)
- Horloge temps réel (+ batterie)
- Carte couleur graphique IBM (résolution: 600x200)
- Carte PC NET de réseau local (transmission: 1 megabits/sec)
- VersaWriter (tablette graphique) + interface
- Crayon optique
- Imprimante 132 colonnes (Epson MX100)
- Ecran couleur RGB (Amdek)
- 2 unités de disques souples (DS,DD)

Deuxième console (serveur):

- 384K RAM
- 2 sorties série (RS232)
- 1 sortie parallèle
- Carte graphique
- Carte PC NET
- Ecran monochrome
- 1 unité de disque souple
- 1 unité de disque dur (10 mega)
- 1 Crayon optique



Bibliography: Computer Assisted Learning

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that will be useful in foreign language classrooms. (EKN)

EJ278131 FL514981  
**Computer-Assisted Language Instruction: Present State and Future Prospects.**  
 Wyatt, David H. 1983  
 System, v11 n1 p3-11  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141); POSITION PAPER (120)  
 An overview is presented of some major areas of interest, including contrasts between older terminal-based and newer microcomputer-based systems, quality and sophistication of ready-to-use and authoring software, and advanced technology. Three directions for development and problem resolution are outlined. (Author/MSE)

EJ276594 FL514934  
**Programming/Evaluating Second Language CAI.**  
 Tuttle, Harry Grover  
 Foreign Language Annals, v16 n1 p35-39 Feb 1983  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); TEACHING GUIDE (052)  
 Practical suggestions are given for teachers wanting to improve classroom computer assisted instruction, including the use of title, instructions, error-proofing responses, feedback, prompts, remediation, personalization, scorekeeping, levels of difficulty, timing, and variety. (Author/MSE)

EJ272817 FL514780  
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 Froehlich, Jurgen  
 Die Unterrichtspraxis, v15 n2 p164-69 Fall 1982  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); NON-CLASSROOM MATERIAL (055)  
 Discusses ways to combine technological innovations in the areas of visual aids and computers with existing language lab equipment in order to motivate students in the area of second language learning. (EKN)

EJ267223 FL514658  
**Computers and Foreign Language Instruction.**  
 Russell, John  
 NALLD Journal, v16 n3-4 p17-23 Spr-Sum 1982  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); POSITION PAPER (120)  
 Discusses computer assisted foreign language instruction. Describes what to look for in computers and gives common problems in hardware and software. Discusses future technology

EJ267222 FL514657  
**Foreign/Second Language Education and Technology in the Future.**  
 Davies, Norman F.  
 NALLD Journal, v16 n3-4 p5-14 Spr-Sum 1982  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); POSITION PAPER (120)  
 Examines the place and use of language labs, audiovisual equipment, and computers in foreign language classrooms of the future. (EKN)

EJ264489 FL514554  
**Simulated Conversation as a CAI Strategy.**  
 Underwood, John  
 Foreign Language Annals, v15 n3 p209-12 May 1982  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141); NON-CLASSROOM MATERIAL (055)  
 Describes experimental Spanish program which employs simulated conversation strategies that allow students more freedom in their responses than in usual computer assisted language instruction programs, while error checking routines monitor for syntactic errors. (Author/BK)

EJ263265 FL514515  
**A Tenses Computer Program for Students of French.**  
 Collett, John.  
 Modern Language Journal, v66 n2 p170-79 Sum 1982  
 Language: English  
 Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141); TEACHING GUIDE (052)  
 Describes use of computer aided instruction and designing of computer programs to teach verb tenses to students of French at the University of Waikato. Basic limitation of present program is lack of variety in sentences it produces. (BK)

English instruction. Findings indicate that a compromise has to be found between a straightforward learning aid such as a microcomputer and a more general purpose instructional system with additional facilities like sound and graphics. (Author/MER)

EJ263219 FL514469  
**Reflections on the Use of Computers in Second Language Acquisition-II.**  
 Marty, Fernand  
 System, v10 n1 p1-11 1982  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); POSITION PAPER (120)  
 Examines requirements for successful computerized instruction in second language acquisition including relationship between teachers and programmers, analyzes limitations of computerized instruction, and examines new technologies. (BK)

EJ25507 SE530571  
**Computer-Assisted Instruction in Foreign Language.**  
 Pusack, James P.  
 Pipeline, v6 n2 p5-8.10 Fall 1981  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); NON-CLASSROOM MATERIAL (055); PROJECT DESCRIPTION (141)  
 Many different types of instructional programs for foreign language are noted, with examples from many different ongoing instructional programs described. (MP)

EJ251142 FL514100  
**Foreign Language Departments and Computer-Assisted Instruction: A Survey.**  
 Olsen, Solveig  
 Modern Language Journal, v64 n3 p341-49 Fall 1980  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); EVALUATIVE REPORT (142)  
 Describes survey on computer assisted instruction (CAI) in foreign languages at four-year colleges in the U.S. Results show those using it are enthusiastic, while those not using it cite cost, suspiciousness of professors toward modern technology, and lack of experienced personnel as reasons. (Author/BK)

EJ247472 IR509170  
**Educational Technology Research: Computer-Aided Learning of a Foreign Vocabulary.**  
 Engel, F. L.; Andriessen, J. J.  
 Educational Technology, v21 n5 p46-53 May 1981  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); EVALUATIVE REPORT (142)  
 Two experiments assessed individual and group response to using a microcomputer for vocabulary improvement in Dutch to

EJ245856 FL513882  
**Meaningful Practice on the Computer: Is It Possible?**  
 Schaeffer, Reiner H.  
 Foreign Language Annals, v14 n2 p133-37 Apr 1981  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); EVALUATIVE REPORT (142)  
 Describes study developed to measure the effects of structural versus grammar practice using the computer as the practice medium. Data supports contention that retention is a function of the meaningfulness of one's learning experience. Suggests the computer has great potential as practice medium in second language acquisition process. (Author/BK)

EJ242519 FL513805  
**A Home Made Package for Use in the Language Lab.**  
 Kenner, Roger; Richards, Griff  
 NALLD Journal, v15 n1 p31-34 Fall 1980  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); INSTRUCTIONAL MATERIAL (051)  
 Describes a computer-assisted learning system that was developed for use by second language students and remedial English students. These students are provided free access to a wide variety of instructional materials via the computer terminals. The workings of the computer programs are described along with sample input-output exchanges. (Author/PJM)

utterances of each word. The purpose is for the learner to develop lexical competence, that is, the ability to use a word syntactically, semantically, and pragmatically. Verbs are the focus of these materials although other parts of speech can be handled similarly. (PMJ)

EJ242517 FL513803  
**Using Computer Assisted Instruction in an ESL Language Program.**  
 Leidy, Judy; And Others  
 NALLD Journal, v15 n1 p13-24 Fall 1980  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); INSTRUCTIONAL MATERIAL (O51)

Argues for the use of computer systems in language classrooms. One of the major advantages is that the student can move at his own pace. The computer thus provides the time needed for individualized instruction that the teacher cannot afford. A sample computer curriculum is detailed. (PJM)

EJ234456 FL513484  
**Examples of Applications of Computers to Modern Language Study.**  
 Collett, M. J.  
 System, v8 n3 p195-204 Oct 1980  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); PROJECT DESCRIPTION (I41)

Describes ways in which existing computer installations have been used by a university French department. Among these are: (1) a format which presented multiple choice questions applied to reading and grammar units, and (2) a new type of program designed for vocabulary review with the capability of recording individual student performance. (Author/MES)

EJ206641 FL512541  
**Students' Reactions to Computer Assisted Instruction in German.**  
 Taylor, Heimtraut F.  
 Foreign Language Annals, v12 n4 p289-91 Sep 1979  
 Available from: Reprint: UMI  
 Language: ENGLISH  
 Document Type: JOURNAL ARTICLE (O80); PROJECT DESCRIPTION (I41)

Reports on the generally favorable response of college students at Ohio State University to the use of computers in elementary German instruction. (AM)

EJ206618 FL512518  
**The Computer in Foreign Language Teaching.**  
 Clutterbuck, Michael  
 Babel: Journal of the Australian Federation of Modern Language Teacher's Association, v15 n1 p33-37 1979  
 Language: ENGLISH  
 Document Type: JOURNAL ARTICLE (O80); TEACHING GUIDE (O52)

Discusses some ways in which computer technology can benefit the language teacher. (AM)

EJ221817 FL513060  
**Teaching the Syntactic, Semantic and Pragmatic Dimensions of Verbs.**  
 McKay, Sandra  
 TESOL Quarterly, v14 n1 p17-26 Mar 1980  
 Available from: Reprint: UMI  
 Language: English  
 Document Type: JOURNAL ARTICLE (O80); TEACHING GUIDE (O52)

Illustrates a strategy for teaching vocabulary, using a computer-held corpus of native speakers' contextualized

computer-held corpus of native speakers' contextualized



EJ199704 FL512132

**Computer Games for the German Class.**

Balsler, Jeffrey R.; Blice, Sylvia A.  
 Unterrichtspraxis, v11 n2 p95-96 Fall 1978  
 Language: ENGLISH

Document Type: JOURNAL ARTICLE (080); TEACHING GUIDE (052)  
 Examines three examples of computer games that can be used by high school German students: antonyms, compound nouns, and prepositions. The programs were written in BASIC and developed for use in a second-year German class. (EJS)

EJ194577 IR506182

**Development of a PLATO Based Curriculum for Tactile Speech Recognition.**

Saunders, Frank A.; And Others  
 Journal of Educational Technology Systems, v7 n1 p19-27 1978

Language: ENGLISH  
 Describes a PLATO-based curriculum for teaching profoundly deaf children to understand speech sounds, which are presented as touch patterns on the abdomen. PLATO's auditory disk output is used to speak words and phrases which are converted to touch patterns via a new sensory aid, the telefactor. (Author/JEG)

EJ192543 EC112064

**An Interactive Computer System for Teaching Language Skills to Deaf Children.**

Galbraith, Gary  
 American Annals of the Deaf, v123 n6 p706-11 Oct 1978  
 Language: ENGLISH

Described is the methodological and technical background of a project dealing with computer-assisted instruction for deaf children, including computer hardware required and the procedures which will be followed. (BD)

EJ179153 CS708114

**Application of Computer Technology in Undergraduate Teacher Education**

Askov, Eunice N.; And Others  
 English Education, 9, 2, 102-9 W 1978  
 Language: ENGLISH  
 Describes how computer assisted instruction is used in two competency based teacher education courses in language education at Pennsylvania State University. (DD)

ED230182 IRO10703

**Computers in Education. Proceedings of the South African Congress = Rekenaars in die Onderrig. Verrigtinge van die Suid-Afrikaanse Kongres.**

van der Vyver, David H., Ed.  
 Stellenbosch Univ. (South Africa).  
 Apr 1982 509p.; Photographs removed prior to filming.  
 Report No.: ISBN-0-908422-79-2  
 EDRS Price - MF02/PC21 Plus Postage.  
 Language: English  
 Document Type: CONFERENCE PROCEEDINGS (021); REVIEW LITERATURE (070); PROJECT DESCRIPTION (141)  
 Geographic Source: South Africa  
 Journal Announcement: RIEOCT83

The 54 conference papers and abstracts on the possible role of computers in the world of education in the Republic of South Africa which are presented in this volume are published under the sections and in the order in which they appeared on the congress program. The names of the sections and the number of presentations in each are as follows: (1) general perspectives, 16; (2) computer-based education in industry, 4; (3) computer-based education in schools, 7; (4) computer-based education at the tertiary level and in schools, 5; (5) computer-based education at the tertiary level, 10; (6) computers in language teaching, 5; and (7) papers received too late for classification, 7. Specific topics discussed include administration of computer-based education, computer-managed instruction, microcomputer applications and studies, cost effectiveness, teacher training, authoring techniques, networks, computer-assisted testing, and curriculum development, as well as applications in specific subject areas. Some papers include references and an author index is provided. (LMM)

offered the opportunity to review all of the areas previously covered. Next, a practice/self-testing mode provides the student immediate feedback and reinforcement. Structural exercises also incorporate the elements of speed and pacing by allowing the student to choose the number of seconds allotted to respond to each question. It is suggested that standard exercises designed for vocabulary development and reading comprehension are also well suited to CAI. Another area not traditionally associated with CAI is the practice of language functions, and notional-functional exercises developed by Meloni, Thompson, and Beley are described. Brief guidelines for developing CAI are also included. (SW)

ED230051# FLO13719  
Teaching and Learning a Foreign Language via  
Tele(Video)phone: A Futuristic Mini-Computer Design.

Harewood, Glenn  
1983 12p.; In: Speak Out and Touch Someone. The OMLTA  
Yearbook, 1983.

Available from: Not available separately; see FL 013 718.

Document Not Available from EDRS.

Language: English

Document Type: POSITION PAPER (120)

Geographic Source: U.S.: Ohio

Journal Announcement: RIEOCT83

A futuristic design for foreign language learning is suggested using a video telephone, that is, a telephone with video and computer components included. Some introductory information is provided on ways the computer is being used today to organize and transmit information, and on models of individualized instruction which can be adapted to a home computerized course in a foreign language. By incorporating elements from these models and from computer assisted instructional programs in existence, a design for teaching and learning a foreign language through a telecommunications system is worked out. The objectives of such a course, kinds of equipment needed, and various ways the program could be implemented are described. The example given is of a course that would accommodate 100 students per teacher in every 3-month period, with a maximum of 20 students in five half-hour teacher-student core teleconferences per day. The ordinary telephone network from the teacher's home or office and the student's home is utilized as the medium of communication. The design provides for group and individual meetings with the teacher and among the students, use of programmed instructional materials, competency tests, and practice and review sessions. (AMH)

ED226569 FLO13385

Skill Specific CAI Techniques.

Lavine, Roberta Z.; Fechter, Sharon Ahern

Oct 1982 20p.; Paper presented at the Conference of the Washington Area Teachers of English to Speakers of Other Languages (Fairfax, VA, October 1-2, 1982); Appendix B has been omitted because of poor reproducibility.

EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); TEACHING GUIDE (052)

Geographic Source: U.S.: Virginia

Journal Announcement: RIEJUL83

Advantages of computer-assisted instruction (CAI) for grammar-oriented exercises are considered, and a learning module to help the student prepare for the Test of English as a Foreign Language (TOEFL) exam is described. The exercises are modeled on the TOEFL exam: the student is given a sentence, one part of which is incorrect and is asked to determine where the error lies. In the first exercises, which deal with structural points, an incorrect answer is followed by a detailed explanation of the error. Students are also



Assisted Learning (CAL) programs on the university level are discussed. First, three points are noted that affect the way materials are conceived: the type of user and the way of giving choices regarding exercises, the fact that the computer is primarily a medium adapted to the written word, and the adaptability of the equipment to be used. Secondly, vital ingredients in the design of a CAL lesson are presented: the questions to be answered, the format that is most adaptable to the point in question, the desirability of contextualization, user-aid features to be included, and provision for error analysis and feedback. A third section deals with examples of CAL materials created at the University of Western Ontario. These range from a translation-based drill and practice review of vocabulary to a contextualized drill. Both of these were designed for teletype terminals. A second example of CAL lessons is one on numbers and dates that was designed for use with color microcomputers. The final section of the paper deals with the place such a system should be given in the curriculum, that is, whether it should be responsible for instruction in certain aspects of the course or whether it should have a solely adjunctive role. Finally, human factors such as faculty attitudes and the part they play are discussed. (AMH)

ED225399 FLO13448  
**So You Want to Do Your Own CAL Program: The Experience at the University of Calgary.**

Mydlarski, Donna  
 SPEAQ Journal, v4 n3-4 p1119-27 1980  
 1980 10p.; Paper presented at the Concordia Colloquium on Language Laboratories (Montreal, Quebec, July 6-8, 1981).  
 Available from: Concordia Colloquium on Language Labs, Concordia University, 1455 de Maisonneuve West, Montreal, Quebec H3G-1M8, Canada (\$15.00 for entire journal).  
 EDRS Price - MF01/PC01 Plus Postage.

Language: English  
 Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141); CONFERENCE PAPER (150)  
 Geographic Source: Canada; Alberta  
 Journal Announcement: RIEJUN83

This paper describes the experience of setting up a computer assisted learning (CAL) program, the implementation of the program, and the way it is currently being integrated into the curriculum. The CAL program was developed by a team that included a subject specialist, specialists in computer applications and instructional design, a computer programmer, and an evaluation and measurement consultant. Planning the program involved (1) attention to decisions about whether to use CAL for mainline or adjunct instruction, (2) the kind of courseware, (3) which aspects of the language to teach, and (4) whether to use a tutorial mode or a drill and practice mode. The implementation of the program involved mainly getting financial support and the support of the faculty. The program is being integrated into the introductory French courses in two ways. In one approach, students are encouraged to use CAL in addition to their regular instruction; in the other, students use CAL as part of the course load. A preliminary evaluation of the two experiments indicated that the CAL lessons should have been better integrated into the course work. A number of mainly positive and neutral comments by students on the initial use of CAL are provided. Generally, student attitudes toward learning French either improved or stayed the same as a result of the CAL experience. (AMH)

ED225396 FLO13445  
**Computer-Assisted Learning: Design and Implementation.**  
 Holmes, Glyn; Kidd, Marilyn E.  
 SPEAQ Journal, v4 n3-4 p83-96 1980  
 1980 15p.; Paper presented at the Concordia Colloquium on Language Laboratories (Montreal, Quebec, July 6-8, 1981).  
 Available from: Concordia Colloquium on Language Labs, Concordia University, 1455 de Maisonneuve West, Montreal, Quebec H3G-1M8, Canada (\$15.00 for entire journal).  
 EDRS Price - MF01/PC01 Plus Postage.

Language: English  
 Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141); CONFERENCE PAPER (150)  
 Geographic Source: Canada; Ontario  
 Journal Announcement: RIEJUN83  
 Issues related to design and implementation of Computer

ED218944# FLO13004

**A Rather Intelligent Language Teacher.**

Cerri, Stefano; Breuker, Joost  
 Illinois Univ., Urbana. Language Learning Lab.  
 Studies in Language Learning, v3 n1 p182-92 Spr 1981  
 1981 41p.

Available from: Not available separately, see FL 012 990.  
 Document Not Available from EDRS.

Language: English

Document Type: PROJECT DESCRIPTION (141); NON-CLASSROOM

MATERIAL (055); JOURNAL ARTICLE (080)

Geographic Source: U.S.; Illinois

Journal Announcement: RIEDEC82

Characteristics of DART (Didactic Augmented Recursive Transition), an ATN-based system for writing intelligent computer assisted instruction (ICAI) programs that is available on the PLATO system are described. DART allows writing programs in an ATN dialect, compiling them in machine code for the PLATO system, and executing them as if the original code was written in TUTOR (the language of PLATO). Characteristics of DART are: (1) data and program are merged but differently represented; (2) data are organized as semantic networks; (3) percepts and sophisticated input-output interface are available; (4) acts reflect choices for the construction of an instructional theory; (5) DART has its own editor and an on-line authoring guide; (6) DART facilitates stacks and queues but can also handle lists; and (7) DART is a tutor-based system and runs on PLATO. The first operational program written in DART teaches the conjunctions of subordinate clauses in a foreign language (Dutch, Italian, English, and French). ELISA (Example of Linguistics Interaction Suitable for Augmentation) is the program that teaches conjunctions in foreign languages. It consists of three main phases--presentation, assessment, and test. By collecting subnetworks, a library of didactic programs can be filled for the development of notions and theories of instruction. One of the main problems in developing intelligent computer assisted teaching programs is the understanding and representation of misconceptions. Adequate tutoring can only be accomplished if misconceptions can be diagnosed and remedied. The syntax of DART is outlined, and part of the concept network of ELISA is graphically displayed. (SW)

**Journal Announcement: RIEDEC82**

Conditions under which using computers can help improve the study of foreign languages are discussed. Attention is limited to a consideration of a language course that aims at giving students a high level of accuracy in listening comprehension, oral expression, reading comprehension, and written expression. The following questions are addressed: (1) Will computerized instruction reduce the number of language teachers? (2) How can we measure the effectiveness of computerized instruction? (3) Under what conditions will a student decide that the computerized materials are valuable? (4) What gains can the student expect? (5) How can the foreign language teacher develop materials? (6) What are the implications for the future of computerized instruction in second language acquisition? The following minimum requirements for working with computerized materials are advocated: When beginning to work, the student should be returned to the exact point that the last session ended; the student should be free to interrupt an exercise and proceed to another one; at the beginning of each exercise, the student should be told what the purpose of the exercise is and how many sentences it contains; the student should have the option of typing the answer or viewing the correct answer; and if the student types an incorrect answer, the student should be guided into correcting errors with the minimum of help. It is suggested that TUTOR, the computer language used on the PLATO system is superior to other computer languages now in general use but it still lacks some of the features necessary to facilitate the performance of essential operations such as separating roots from affixes. (SW)

ED218932# FLO12992

**Reflections on the Use of Computers in Second-Language Acquisition.**

Marty, Fernand  
 Illinois Univ., Urbana. Language Learning Lab.  
 Studies in Language Learning, v3 n1 p25-53 Spr 1981  
 1981 29p.

Available from: Not available separately, see FL 012 990.  
 Document Not Available from EDRS.

Language: English

Document Type: JOURNAL ARTICLE (080)

Geographic Source: U.S.; Illinois



ED218930 FLO12990

**The PLATO System and Language Study.**

Hart, Robert S., Ed.  
 Illinois Univ., Urbana. Language Learning Lab.  
 Studies in Language Learning. V3 n1 Spr 1981  
 1981 238p. For related documents, see F1 012 991-FL 013  
 007.

Available from: Language Learning Laboratory, University of  
 Illinois, G-70 Foreign Languages Bldg., 707 S. Mathews,  
 Urbana, IL 61801. Prices available upon request.  
 EDRS Price - MF01/PC10 Plus Postage.

Language: English

Document Type: SERIAL (022); REVIEW LITERATURE (070)

Geographic Source: U.S.; Illinois

Journal Announcement: RIEDEC82

This issue presents an overview of research in  
 computer-based language instruction using the PLATO IV  
 computer system. The following articles are presented: (1)  
 "Language Study and the PLATO system," by R. Hart; (2)  
 "Reflections on the Use of Computers in Second-Language  
 Acquisition," by F. Marty; (3) "Computer-Based Instruction in  
 Elementary Hindi," by Y. Kachru and others; (4) "A  
 Computer-Assisted Program for the Teaching of Modern Hebrew,"  
 by P. Cole and others; (5) "PLATO Sitcom Dialogs for Russian,"  
 by C. Dawson and N. Provenzano; (6) "PLATO Reaches  
 International Students with English Lessons," by R. Dixon; (7)  
 "Computer-Assisted Instruction in Latin and English Vocabulary  
 Development," by R. Scamian; (8) "PLATO Esperanto Materials,"  
 by J. Sherwood; (9) "CAI in Advanced Literature Classes," by  
 N. Hinton; (10) "The Indiana Routing System: A PLATO  
 Curricular Tool for Teachers," by R. Haugh and others; (11)  
 "Computer Processing of Esperanto Text," by B. Sherwood; (12)  
 "Technical Aspects of Computer-Assisted Instruction in  
 Chinese," by C. Cheng and B. Sherwood; (13) "Speech Synthesis  
 Applied to Language Teaching," by S. Cerri and J. Breuker;  
 (14) "An Evaluation of Computer-Assisted Instruction in  
 English Grammar Review," by W. Dates; (15) "Computer-Based  
 Analysis of Individual Learning Characteristics," by C. Curtin  
 and others; and (16) "Learning Characteristics of the  
 Disadvantaged: Implications for CAI Lesson Design," by S.  
 Campanini. (AMH)

there is a need for more reports from practitioners in the  
 foreign language classroom. Leaders in the foreign language  
 profession must provide in-service opportunities, and foreign  
 language teachers themselves must seek active involvement with  
 computers. Paradoxically, the United States, the leader in  
 production of computer technology, lags behind other countries  
 in efficient and effective utilization of computers in  
 education. A review of developments in the U.S.S.R., France,  
 Great Britain, Sweden, Canada, and Austria provides some  
 guidelines for American educators. Some initiative and  
 guidance in the use of computers in education are being  
 provided by the House Committee on Science and Technology on  
 the federal government level and by some states. The way some  
 school districts are using computers gives an idea of what  
 computers can do and why teachers should use them. Some uses  
 in foreign language education are the mechanics of the  
 language, the possibilities for individualized instruction,  
 and recording and analyzing error patterns. Because the  
 software dilemma is likely to remain the crucial problem, what  
 is needed is extensive cooperation between curriculum  
 specialists in foreign languages and experts in computer  
 programming. (AMH)

ED216552# FLO12945

**Applications of Computer Technology in Foreign Language Teaching and Learning.**

Harrison, John S.

1982 9p.

Available from: Not available separately; see FL 012 939.

Document Not Available from EDRS.

Language: English

Document Type: POSITION PAPER (120); PROJECT DESCRIPTION (141)

Geographic Source: U.S.; Maryland

Journal Announcement: RIEOCT82

Literature on the use of computers in education is vast, but

instruction are discovered: (1) errors can be analyzed and positive reinforcement given; (2) testing can become a learning process; and (3) it can provide almost unlimited opportunity for drill and practice. Almost any written material can be adapted for computer exercises using the drill and practice, tutorial, testing, dialogue, or simulation and gaming modes. The computer learning program at Strayer College is mainly employed in the drill and practice mode and is used along with classroom instruction. The other instructional modes are used as well and are described briefly. Several computer exercises are appended. (AMH)

ED214377 FLO12825

**How Real Is a Computer Simulation?**

Higgins, John J.

Dec 1981 7p.; Revised version of a paper presented at the International Conference of the International Association of Teachers of English as a Foreign Language (16th, London, England, December 18-21, 1981).

EDRS Price - MFO1/PC01 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); PROJECT DESCRIPTION (141)

Geographic Source: United Kingdom; England

Journal Announcement: RIEAUG82

Two keywords "input" and "get," in the BASIC programming language provide a metaphor of the processes of response and intervention in a dialogue situation. Computer teaching activities can be programmed using one or both of these commands. There are at least five main types: the quiz or overt teaching program, the text processing program, the search, the game, and the simulation. In the last four, the computer is not a teacher but a provider and organizer of relevant language experience. Cloze passages, varieties of the Hangman game, and activities on predictable forms such as plurals, are activities based on the input command and consist of well-formed dialogue. Activities using the "get" keyword introduce the element of skill and timing. Another category of activities, simulations, can be relatively simple or complex. These involve an initial task and several possible solutions or routes to a solution. While there are drawbacks, the tasks one can carry out on computers are real enough to engross learners and they possess more versatility than printed visual aids. (AMH)

ED216546 FLO12939

**The Foreign Language Teacher: The Lifelong Learner. Northeast Conference on the Teaching of Foreign Languages (29th, New York, NY, April 1-4, 1982).**

Mead, Robert G., Jr., Ed.

Northeast Conference on the Teaching of Foreign Languages, Inc., Middlebury, Vt.

1982 158p.; For related documents, see FL 012 940-945.

Report No.: ISBN-0-915432-82-X

Available from: Northeast Conference, Box 623, Middlebury, VT 05753 (\$7.95).

EDRS Price - MFO1 Plus Postage. PC Not Available from EDRS.

Language: English; French; German; Italian; Spanish

Document Type: CONFERENCE PROCEEDINGS (021); BOOK (010)

Geographic Source: U.S.; Vermont

Journal Announcement: RIEQCT82

The articles and presentations in this publication relate to the general theme of the 1982 Northeast Conference, the foreign language teacher as a lifelong learner. The concept that in the best teachers learning and teaching form a progressive continuum, and that learning and teaching occur simultaneously is the basic assumption underlying all the presentations, workshops, and seminars. This report is divided into four sections. The first section deals with the less-commonly taught languages as well as ideas for intensive training in them. The second section treats contemporary cultures, specifically French, German, Italian, and Spanish. Part three concerns teaching and testing, with articles on merging teaching methods and textbooks, and proficiency testing in second language classrooms. The final section deals with technology and the foreign language classroom, with special attention to the use of audiovisual materials and techniques and microcomputers. (AMH)

ED214391 FLO12844

**Computer-Assisted Instruction in the ESL Curriculum.**

Lavine, Roberta Z.; Fechter, Sharon Ahern

Oct 1981 33p.; Paper presented at the Conference of the Washington Area Teachers of English to Speakers of Other Languages (Baltimore, MD, October 2-3, 1981). A portion of the appendix has been omitted because of poor reproducibility.

EDRS Price - MFO1/PC02 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); TEACHING GUIDE (052); PROJECT DESCRIPTION (141)

Geographic Source: U.S.; District of Columbia

Journal Announcement: RIEAUG82

A double perspective is offered on computer-assisted instruction (CAI): (1) a definition is provided, the role of a computerized component in an ESL curriculum is examined, and the potential of computerized learning in the ESL field is explored; and (2) the CAI program at Strayer College in Washington, D. C. is described. The definition proposed is the use of a computer in enhancing the learning and mastery of a specific skill. Because of CAI's versatility and provision for individualization, several advantages of this type of

ED202227 FLO12299

**Possible Pedagogical Applications of a Talking Computer Terminal for the French-Speaking Blind to Foreign Language Teaching.**

Trescases, Pierre

Apr 1980 20p.; Paper presented at the Annual Kentucky Foreign Language Conference (33rd, Lexington, KY, April 24-26, 1980).

EDRS Price - MFO1/PC01 Plus Postage.

Language: English

Document Type: TEACHING GUIDE (052); CONFERENCE PAPER (150)

Geographic Source: Canada; British Columbia

Journal Announcement: RIE0CT81

A computer system developed as a database access facilitator for the blind is found to have application to foreign language instruction, specifically in teaching French to speakers of English. The computer is programmed to translate symbols from the International Phonetic Alphabet (IPA) into appropriate phonemes for whatever language is being learned. In the case of French, the resulting "vocalization," while not efficient enough to be a good guide to the details of French pronunciation, is conducive to the construction of exercises designed to teach phoneme-grapheme correspondence. A table of rules for translation from French text to the IPA offers the advantage of presenting the graphical-sound correspondences of standard French in a very concise manner, with only a few constraints. The insertion of a frequency list of the 5,000 most used words in French makes the program further conducive to a great variety of exercises involving vocabulary learning. (J8)

ED193940 FLO11905

**Two-Pronged Error Analysis from Computer-Based Instruction in Latin.**

Culley, Gerald R.

1979 8p.; Paper presented at the Delaware Symposium on Language Studies (October 18-20, 1979).

EDRS Price - MFO1/PC01 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143); CONFERENCE PAPER (150)

Geographic Source: U.S.; Delaware

Journal Announcement: RIEMAR81

A technique for Latin instruction has been developed which uses the Programmed Learning for Automated Teaching (PLATO) computer system. The program, which conjugates Latin verbs and declines nouns and adjectives, represents an improvement over traditional computer teachers. While older systems only told the student when he made an error, the PLATO program can tell him what kind of error he has made. There are several benefits to this. Once the computer is provided with a set of noun and adjective bases and case endings, it can combine these elements to produce correct Latin forms. A small amount of computer memory is needed to produce a great number of Latin forms, thus combining the contents of many lessons into one. Another benefit is error analysis. Since the computer knows what kind of error the student makes and tells him, the

student can concentrate on his problem areas. As the computer tabulates the different types of errors, the instructor can discern problem areas by studying relative frequencies of these errors. The program thus assists Latin instruction at both ends, and can be a valuable tool for pedagogy. (PJM)

ED184308 FLO10945

**Computer-Based Hindi Pedagogy.**

Bhatia, Tej K.

1979 13p.; Paper presented at the annual meeting of the Linguistic Society of America (53rd., Boston, MA, December 28-30, 1978).

EDRS Price - MFO1/PC01 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); PROJECT DESCRIPTION (141)

Geographic Source: U.S.; New York

Journal Announcement: RIEAUG80

This paper brings out the structure and salient features of the Computer-Based Hindi Teaching (CBHT) course, which is being developed at the University of Illinois. The following topics are treated specifically: (1) areas of the Hindi Language course that can be efficiently and economically taught with computer-based pedagogy; (2) a demonstration of how the CBHT Course supplements non-computer-based Hindi teaching; and (3) claims about the development of testing procedures that are more satisfactory and efficient than procedures realized in non-computer-based teaching. In addition, the paper has implications for computer-assisted instruction. The course has been developed on the PLATO IV computer. PLATO IV, (Programmed Logic for Automated Teaching), is an economically feasible, large-scale, computer-controlled teaching system. It is being used to teach courses in medicine, science, and a number of foreign languages. (Author/AMH)



RAPPORT NATIONAL - FRANCE

Texte du Diapason de la  
Présentation du Centre de Langues et  
Etudes Etrangères Militaires

Dans le cadre d'une Défense Nationale efficace le Commandement doit avoir une idée précise des intentions et des possibilités de l'ennemi éventuel.

Il lui faut également connaître ses alliés.

Pour cela il doit disposer de personnel spécialisé, chargé de tisser des liens avec les principaux acteurs de la scène internationale,

de connaître leurs langues, leurs points forts et leurs faiblesses et plus particulièrement leurs armées.

Le C.L.E.E.M., Centre de Langues et Etudes Etrangères Militaires, est l'un des organismes dont s'est doté l'Etat-Major de l'Armée de Terre pour être capable de répondre à ces besoins.

L'histoire du C.L.E.E.M. débute au lendemain de la Seconde Guerre Mondiale.

Un centre d'études germaniques fut alors créé, rapidement suivi d'un centre d'études slaves.

Ces organismes reçurent pour mission non seulement d'enseigner les langues allemande et russe mais également de rassembler et de diffuser des connaissances aussi complètes que possible sur l'Allemagne et l'Union Soviétique.

En 1957 une section d'études britanniques et nord-américaines fut formée.

Le 21 octobre 1965 le C.L.E.E.M. était créé officiellement.

Il prenait entièrement à sa charge l'enseignement des langues dans l'Armée de Terre.

Implanté dans l'enceinte de l'Ecole Militaire,

il est actuellement rattaché au Bureau Renseignement Relations Internationales de l'Etat-Major de l'Armée de Terre.

La mission du C.L.E.E.M., exécutée au profit des militaires d'active et de réserve de l'Armée de Terre et exceptionnellement des autres armées, revêt deux aspects:

- une participation à la formation des personnels officiers et sous-officiers de la filière renseignement-langues,
- et l'enseignement des langues étrangères, pour lequel le C.L.E.E.M. est l'organisme pilote de l'Armée de Terre.

Pour remplir les missions qui lui sont confiées le C.L.E.E.M. dispose:

- d'un Bureau Commandement-Administration chargé de régler les problèmes de la vie courante: chancellerie, budget, matériels, service général,

La création récente d'une section audio-visuelle doit lui permettre de constituer une documentation sur vidéo-cassettes.

Le C.L.E.E.M. participe à l'organisation et au déroulement des examens de langues ou des épreuves linguistiques de certains concours. Chaque année 3 500 candidats environ se présentent aux certificats militaires dans une trentaine de langues.

Le C.L.E.E.M. édite enfin en 4 000 exemplaires son Bulletin annuel de liaison donnant aux linguistes, professeurs et élèves, toutes les informations qui leur sont nécessaires.

Par la valeur de l'enseignement qu'il prodigue, par l'étendue de ses activités dans tous les domaines de la connaissance des langues et des pays étrangers, et par le souci de développer, d'améliorer et d'entretenir un corps d'Interprètes de Réserves de l'Armée de Terre de haut niveau, le C.L.E.E.M. répond à sa mission.

L'esprit qui l'anime, la formation qu'il dispense et les relations qu'il entretient permettent d'améliorer la qualité des rapports entre les armées françaises et étrangères.

C'est l'idée que symbolise son insigne.

La ziggourat évoque la multiplicité des cultures abordées,

et le flambeau éclairant le monde souligne sa volonté d'écarter les frontières de l'incompréhension.



NATIONAL REPORT - GERMANY

In 1980 and 1981 the SLP Testing System was implemented in the Bundessprachenamt and in the language training institutions for which it is technically responsible. 1982 could be called a consolidation phase. In 1983 we began developing a syllabus and skill-oriented curricula. The basic concept underlying the syllabus and the curricula was discussed in our National Report last year. Based on principles elaborated in this syllabus so-called "Model Curricula" have been written for English and French. Since the needs of our English and French learners and the requirements of their jobs may vary greatly, one of our most important goals for these languages is flexibility - both in establishing course objectives and in determining how a particular course will be conducted. The purpose of the model curricula is to provide flexibility while ensuring that students attending different institutions for different purposes will still achieve comparable results on a standard proficiency examination.

The model curricula will serve as patterns for specific curricula that are to be developed for various courses - both within the Bundessprachenamt and other Bundeswehr institutions. To date there are three model curricula: English for our Proficiency Level B (equivalent to NATO Level 2), French for Proficiency Level A (equivalent to NATO Level 1), and French for Proficiency Level B. On the basis of these curricula, the Bundessprachenamt is now producing skill-oriented teaching modules and study materials. By the end of 1984, we will be able to offer our teachers and students a considerable body of skill-oriented teaching and learning material.

In addition the Bundessprachenamt will help external language-training institutions to adapt these materials to their own requirements. To this end, the Bundessprachenamt offers seminars for the heads of language training and occasionally arranges for teachers from these institutions to come to the Bundessprachenamt for a few weeks of intensive work on course development.

Since the Russian courses at our external training institutions are carefully coordinated with the course offered at the Bundessprachenamt, there was no need for model curricula for Russian. Instead, two specific curricula were developed for immediate application in Russian courses on NATO Levels 1 and 2. These curricula are now being tested at the Bundessprachenamt.

In addition to the curricula for English, French, and Russian, the Bundessprachenamt plans, by the Spring Quarter of 1985, to develop a curriculum for German as a foreign language. This curriculum will provide the framework for instruction which should enable officers from other countries to pursue studies at the German General Staff College.

In addition to the languages that are routinely taught - English, French, Russian, Czech, Polish, Spanish, Italian, Portuguese and German - the MoD has tasked us to open about 19 less commonly-taught languages, ranging from Arabic to Urdu. These courses will be taught, as the need arises, by teachers engaged for a limited period of time or on a fee basis and will last for between eight-teen days and twelve months, depending on the required proficiency level and the time available. Our experience with languages such as Spanish, for which we have only one or at most two, permanent staff members, indicates that it will be some time before we can expect curricula and standardised proficiency examinations for any of the recent additions to our programme. However, we are optimistic about the outlook for these new language courses, and are happy that we can now begin to meet a need that has long been perceived.

Finally, the Seminar on the Teaching of Czech and Polish to Defence Intelligence Personnel held at the Bundessprachenamt from 19 to 23 September 1983 must be

mentioned. Denmark, France, the Netherlands and the United States sent delegates. As in the Russian seminar of 1981 (see German National Report 1982), the aim was to pool knowledge and techniques in use by delegate countries. The language-specific part of the seminar was dealt with in two groups, one for Czech and one for Polish. While most work was done at the Bundessprachenamt, a visit to the Armed Forces Intelligence School at Bad Ems was included to round off the programme.

NATIONAL REPORT - ITALY

Survey conducted by the Italian Army Language School (S.L.E.E.)  
(Presented in video at the 1984 BILC Conference)

1. INTRODUCTION

The S.L.E.E. proposes to contribute to the research being conducted in all countries especially concerned with the problem of a second language by means of a statistical survey, strict in its approach, and the application of data obtained. Three objectives were given to the research:

"What influence, if any, do the following factors have on the process of learning a second language?"

- Cultural level
- Place of origin
- Age

If the relevance of the first and third factors is sufficiently clear, it is perhaps necessary, however, to summarise the reasons for taking "Place of origin" into consideration. Given that up to 15 - 20 years ago dialect had an importance almost equal to that of Italian for the greater part of the population, and that the study of Italian during school years was comparable to the learning of a second language, it was proposed to determine if, and to what extent, this experience influences the ability to learn a foreign language.

2. LINES OF THE SURVEY

The first problem to be resolved was that of defining and therefore rendering valid the terms "Cultural level", "Dialect", and "Level of knowledge of the language" as used in this survey.

For the first factor we have obviously influenced the results. It was, in fact, decided to equate "Cultural level" with the level of education and to quantify this last by reference to the educational qualifications (certificates, diplomas etc.) obtained.

The dialect factor was based solely upon the place of origin, without any further research into the length of time that any individual remained in that area (which would, of course, have had to be determined to quantify precisely the effect of the dialect on linguistic ability).

The foreign language chosen for this study is English. The level of knowledge of English is shown by the percentage obtained in one of the three standard armed forces tests which were being used alternately by the S.L.E.E. throughout the period of the research. The three tests presented similar if not identical levels of difficulty.

3. DESCRIPTION OF THE SAMPLE

The sample examined consists of 716 males, 98,8 % of whom are servicemen, who all took the standardised English test at the S.L.E.E. between 1st January 1980 and 31st December 1983. Data was obtained from forms which the students were required to complete giving the following pieces of information:

- Rank
- Name and surname
- Place of birth

- k. TABLE 11 shows the distribution of High School qualifications held by rank. The high number of Lieutenant Colonels holding such qualifications should be noted.
- l. TABLE 12 shows the distribution of compulsory and "professional" school qualifications among the sample. The highest number of Marescialli (Warrant officers) with such qualifications are in the age group 42 - 49.

5. CONCLUSION

In brief, the survey has furnished concrete data and enables us to draw the following conclusions:

- There is undoubtedly a correlation between "Cultural level" and the ability to learn a second language.
- A humanities education seems to confer a certain advantage in the learning of a second language.
- Age does not appear to have a notable influence on the ability to learn a foreign language.
- Those who have already learnt a second language have less difficulty in learning a third.
- "Place of origin" does not appear to exercise any considerable influence on the learning of a second language.

TABLE 1

RIPARTIZIONE DEI GRADI MILITARI NEL CAMPIONE  
DISTRIBUTION OF MILITARY RANKS IN THE SAMPLE

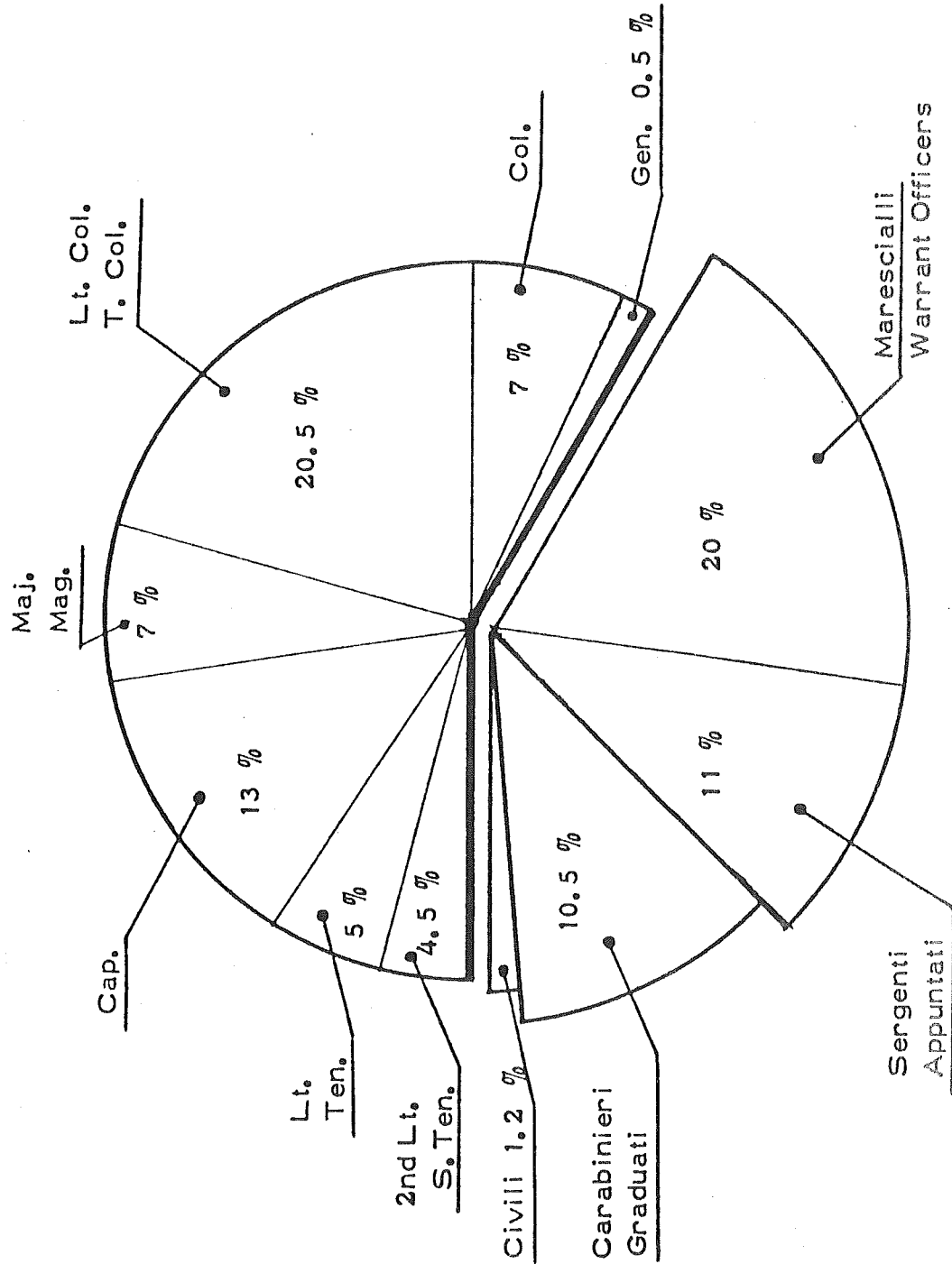


TABLE 2

DISTRIBUZIONE DELLE ETÀ  
AGE DISTRIBUTION

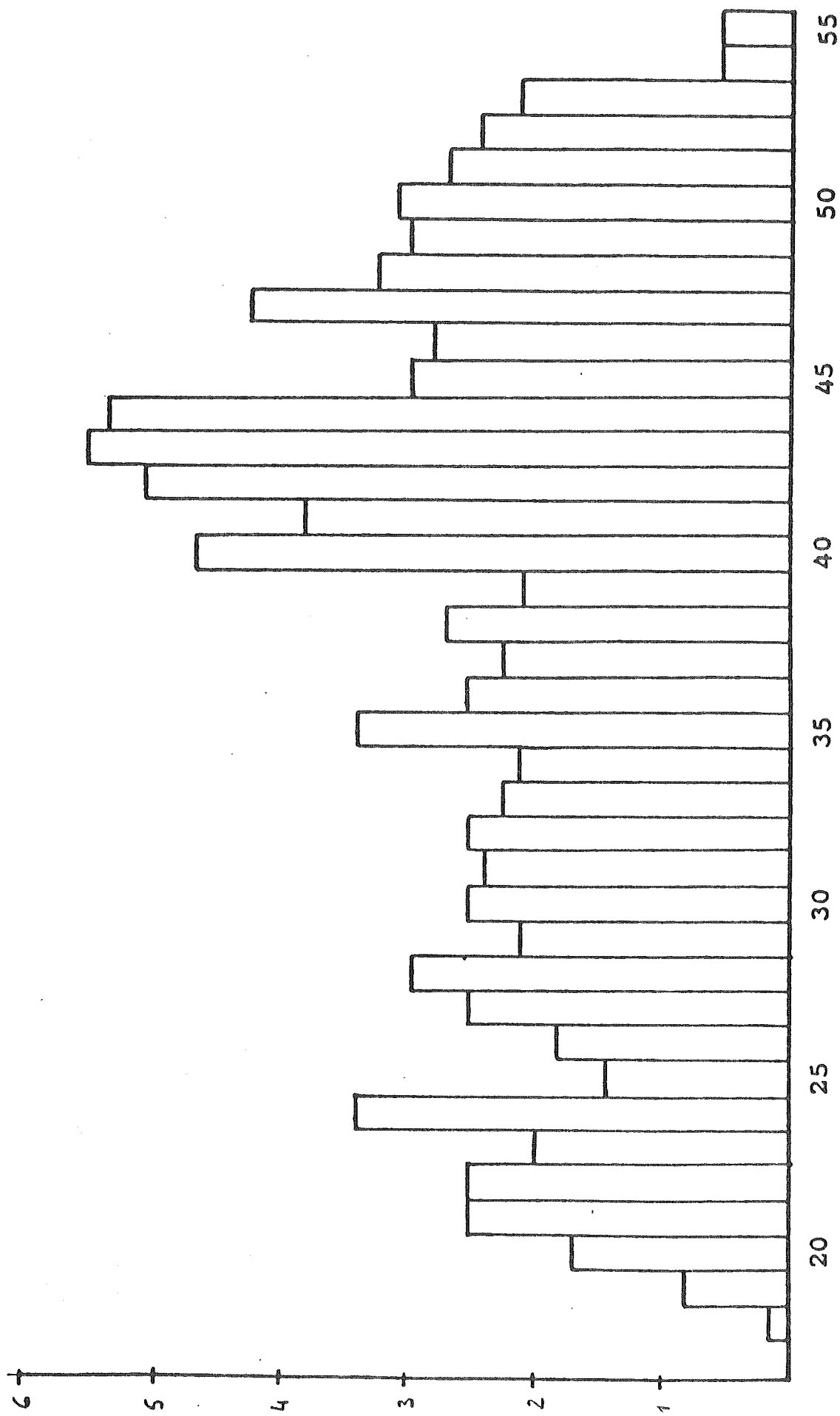


TABLE 3

RIPARTIZIONE TITOLI DI STUDIO NEL CAMPIONE  
DISTRIBUTION OF EDUCATIONAL QUALIFICATIONS IN THE SAMPLE

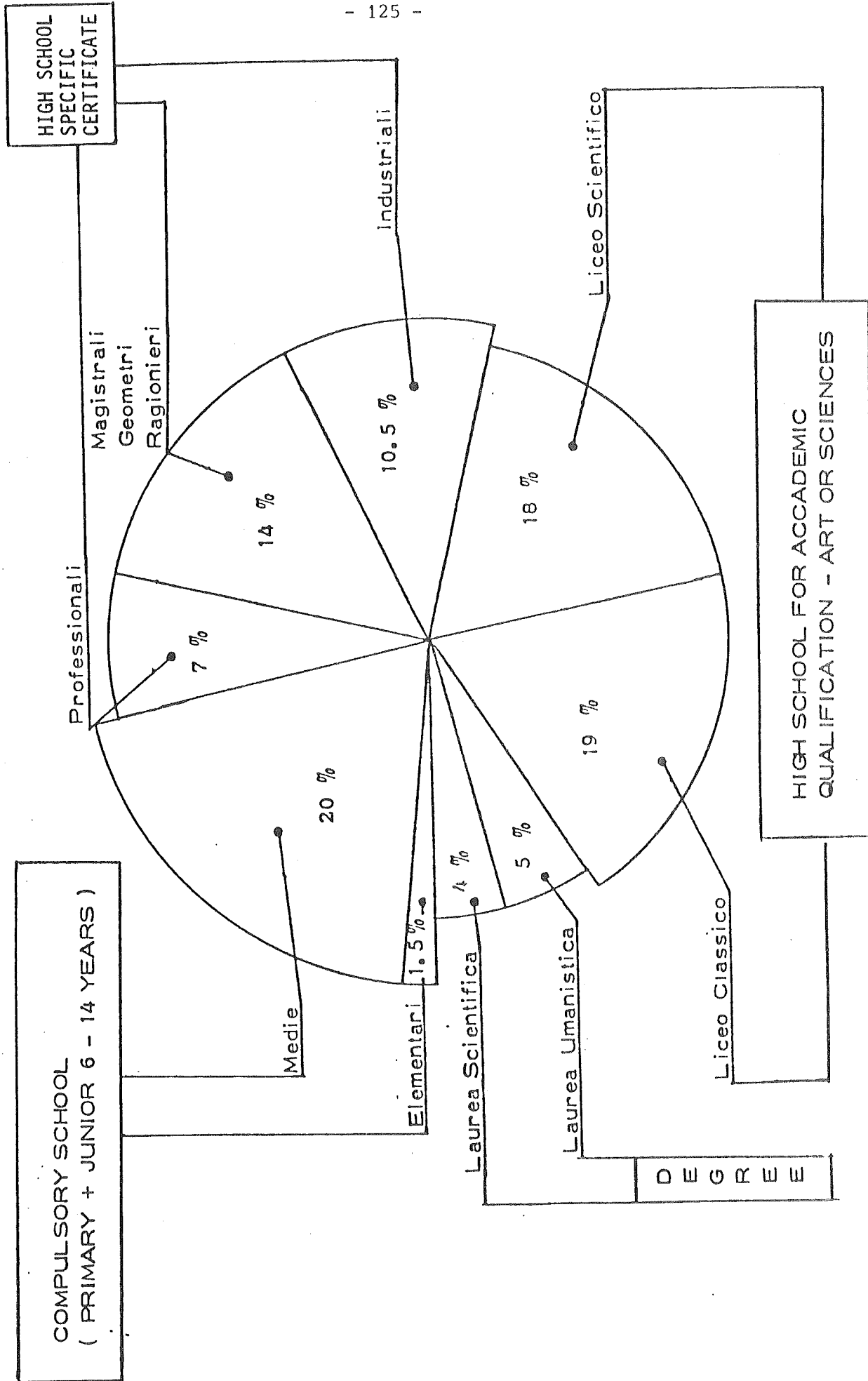
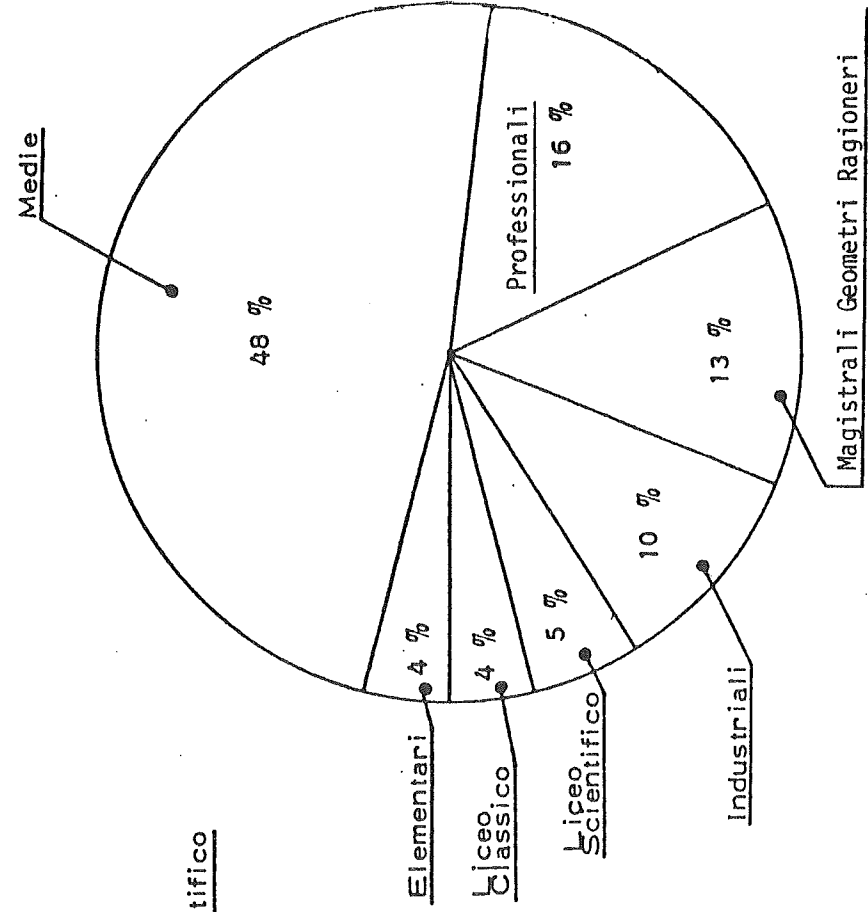
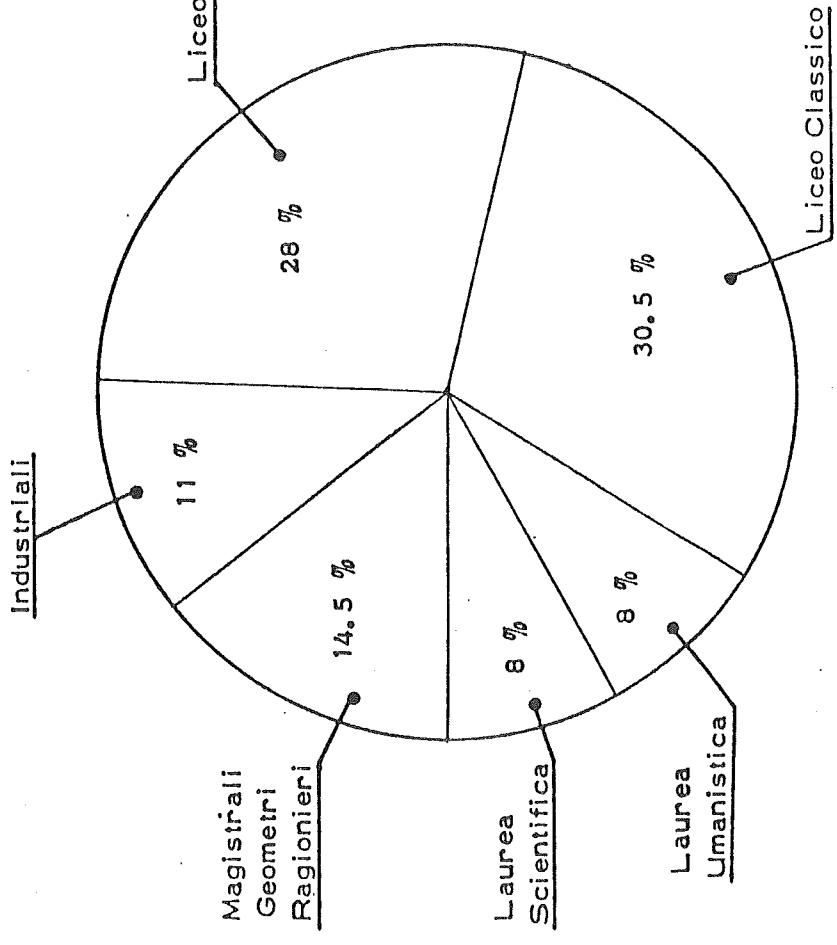


TABLE 4

RIPARTIZIONE TITOLI DI STUDIO S/U  
 DIVISION OF EDUCATIONAL QUALIFICATIONS  
 between Officers and N. C. O. s



Sottufficiali  
 NCOS

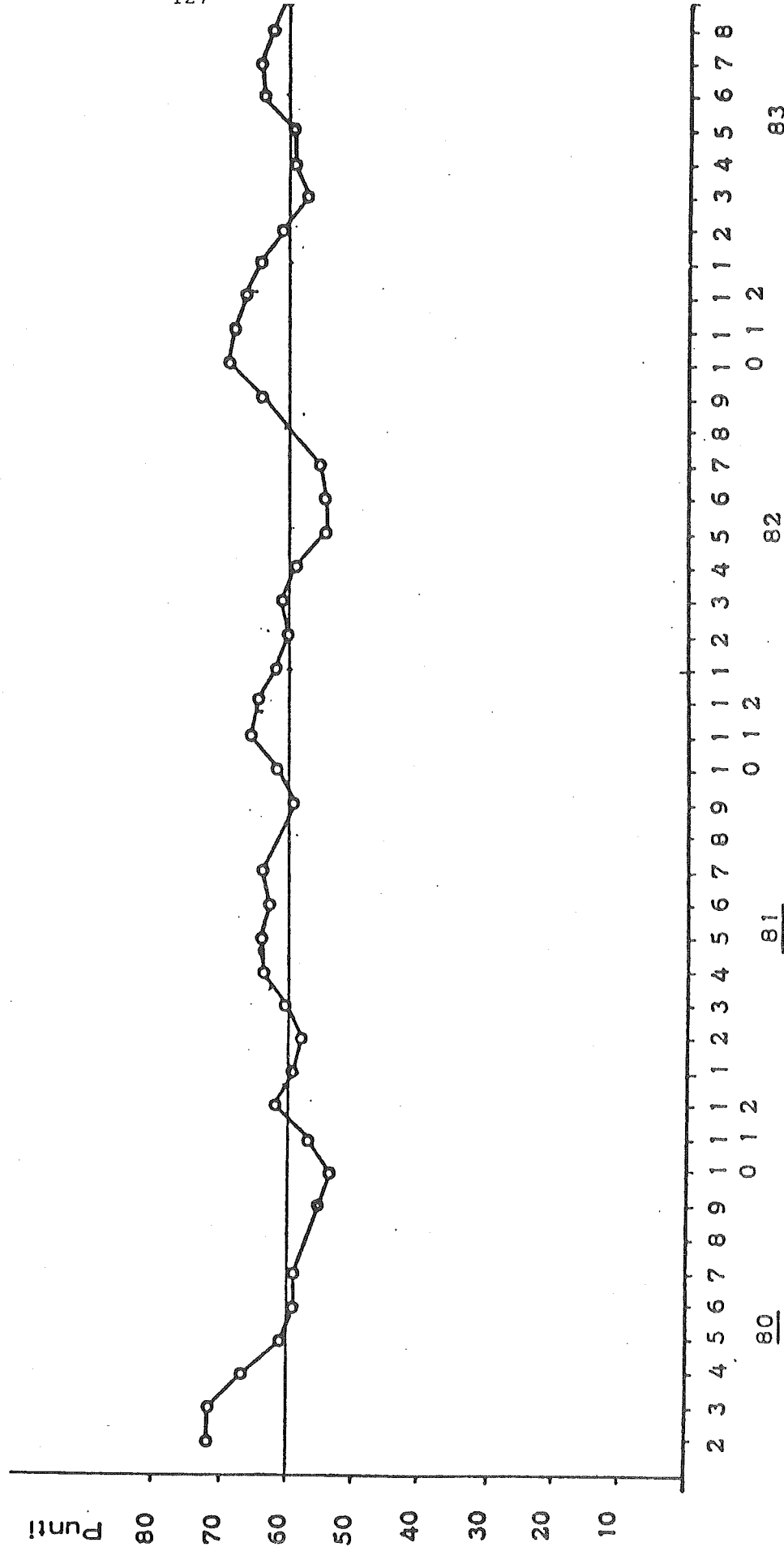


Ufficiali  
 Officers



TABLE 5

TREND DEL PUNTEGGIO  
TEST RESULT TREND DURING PERIOD OF SURVEY



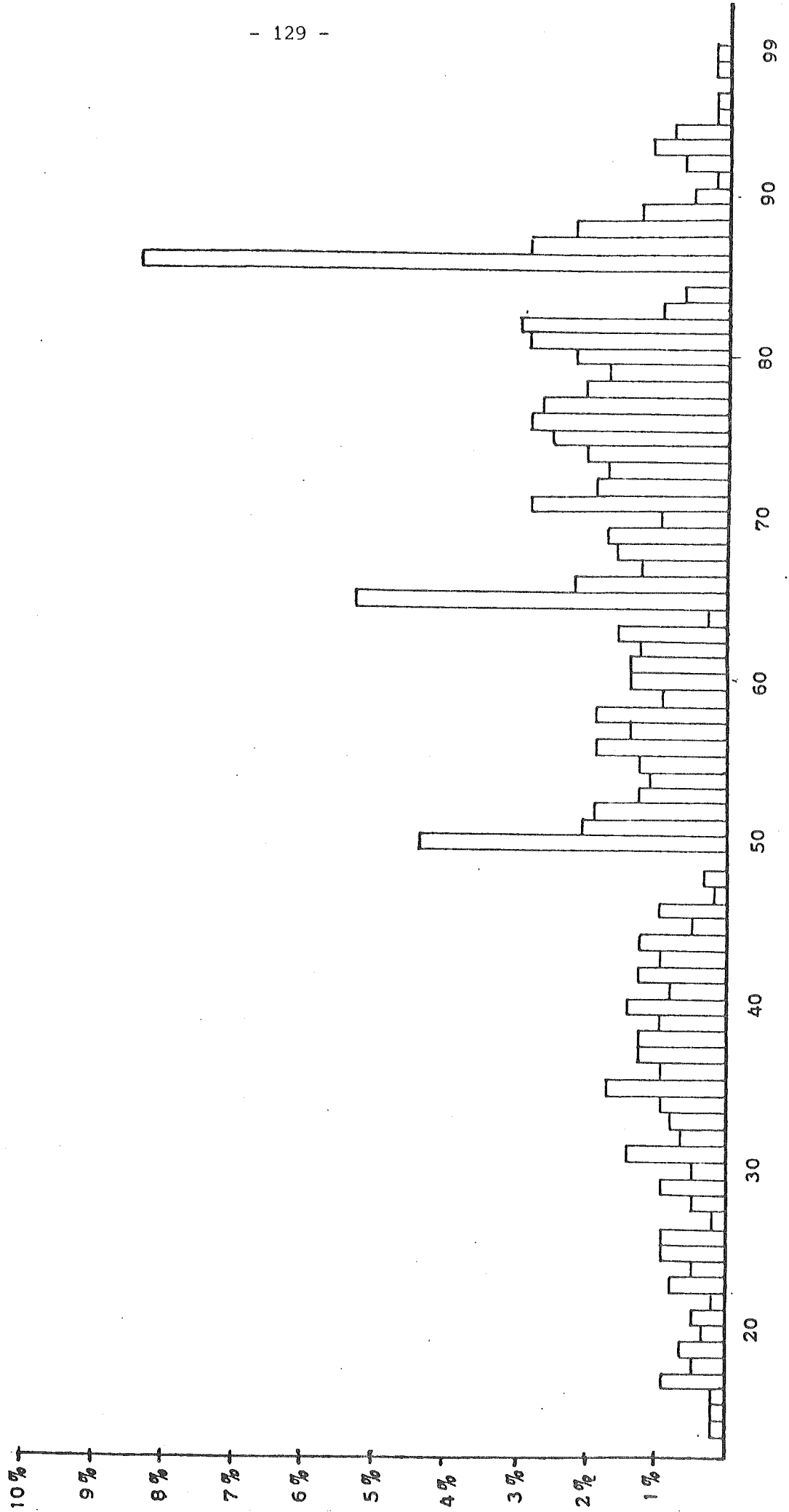
## RICERCA DI EVENTUALI MOVIMENTI STAGIONALI

## SURVEY OF CYCLICAL TRENDS

$\frac{\text{year}}{\text{anno}}$ / $\frac{\text{month}}{\text{mese}}$	1	2	3	4	5	6	7	8	9	10	11	12
1980	104.9	117.6	120.8	106.5	95.4	89	98.6	—	92.2	77.9	89	108.1
1981	99.2	78.4	104	108.8	96	—	104	—	89.6	96	112	112
1982	91.5	97.9	—	99.5	85.1	77	102.7	—	115.6	101.5	112.4	110.8
1983	103.	101.3	103	83.1	108	104.7	108	—	101.3	99.7	96.3	91.4
Media %	99.7	98.7	109.3	99.5	96.1	90.2	103.3	—	99.7	95.3	102.4	105.6

TABLE 6

DISTRIBUZIONE IN FREQUENZA DEI PUNTEGGI  
DISTRIBUTION OF FREQUENCY OF TEST RESULTS



MEDIA GENERALE IN FUNZIONE DEL TITOLO DI STUDIO  
 OVERALL MEAN RELATED TO EDUCATIONAL QUALIFICATIONS

Titolo di Studio.	$\mu$	$\sigma$	N
ELEMENTARI	42	14.0	12
MEDIÈ	52	20.4	147
PROFESSIONALI	49	19.1	51
HAGIS./GEOM./RAG.	62	20.0	100
INDUSTRIALI	60	18.0	73
SCIENTIFICO	71	16.5	128
CLASSICO	74	15.0	139
Lam. UMANISTICA	70	16.7	35
LA. SCIENTIFICA	60	20.0	31

$N$  = ampiezza campione.  
 size of sample

$\mu$  = media  
 mean

$\sigma$  = scarto quadratico medio  
 standard norm deviation

TABLE 7 b

LIVELLO DI SIGNIFICATIVITA' ( "t" di "Student" )  
 LEVEL OF "EQUALITY"

	ELEMENTARI	MEDIE	PROFESSIONALI	MAGIS/LEON...	INDUSTRIALI	SCIENTIFICO	CLASSICO	LA. UMANISTICA
ELEMENTARI								
MEDIE	A							
PROFESSIONALI	A	N						
MAGIS/LEON.	A	A	A					
INDUSTRIALI	A	B	A	N				
SCIENTIFICO	A	A	A	A	A			
CLASSICO	A	A	A	A	A	N		
LA. UMANISTICA	A	A	A	C	B	N	N	
LA. SCIENTIFICA	A	C	C	N	N	C	A	C

livello di significativita'

A = 0.2%

B = 1%

C = 5%

N  $\Rightarrow$   $\mu_0 = \mu_1$



TABLE 8 b/1

"1" di "STUDENT" RELATIVO ALLE DIFFERENZE DI MEDIE REGIONALI

"1" of "STUDENT" IN RELATION TO THE DIFFERENCES OF REGIONAL MEANS

Scientifico

	Friuli	Veneto	Liguria	Emilia	Latino	Abruzzo	Campania	Puglie	Sicilia
Piemonte	2								
Fiuli		2							
Veneto			2						
Liguria				2					
Emilia					2				
Latino						2			
Abruzzo							2		
Campania								2	
Puglie									2
Sicilia									

Classico

	Toscana	Latino	Campania	Puglie	Sicilia
Piemonte	2				
Toscana		2			
Latino			2		
Campania				2	
Puglie					2
Sicilia					

"t" di "STUDENT" RELATIVO ALLE DIFFERENZE DI MEDIE REGIONALI  
 "t" of "STUDENT" IN RELATION TO THE DIFFERENCES OF REGIONAL MEANS

Medie

	LAZIO	CAMPANIA	PUGLIE	CALABRIA	SICILIA
FRIULI	N	0	N	N	N
LAZIO		N	N	N	N
CAMPANIA			N	N	N
PUGLIE				N	N
CALABRIA					N
SICILIA					

Professionali

Professional School

Nessuna differenza fra:  
 CAMPANIA e LAZIO

No difference between  
 CAMPANIA and LAZIO

Registrali

Education

Nessuna differenza fra:  
 LAZIO, CAMPANIA, PUGLIE  
 and SICILIA

No difference between  
 LAZIO, CAMPANIA, PUGLIE  
 and SICILIA

Industriali

Technical School

Nessuna differenza fra:  
 LAZIO e CAMPANIA

No difference between  
 LAZIO and CAMPANIA

livello di significatività

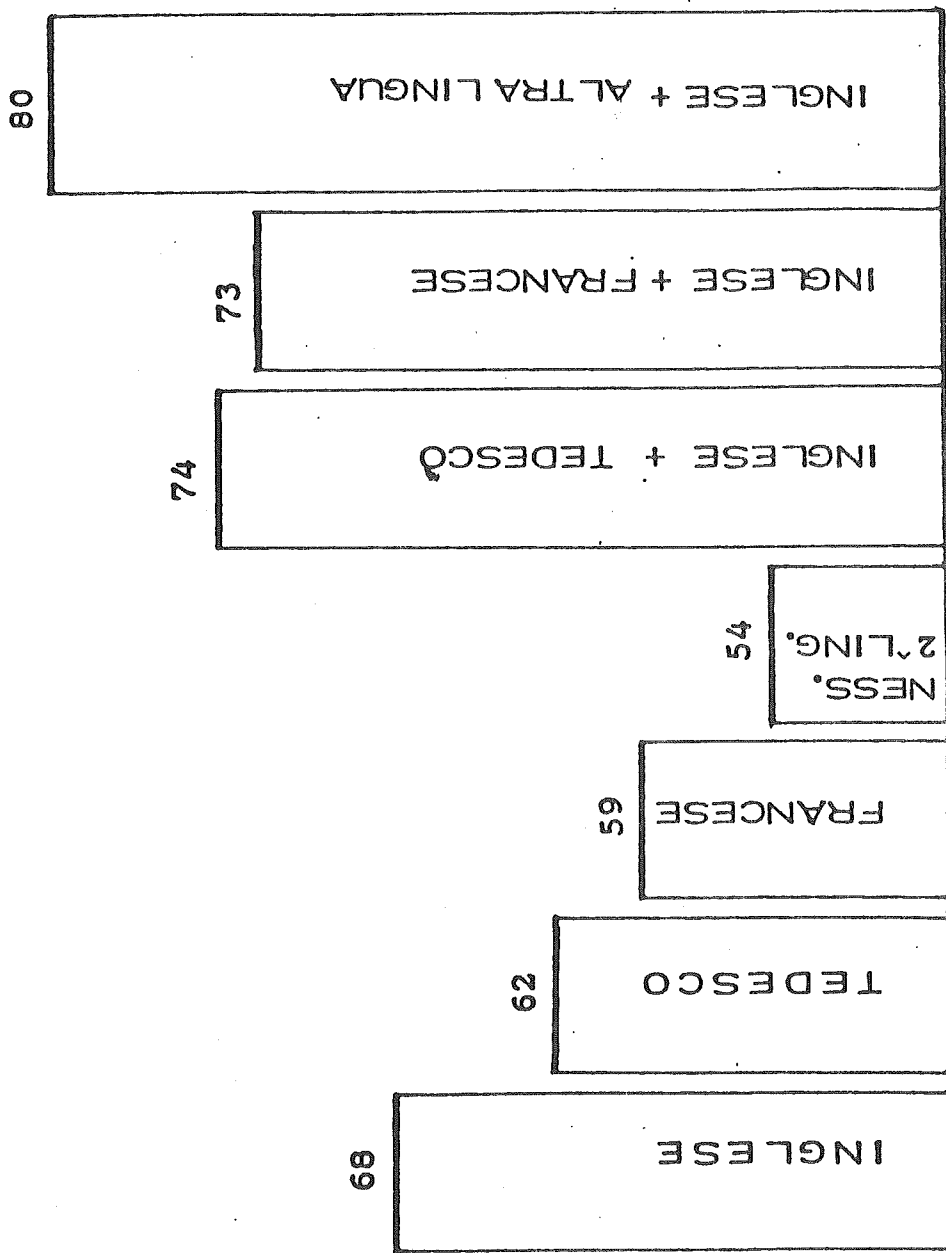
α = 5%



TABLE 9

VOTO MEDIO RIPORTATO IN RAPPORTO AD EVENTUALI  
CONOSCENZE EXTRA-MILITARI DI ALTRE LINGUE

AVERAGE MARKS SCORED IN RELATION TO ANY PREVIOUS "EXTRA MILITARY"  
KNOWLEDGE OF FOREIGN LANGUAGES



## MEANS OF TEST RESULTS RELATED TO AGE AND EDUCATIONAL QUALIFICATIONS

ANNI	Scuole Prof./ e Meie		Scuole Indus. Magistr./Geom		Liceo Classico " Scientifico	
	$\mu$	N	$\bar{x}$	N	$\mu$	N
18 - 25	55	39	60	30	68	32
26 - 33	49	38	56	28	64	41
34 - 41	51	50	59	51	71	47
42 - 49	52	40	66	49	76	113
50 - 57	51	22	63	15	74	34

N.B. Esistono differenze di media significative solo nella colonna del liceo classico e scientifico. In particolare i gruppi (42-49) e (50-57) hanno media significativamente più elevata del gruppo (26-33)

Mean =  $\mu$  = media

Standard Norm Deviation =  $\bar{x}$  = scarto quadratico medio

Size of Sample = N = ampiezza campione.

N.B. There are relevant differences of means only in the High School - "Classics and scientific" column. Specifically the age groups (42-49) and (50-57) have a mean markedly higher than of the group (26-33).

TABLE 11

DISTRIBUZIONE DEI GRADI TRA STUDENTI CON LICEO CLASSICO/SCIENTIFICO  
 DISTRIBUTION BY RANK BETWEEN HIGH SCHOOL "CLASSICS/SCIENTIFIC" STUDENTS

	Operai Civili	Cerabinieri/ Graduati	Sergenti Appuntati	Marescialli	Sottotenenti	Tenenti	Capitani	Maggiori	Ten. Colom.	Colonnelli	Generali
18-25		9			20	3					
26-33	1	2	9		4	10	18				
34-41			1	1	1	1	23	14	6		
42-49				4			2	12	75		
50-57				3					14		

DISTRIBUZIONE DEI GRADI TRA STUDENTI CON SCUOLA MEDIA E PROFESSIONALE  
 DISTRIBUTION BY RANK BETWEEN ELEMENTARY AND PROFESSIONAL STUDENTS

	Operai Civili	Ceramici Graduati	Sergenti App.	Marescialli	Sottotenenti	Tenuti	Cavaliere	Capitano	Ten. Col.	Colonnelli	Generali
18-25	3	22	15								
26-33		17	22	7							
34-41	1	4	5	40							
42-49			4	45							
50-57				21							

NATIONAL REPORT - PORTUGAL

In our country the main emphasis in teaching a NATO language is on English because the learning of French is compulsory in civilian high schools. This situation is changing now and in a few years we'll have to start courses in French as well. The teaching is delegated to the three different branches though the coordination belongs to the general staff. In this way each branch is free to use the means and the methods it feels are appropriate. We have two types of courses: intensive courses with a maximum length of four months and courses in which English belongs to the curriculum of another academic course, for instance at the military academies. After BILC 83 we organized a meeting with the three branches to report on last year's conference.

During the second half of 83 and the first half of 84 we started a program which will hopefully help us to effectively coordinate the teaching of English in the branches.

The program consists basically of two parts: first to know exactly what are the means each branch has, mainly concerning installations, teachers and technology available to support the courses. The second part will try to improve the contacts among the teachers of the different branches and an exchange of the technology available. The aim is of course to get a better result with the means we have at the moment. The first part is now concluded and as a result we are able now to provide BILC a new list of schools where English (see Annex A) is taught and the maximum STANAG level each school teaches.

It was decided that from October 84 onwards the SLP tests will be held at EMGFA - General Staff with the help of teachers of the three branches. This decision was based on the fact that the British Council tests were not adapted to the needs of the STANAG 6001 and that they were becoming more and more expensive. Another reason that influenced our decision was that through BILC in June 1983 we got a test type which we will adapt to our needs.

We started a course of German at the Air Force Academy for senior officers. This course will last till the end of the school year of 84 - 85 and it has four hours a week. We hope to get the students to the equivalent of SLP 2222 at the end of this course. The main reason for this course is the increasing contacts of the Portuguese Air Force with the German Armed Forces. This is now the second center where German is taught, because since 1982 it is taught at the EMGFA - General Staff.

To finish this report we would like to emphasize the commitment of the Portuguese Armed Forces to the teaching of the two official languages of NATO to all Portuguese military personnel, mainly to the ones performing tasks at NATO.



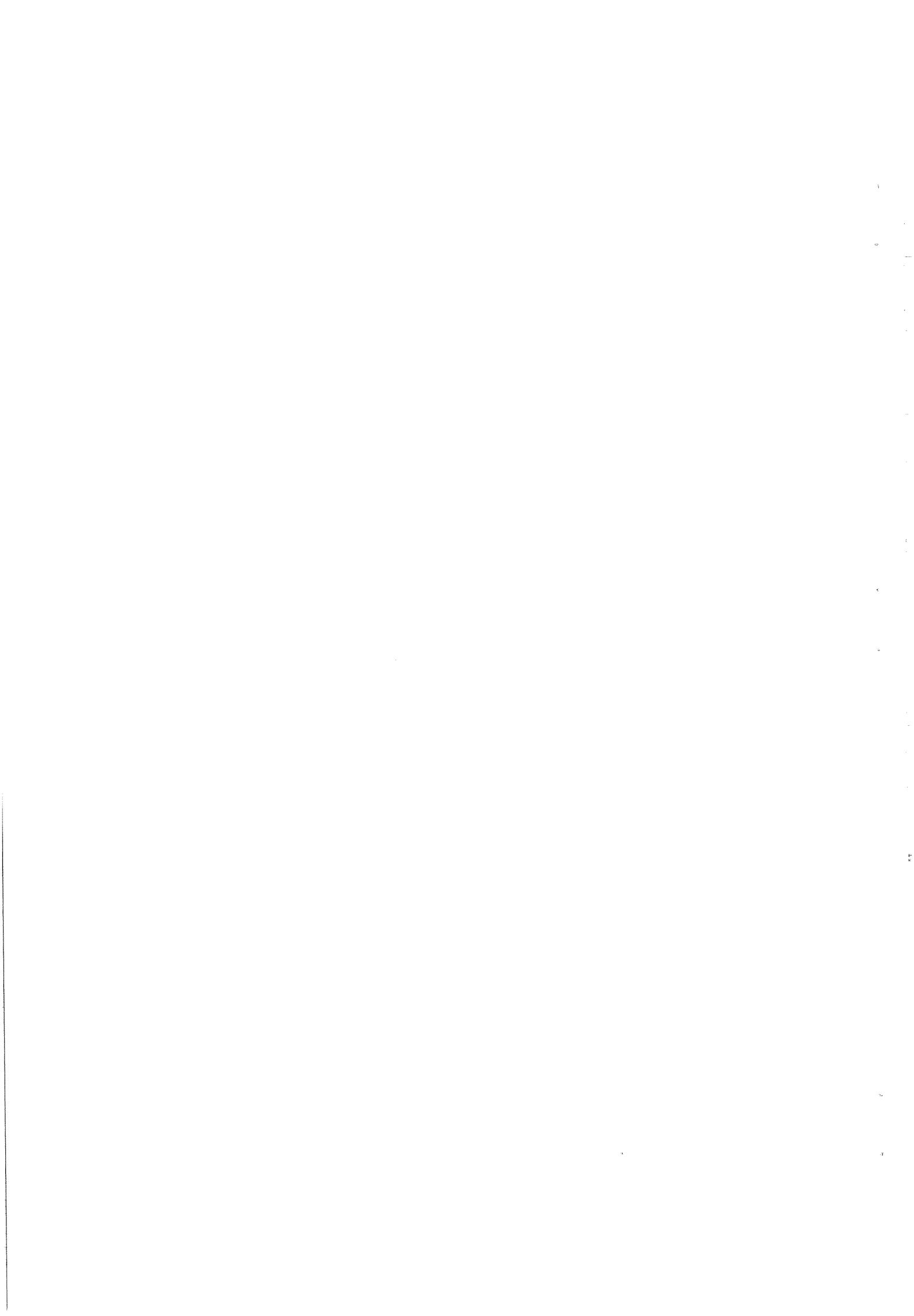
Serial	Names and addresses of all Language Schools at which Military Personnel are trained	Languages taught	Maximum level to which taught	Military Personnel or Military and Civilian Personnel	What resource materials are available to other BILC member countries
1	ACADEMIA DA FORÇA AÉREA Granja do Marquês - Sintra	English	SLP - 4444	200	-
2	ACADEMIA DA FORÇA AÉREA Granja do Marquês - Sintra	German	-	20	-
3	ESCOLA SUPERIOR DA FORÇA AÉREA Granja do Marquês - Sintra	English	SLP - 4444	15	-
4	C.I. nº 2 Ota	English	SLP - 4444	MP/CP 500	-
5	BASE AÉREA Nº 2 Ota	English	SLP - 4444	30	-
6	BASE AÉREA Nº 5 Monte Real	English	SLP - 4444	25	-
7	BASE AÉREA Nº 6 Montijo	English	SLP - 4444	10	-
8	OFICINAS GERAIS DE MATERIAL AERONÁUTICO - Alverca	English	SLP - 4444	MP - 30 CV - 10	-

8	ESTADO MAIOR DO EXÉRCITO Lisboa	English	SLP - 4444	MP - 90 CV - 17	-
9	INSTITUTO MILITAR DOS PUPILOS DO EXÉRCITO - Lisboa	English	SLP - 3333	400	-
	INSTITUTO MILITAR DOS PUPILOS DO EXÉRCITO - Lisboa	French	SLP - 3333	330	-
10	1st BMI Santa Margarida	English	SLP - 4444	80	-
11	COLÉGIO MILITAR Lisboa	English	SLP - 3333	350	-
	COLÉGIO MILITAR Lisboa	French	SLP - 3333	350	-
12	DIRECÇÃO DO SERVIÇO DE MATERIAL Lisboa	English	-	Non - activated	-
13	SERVIÇO DE INFORMÁTICA DO EXÉRCITO - Lisboa	English	SLP - 3333	40	-
14	ESCOLA DE SARGENTOS DO EXÉRCITO Caldas da Rainha	English	SLP - 3333	300	-
15	ESCOLA PRÁTICA DE ADMINISTRAÇÃO MILITAR - Lisboa	English	SLP - 3333	10	-
16	ESCOLA MILITAR DE ELECTROMECÂNICA - Paço de Arcos	English	SLP - 3333	50	-



17	ACADEMIA MILITAR Amadora - Lisboa	English	SLP - 4444	274	-
	ACADEMIA MILITAR Amadora - Lisboa	French	SLP - 4444	24	-
18	INSTITUTO DE ALTOS ESTUDOS MILITARES - Lisboa	English	SLP - 4444	50	-
19	INSTITUTO SUPERIOR MILITAR Águeda	English	SLP - 3333	10	-
20	ESTADO-MAIOR-GENERAL DAS FORÇAS ARMADAS - Lisboa	English	SLP - 4444	MP/CP 70	-
	ESTADO-MAIOR-GENERAL DAS FORÇAS ARMADAS - Lisboa	German	-	MP/CP 10	-

21	ESCOLA NAVAL Alfeite	English	SLP - 4444	150	-
22	GRUPO Nº 1 DE ESCOLAS DA ARMADA Vila Franca de Xira	English	SLP - 3333	100	-
23	GRUPO Nº 2 DE ESCOLAS DA ARMADA Alfeite	English	SLP - 4444	100	-



NATIONAL REPORT - UNITED KINGDOM

In the UK National Report presented by my predecessor at last year's conference he advised BILC members of studies which were under way at that time towards the setting up of a Defence School of Languages (DSL).

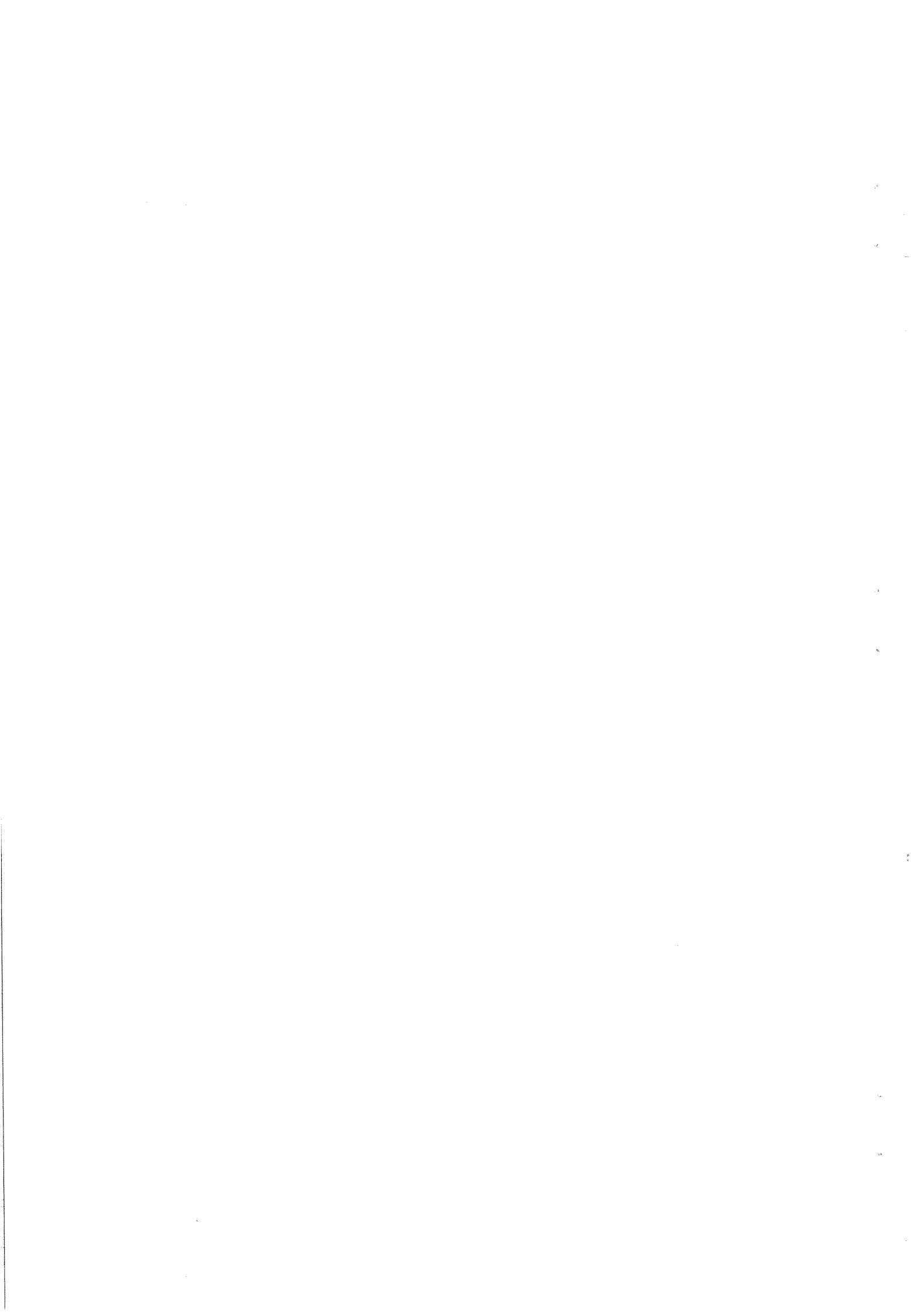
I can now tell you that the DSL is expected to become operational on 1 January 1985. The School will be located at the RAEC Centre Beaconsfield and will offer courses of varying durations and with a variety of objectives, in Arabic, German, Russian, and Services English for Gurkhas and foreign students. The school will be staffed by Army, Royal Air Force and Royal Navy personnel.

The army is now implementing plans announced at the last Conference which effectively increase the provision of formal language training in German for officers serving in BAOR. This will mean that at least 2/3 of Majors serving in BAOR should reach SLP 2200 either before or during their tours. This also means that well over 4,000 personnel serving in BAOR are now receiving formal language training annually of whom at least 750 reach SLP 2200 and beyond.

The RAF has just introduced a new syllabus for its Colloquial Test, which corresponds to Standardised Language Profile (SLP) 2200. The new syllabus, which is based on communicative principles, draws heavily on the Council of Europe's work in defining a 'Threshold Level' for adult language learners. The trial examinations so far conducted have proved very successful in discriminating between those who have a real ability to use the foreign language, and those (over-rewarded by the previous syllabus) who have merely rote-learned lists of prescribed phrases. Copies of the new syllabus are available to members through the BILC Secretariat.

A new multi-media approach to German language training is being tried out at the RAF's Command Language Training Centre at Rheindahlen (Federal Republic of Germany). Video, tape-slide sets, cassettes and microcomputer programs are being evaluated for their effectiveness in meeting individuals' differing learning strategies.

It is hoped to found a Royal Navy Language Association in the future to promote further the facilities and services available to RN personnel who may wish to pursue an interest in languages.



NATIONAL REPORT - USA

DEFENSE LANGUAGE INSTITUTE; FOREIGN LANGUAGE CENTER (DLIFLC);  
MONTEREY, CALIFORNIA

1. DLIFLC ACADEMIC MASTER PLAN UPDATE/SIGNIFICANT ACCOMPLISHMENTS

In the Defense Language Institute Foreign Language Center's (DLIFLC's) quest for academic excellence the Dean has significantly improved our overall capability in the areas of Instruction, Course Development, Testing, Research and Evaluation, and Faculty Training under the DLIFLC Academic Master Plan. The Dean's major emphasis continues to be on foreign language testing because it is language proficiency testing which defines the standards of performance against which we measure the quality of our entire instructional system. Further test development details are set forth under the Directorate of Evaluation and Standardization input entitled, "Comprehensive Test Development Package." DLIFLC has continued to make substantial progress in its course development efforts, and has been successful in identifying and procuring commercially available materials which satisfy mission requirements. This will further reduce the overall cost and time required to bring new course materials into the classroom. Along with DLIFLC ongoing efforts to improve course materials and develop testing instruments using a common metric across all languages and all organizations, we are working in concert with the Defense Manpower Data Center and the DOD to create an automated Defense Foreign Language Program Linguist Reporting System. All concerned with this project see it as a vital tool for managing foreign language assets. In summary, the Dean has made substantial progress in improving the cost and mission effectiveness of the Defense Foreign Language Program. DLIFLC is especially dedicated to making the most of opportunities afforded by School Model '83 and has every reason to believe that it will realize the goal of bringing 50 % or more of DLIFLC Basic Course graduates to at least Level 2 proficiency.

2. The Defense Language Proficiency Test III (DLPT III) replaces DLPT Is and IIs, which now exist in over forty languages. The earlier tests have serious deficiencies, as almost half of them are more than twenty years old, they have only one form, they test only listening and reading, and only test the lower proficiency scale (Levels 0 - 3). This system has led to inflated scores over the years. The new DLPT IIIs test the full proficiency range (Levels 0 - 5) in three skills - Listening, Reading, and Speaking. The DLPT III serves as the end-of-course test at DLIFLC. Like the present DLPTs, it tests the language at large, and not any particular course of instruction. The DLPT III will be a two-tiered system. Only those who score Level 3 on a lower range test will be eligible to take the upper range test in that particular skill. The primary aim of the new skill level standards is to equate level attainment across language across various government agencies. DLPT IIIs have been developed in Russian and Korean. Work has begun in eight other languages. To eliminate the problem of inflated scores, DLIFLC developed a plan to recalibrate the current DLPTs using the skill level standards. This brings DLPT results into line with results of tests used by other government agencies. A new graduation policy was established concerning all classes beginning in January 1983. The minimum graduation standards are achieving Level 1 in two of the three skills (Listening, Reading, and Speaking) on the DLPT III. Any student not achieving these standards is awarded a certificate of attendance, in lieu of a graduation diploma. The minimum standards may be raised at a later date.

Students are eliminated from DLIFLC for administrative and academic reasons. Administrative attrition is beyond the control of DLIFLC. It includes, among others, elimination for medical reasons, loss or non-award of security clearance, change requested by user agencies and failure to adapt to military life. Academic attrition consists of two categories, lack of effort (LOE), and lack of aptitude (LOA). Academic attrition rates are affected by each of a variety of factors such as scores on the Defense Language Aptitude Battery (DLAB), years of education, prior language learning, age, difficulty of the language and individual motivation. No single factor stands out yet as a useful predictor for students whose DLAB scores exceed the minimum cutoff of 89. We continue to collect and analyze the data, e. g., for possible combinations of factors. Once the students have begun training, however, their quiz and test grades, plus the judgement of the faculty and Foreign Language Training Advisors, provide reasonable attrition decisions. Recent emphasis on earlier identification of attritees has significantly moved academic attrition toward the early weeks of the course. The overall attrition rate for DLIFLC for the top eleven languages (including dependents) is about 44 %, nearly all administrative.

#### 4. BASIC COURSES

Development of up-to-date material for basic courses is a continual challenge. Modern languages continually change through new vocabulary and concepts. Different meanings evolve for previously standard expressions and terms, and cultural norms radically change with the development of new societal groups. Revisions are therefore required annually for each language, and courses over ten years old are often badly outdated for in-country authentic language requirements. The bulk of our courses use material developed in-house because of the length of the courses and the need for continuity of training as we strive to meet specific comprehensive Terminal Learning Objectives (TLOs) developed by NSA and the user community. We are making excellent progress in development of these Basic Courses. Emphasizing the usage of the language in speaking, reading, and listening comprehension, we recently completed development of a new 47-week Russian course. The new 47-week Korean and Arabic (MSA) courses are also being taught in the respective departments. We are currently revising the Egyptian, Syrian and Iraqi (16 weeks) follow-on dialect courses. Development of the Basic Chinese (47 weeks), German (32 weeks), and Italian (28 weeks), as well as a Spanish Intermediate Course, is progressing as scheduled. We recently had to temporarily curtail development of a desperately needed Czech Course because of rising input and constrained resources. We are currently developing a series of new/updated basic courses using commercially available material. This is a more complex endeavor, since it requires building bridges from one text to another. Their usage has the advantage of significantly accelerating availability of current materials. Projects are ongoing in French, Japanese and Greek. In German, we have developed the first third of the course in-house and we are now building 2 and 3 by using commercial materials. In addition, significant course development and course maintenance updates have always been conducted in our 39 different language departments and work continues at an impressive rate.

#### 5. SPECIALIZED COURSES

##### Gateway Courses.

The Gateway courses are designed to provide elementary language skills for senior officers designated for command positions in Germany. The courses are offered in residence at the Presidio of Monterey and are six to eight weeks long. They may also be used in nonresident (command) instructional programs. Development of interactive videodisc supplements has commenced in a major initiative to upgrade these courses.

Refresher Maintenance Courses.

R/M courses may be used in residence or in the field. They are instructor based materials with the objective to give the student an opportunity to bring his/her level of proficiency to that normally expected of graduates from the Basic Course. Depending on the language difficulty, the level may vary from 1 in Korean to 2 in German. A Spanish R/M Course has been completed.

Special Forces and SEALS Courses.

To meet the unique requirements of the Special Forces and the Navy Seals, we are developing special short courses in French, Russian, German, Norwegian and (for the Seals) Latin American Spanish.

Russian Refresher Maintenance Course.

FORSCOM has requested R/M courses in several languages designed to support their newly-established language proficiency program. At present, we are developing the course in Russian.

Headstart Courses.

These very short courses provide daily-life language and cultural orientation for military personnel and dependents. The materials consist of audiotapes and a text. They can be implemented in class or as a totally self-instructed course. Each course is designed for approximately 40 to 80 learning hours. Videotape programs are now being developed to support Headstart courses. The Video Headstart package typically consists of twenty-six videotapes of approximately 27 minutes duration each. The first tape provides a cultural orientation to the country. The remaining twenty-five provide dialogues, drills and exercises. Each program or module includes a self-evaluation quiz. An end-of-course test is also included in the package. The materials, once developed, are made available to the Armed Forces Radio and Television Service for broadcast, to Education Centers and to the Navy for shipboard training in the form of 3/4" video cassettes. Videotaped materials are currently being produced under contract by the University of California at Los Angeles using professional actors. A program specifically for Puerto Rican Spanish has been completed and shipped to the field. Programs in German and Latin American (Panama) Spanish were received from UCLA in February. The German program is now in the publishing process and the Spanish is being prepared for the publishers. The Italian program is now being filmed at UCLA. The program in Pilipino (Tagalog) will follow it immediately and will also be finished in 1984.

6. NEW SYSTEMS TRAINING

The New Systems Training Division reflects DLIFLC's commitment to explore the usefulness of a wide range of new technology to the language learning process. The Division is currently headed by an Army Lieutenant Colonel who has an extensive computer and foreign language background. The mission of the Division is to identify relevant opportunities for application of technology to language training; convert these opportunities into scheduled, funded, formal projects; and plan and manage milestones until a project becomes self-sustaining.

FIRST YEAR ACCOMPLISHMENTS: Accomplishments during its first two years of existence included:

- a. Created two foreign language videodiscs: "KLAVIER IM HAUS" for German and "DE VIVE VOIX" for French. Those videodiscs are now serving as the basis for evaluating specific approaches to the use of interactive video for foreign language instruction.

- b. Hosted a Foreign Language Instructional Technology (FLINT) Conference in which over 100 distinguished foreign language educators and technologists representing institutions in the United States, Germany, Canada, and England shared information on the application of advanced technologies to the teaching and learning of foreign languages.
- c. Conducted training for approximately 100 members of the staff and faculty on the use of microcomputers in education.
- d. Launched a wide range of major initiatives using state-of-the-art equipment to explore concepts and to inform the faculty and staff of the usefulness of this technology.

CURRENT INITIATIVES: Current New Systems Training Division initiatives include:

Arabic Writing and Sound System: Evaluation of a program developed at the University of Texas for teaching the Arabic Writing and Sound System using the IBM Personal Computer. Application of this system at DLIFLC is expected to significantly reduce student learning time using the computer terminal. Completion of initial evaluation will be accomplished during FY84 with expansion of the program in FY85.

PLATO System: Evaluation of PLATO System (nation-wide network of computer-based instruction) to determine its usefulness for resident and nonresident foreign language instruction.

- a. Determining the usefulness of existing PLATO courseware for DLIFLC applications.
- b. Evaluating the effectiveness of PLATO instructional development and delivery.
- c. Adapting existing instructional materials for delivery on PLATO at minimum cost. Project completion is anticipated during FY85.

Faculty and Staff Development: Training in computer applications for the DLIFLC faculty and staff to prepare them to make best use of interactive technology for language instruction. Project is continuous.

Video-Enhanced Learning, Video-Enhanced Testing (VELVET): Development of an interactive video instructional system involving the six-week resident German Gateway course to assess the value of interactive video for foreign language training. Goals are to determine:

- a. Whether the use of interactive video can improve foreign language proficiency and reduce training time.
- b. The value of authoring languages and systems for development of foreign language instruction.
- c. The most effective and efficient method of producing interactive video media by comparing use of commercially available material with custom video. Project completion is anticipated during FY85.

Interactive Instructional System: A joint research effort with the National Security Agency and the US Army Forces Command to identify the optimal interactive technology for use in foreign language instruction.



Goals are to design and develop:

- a. A prototype interactive instructional delivery and development system for interagency use.
- b. An authoring system for use in developing interagency-compatible interactive instructional materials.
- c. A pilot project in a non-Roman alphabet language. Project completion is anticipated during FY85.

Testing/Evaluation of Interactive Instructional Materials: A joint DLIFLC/US Air Force Academy research effort is being planned to conduct formative testing and evaluation of interactive instructional materials. These materials would be developed using various instructional strategies and evaluated to determine appropriateness for use in foreign language instruction.

#### 7. RESIDENT TRAINING

In FY83 the average student load at Monterey was 2,425, 156 for the Presidio of San Francisco, and 386 at Lackland AFB. At the Foreign Service Institute DLIFLC trained an average load of 108 students. Training was conducted in 41 languages and dialects. Load projection for FY84 is 3,544 for Monterey, 268 at Presidio of San Francisco, 400 at Lackland AFB, and 100 at FSI.

#### 8. INPUT AND LOAD

The student input picture at DLIFLC shows a consistently rising trend from FY79 through the mid 80's. The increase in foreign language input is attributed to greater awareness of the significance of foreign language proficiency both in the intelligence services as well as in other activities targeted for overseas assignments. Since FY79 student loads have increasingly taxed barracks and classroom facilities at the Presidio to the point where, in 1980, we had to garner the BOQ's for use as enlisted billets and move one Directorate of over 200 people off-post to provide additional classrooms. By FY81, even this additional capacity was exceeded. To ease the burden at the Presidio, we opened a branch facility at Lackland AFB in November 1980, teaching Russian to approximately 400 Air Force and Army students and opened a branch at a former Public Health Service Hospital at the Presidio of San Francisco on 1 October 1982, teaching Korean, Spanish and German to approximately 400 single Army Enlisted students. By the end of FY83, we will have experienced a 70 % increase in student load over that of 1979, a rise of over 14 % per year. The present classroom shortages at the Presidio are being alleviated by using staggered scheduling and, by contracting for the use of a local, recently vacated elementary school. These solutions are expected to relieve the immediate demand for classroom space until 1985, when the first of two new General Instructional facilities should be ready for use. The medium/long range solution to our over-loading at the Presidio is the new military construction now in progress.

#### 9. SCHOOL MODEL '83

DLIFLC reorganized in April 1984 to implement School Model '83, the new school organizational model for all Army schools under the direction of the US Army Training and Doctrine Command (TRADOC). This reorganization primarily affected the upper-management organization. The Directorate of Training, the Directorate of Training Development, and the Directorate of Evaluation and Standardization were abolished and two assistant Dean positions, Assistant Dean for Instruction (ADI) and Assistant Dean for Evaluation and Standardization (AES), were established. The ADI supervises a relatively large organization that has

absorbed many of the day-to-day training management functions, educational technology, nonresident training, faculty and staff development, and text publication. Three new schools of language were created to establish six language schools; Asian, East European, Germanic, Middle East, Romanic, and Russian. The Directors of the language schools work directly for the Dean. The course development mission has been decentralized and responsibility assumed by the respective language school Directors. The ADI works closely with the Directors of the language schools in course development analysis, design, and quality control. Moving curriculum development closer to the teaching departments is a step forward and in line with previous DLIFLC efforts. When the Institute's construction program is completed, space will be available for the course development teams to be colocated with their respective language schools.

#### 10. DLIFLC CONSTRUCTION PROGRAM

Long awaited construction programs at DLIFLC have begun. While DLIFLC has excellent language training facilities, significant increases (approximately 500 each year) in student load has resulted in severe overcrowding with attendant degradation of instruction and the soldierization process. The construction program is centered in three general areas: Barracks, Classroom and Morale, Welfare and Recreational Facilities. With the latest Army stationing and installation plan figures indicating a requirement for 2000 additional enlisted barracks spaces to accommodate current and projected student loads, the FY84 Barracks project has been accelerated to FY83. Simultaneously, the burgeoning student load has had a tremendous impact upon our classrooms, requiring extensive use of our 1905 vintage converted Horse Cavalry Barracks. DLIFLC has leased one nearby public school facility for administrative space to open up additional classrooms, is negotiating for another public school facility for additional classrooms, has opened up two Branch Facilities at Lackland AFB and Presidio of San Francisco and has implemented a staggered shift schedule of classes to cope with programmed increases in student load. As the FY83 Instruction Facility is completed, we will start closing out the Branch Facilities. The available morale, welfare and recreational facilities are aged and inadequate for student population. An extensive facility upgrade is in progress.

#### 11. RUSSIAN CULTURE HOUSE

The Russian Cultural House (RCH) is a DLIFLC initiative to improve the linguistic proficiency of selected outstanding students enrolled in the Russian Continuation Course, the Russian Intermediate Course, or the Russian Basic Course (Application Phase). The RCH enhances and supplements traditional classroom instruction by exposing a group of students to very intensive language instruction and practice in an isolated environment. Intensive language instruction is best conducted in an atmosphere of total immersion in the linguistic and cultural milieu of the target country. Total immersion requires the student to use the target language exclusively in daily living. On 1 June 1983 DLIFLC established, on a one-year trial basis, a total immersion Russian Cultural House in an isolated five bedroom house in Carmel Woods. The facility is operated by two DLIFLC Russian instructors responsible for controlling the out-of class environment, ensuring the exclusive use of the Russian language in special RCH activities, as well as, the various situations of everyday living. A group of six students is rotated to the facility every ten weeks. The degree of success of this total immersion project will be measured by testing participants before and after training, and comparing their improvement against that of a control group of similar sex, age and academic qualification which received standard DLIFLC language training. Four groups of students have completed training at the Russian Cultural House. Evaluation of the first and second experimental and control groups

of the RCH experiment has been completed. The gains in percentages attained for the groups were measured by the results of entry and exit testing with the Lower Range Russian DLPT III. The experimental group gained an average of 10 % in speaking and 3 % in reading over the control group, although they gained equally in listening. This difference in 10 % in favor of the experimental group is quite significant. The objective of "total immersion" of students in Russian is being attained. The data collected thus far is not sufficient for a meaningful statistical analysis. A minimum of thirty samples is needed for such a study. If successful in significantly raising the language proficiency of Russian students, this concept should be extended to other language programs. Other languages having demanding terminal learning objectives might also be considered for such programs in the future.

## 12. PROFESSIONAL DEVELOPMENT EXTENSION COURSE PROGRAM

The Professional Development Program Extension Courses (PDPEC) were originally designed as language Training Extension Courses (TEC) for interrogators. The use of tactical interrogation settings has proven to be an effective way of introducing military terminology in a systematic manner, and the materials are now being used by military linguists of all specialities, both HUMINT and SIGINT. Three courses in Russian, each of 46 lessons, (Motorized Infantry, Armor, and Artillery) have already been completed and are being revised for republication. Courses in Chinese Infantry, North Korean Infantry and Iraqi Armor have recently been published. Development is presently continuing, and some parts are now nearly ready for publication, in Arabic (Iraqi, Syrian and Egyptian), Chinese, Czech, German, Korean, and Russian (Air Forces). Future projects include Latin American Spanish and Polish. Course objectives include the acquisition of target area military concepts and terminology. Initial courses deal with ground forces order of battle in a tactical environment. If the need exists, later materials can address Naval and Air Force operations in any required language. Course development for PDP Extension Courses is accomplished through the services of civilian course writers (fluent in the target language) and HUMINT Specialists (mostly Marine Corps).

DEFENSE LANGUAGE INSTITUTE ENGLISH LANGUAGE CENTER

Annual Report to BILC Conference 1984

1. INTRODUCTION

- a. Each year the Military Departments coordinate their Foreign Military English Language Training requirements with DLIELC. English language Training is provided by DLIELC either under the International Military Education Training (IMET) or Foreign Military Sales (FMS) Programs. During FY 83, 2351 students from 68 countries received English language training preparatory to entering CONUS technical training programs.
- b. The English language proficiency skill level required for entry into a technical/professional program is determined by each Military Department and is expressed in terms of an English Comprehension Level (ECL) test score on a scale of 0-100. The majority of the programs which are highly technical or hazardous in nature require an ECL of 80. Prerequisites for less technical courses vary from 65 to 80 ECL. The Foreign Military Trainee (FMT) is given an ECL screening test in-country prior to departure for CONUS. If the FMT does not meet the English language proficiency program, or if the FMT requires Specialized English terminology training as a course prerequisite, the individual is programmed for additional language training at DLIELC.

2. ENGLISH LANGUAGE TRAINING COURSES

- a. The American Language Course (ALC) is a proficiency-based course and is variable in duration. Upon entry at DLIELC, an FMT is placed at the appropriate proficiency level in the American Language Course and receives six hours of instruction daily. During the last nine weeks of scheduled training at DLIELC, providing the minimum ECL score has been achieved, the FMT studies specialized language skills and technical terms appropriate for the scheduled follow-on training program.
- b. DLIELC conducts three courses for selected FMT who are involved with the teaching of English in their homelands.
  - (1) The Basic/English Language Instructor Course is a 27-week course. During this time, the trainees study the structure and phonology of English, and the DLI methodology of teaching English as a Foreign Language (TEFL). Emphasis is placed on TEFL techniques and peer teaching. Six classes of this course are scheduled annually.
  - (2) The Advanced English Language Instructor Course is a 13-week course. It is intended for experienced TEFL instructors who need to be updated on the TEFL "state-of-the-art" and on teaching techniques. This course is conducted quarterly.
  - (3) The Advanced Programs in English Language Training Management Systems Course is an eight-week course. It is conducted twice a year for FMT who are managers, administrators, and/or supervisors in host country ELTP.
- c. Four additional courses are also conducted by DLIELC as required.
  - (1) Language Laboratory Maintenance Training provides instruction and practice in the installation, maintenance, and operation of language laboratories. Course duration varies from three to eight weeks depending

upon previous experience of the trainees in electronics.

- (2) OJT Professional/Specialized, CONUS consists of on-the-job training in general laboratory procedures, i. e., operational and preventive maintenance in procedures.
- (3) Observer Professional/Specialized, CONUS is tailored to cover those areas in the operation and administration of an English Language Training Program (ELTP) which are most appropriate to the observer(s) as defined by the host country.
- (4) A 16 week course called the English as a Medium of Instruction Course for academic instructors from overseas who will teach scientific and technical subjects using English as the instructional language.

### 3. OVERVIEW OF DLIELC TRAINING ACTIVITIES

The following special projects highlighted the academic training program during the past fiscal year:

- a. Students from several new countries are receiving English language training at DLIELC. For the most part they are developing nations from South and Central Africa. Over 80 countries will be represented during FY 84. The Egyptian Army, Navy, and Air Force programs continued strongly with the largest majority of the students receiving from 8 to 12 weeks language training.
- b. The U.S. Navy has, in coordination with DLIELC, initiated an English Language Training Program for their new recruits. About 600 personnel, mostly from Puerto Rico, will be entered into English Language Training at DLIELC each year. The recruit receives language training up to a comprehension/speaking (C) level of 3-3 and ECL of 80. Upon achieving these levels they are returned to the Navy Recruit Center at Orlando, Florida for recruit training. Training durations at DLIELC vary from 12 to 24 weeks.
- c. General English Language Training Program for US Army and USAF ROTC Students: The US Army students started to arrive at DLIELC in January 1982. A total of 50 students per year were programmed. The USAF students began entering in June 1982. The DLIELC mission is to train them in the General English Section for a period of up to 16 weeks for improvement of their speaking and comprehension abilities. A total of 175 students have graduated, including 44 distinguished graduates. This is an ongoing program with officers being entered directly from their university upon graduation and from their units after receiving some military training.
- d. EURO-NATO Joint Jet Pilot Training Program: At the request of managers of the EURO-NATO Joint Jet Pilot Training Program (ENJJPTP) at Sheppard AFB, Texas, DLIELC set up a nine-week Graduate Instructor Pilot Language Refresher Course stressing live radio communications and instructor pilot language development. Deficiency areas covered were live radio communication vocabulary and comprehension, and radio speech development. At present, nine students from Italy are in English language training for this purpose.
- e. DLIELC continued to monitor all approved US Army Non-resident English Language Programs (NRELP) in CONUS and overseas, and to provide American Language Course (ALC) textbooks and other related training materials. Seventy-two US Army Programs are located in CONUS; 148 are located overseas. US Army NRELP support also included on-site staff assistance visits and instructor orientation workshops.

- f. DLIELC continued to furnish ALC material support to the NRELP for Filipino personnel employed at the US Naval Ship Repair Facilities at Subic Bay, Philippines. Student load is approximately 200 per year.
- g. US Army Pre-Basic Program - DLIELC continues to plan for the ELT of US Army recruits at Lackland AFB. Facilities and equipment have been set aside for this purpose. Hiring of instructors will start upon official modification of programmed entries.
- h. Instructor Training: Training of international students at Lackland AFB as English language instructors has undergone a large increase from past inputs. Requirements for instructor trainers have doubled.
- i. DLIELC Non-resident Branch is assisting the U.S. Navy in identifying non-English speaking personnel in the USN who may require English training.
- j. Colonel John M. Kilborn, Commandant DLIELC and Mr. John P. Devine, Chief, Non-Resident Training Branch, visited the Far East from 24 Mar 84 to 28 April 84 in order to update the English Language Training Program (ELTP) requirements in Japan, Korea, the Philippines, Thailand and Indonesia. They had also visited the Mid-East from 2 Nov 83 to 3 Dec 83 to consult in-country personnel about the ELTP's in Riyadh and Dhahran, Saudi Arabia, Yemen Arab Republic, and Djibouti, Sudan, Egypt and Ankara and Izmir, Turkey.
- k. The ELTP in Morocco achieved self-sufficiency, and its one-member Language Training Detachment (LTD) was transferred to Somalia. LTD's continued to be assigned to Saudi Arabia (3 members), Sudan, Thailand and Zaire (one Member each). Two additional LTD members were deployed to Yemen Arab Republic, bringing its total to six DLIELC employees. The two LTD positions in Egypt were terminated but in a short time replaced by a five-member Mobile Training Team (MTT). A new one-member LTD was established in Indonesia and a two-member LTD established in Lebanon until the evacuation of American forces there. Additional personnel were deployed as Mobile Training Teams to meet requirements generated by the Security Assistance Training Programs (SATP) for the Army, Air Force and Navy in Ecuador, Honduras, Thailand, Korea, Indonesia and Sudan. Two Mobile Training Teams were also deployed to Puerto Rico to assist their ROTC ELT program.

#### 4. CURRICULUM DEVELOPMENT ACTIVITIES

- a. DLIELC uses a system approach to the planning and development of English language instructional programs which ensures that personnel are taught the language skills necessary for the successful completion of follow-on technical training. Priorities in the curriculum development effort are established through analysis of student input, service needs, and the systematic updating of requirements (course review). Currently, all established priorities for development and revision of the American Language Course (ALC) materials are based on the Resident ELTP requirements.
- b. DLIELC continued a major overhaul of the ALC General English materials. Books 1 and 2 (formerly 1110 and 1210) of the Elementary materials went for operational tryout in Morocco, Yemen, and the General English Section of DLIELC. Books 3 to 6 are now in the process of being keyboarded and edited. The first two (of six planned) intermediate volumes have been written. Periodic course maintenance was performed on current materials.
- c. In response to a need identified in the Euro-Nato Joint Jet Pilot Training Program, DLIELC was ordered to develop by June 84 an exportable oral interview package to determine, in doubtful cases, whether particular candi-

dates for staff and instructor pilot positions are capable of operation at the "S-3" level as currently defined in Air Force Regulation 50-40.

- d. In the Instructor Development area, new courses have been designed to meet changing needs in the fields of faculty development and foreign instructor training. The Advanced English Language Instructor Course was developed and is now in operational use. This course replaced the English Language Instructor Refresher Course and is of the same length, 13 weeks. A 27-week course, Basic English Language Instructor Course, was designed. The first 10 modules of DLIELC Methodology have been written and are being tried out in classes. This course will replace the English Instructor Course, of the same length, which has been the principal instructor training course at DLIELC.
- e. Approximately 1,500 new English Comprehension Level (ECL) test items have been validated for entry into the Computer Generated Test (CGT) item bank. Computer software problems have precluded the use of these items. Present plans are to justify and purchase stand-alone computer hardware to support the CGT system. Extensive software revisions will have to be made in order to switch to this new hardware. We do not anticipate that the new system will become operational before FY 85. We will, therefore, be limited to using our present inventory of operational and reserve ECL tests for at least the next 12 months.

FOREIGN SERVICE INSTITUTE

Report to BILC Conference 1984

During the past year, the Foreign Service Institute has continued its efforts to make its language testing and training programs more responsive to the needs of the Eighties. Work began in 1981 on "Bridges" - 2-3 day job-relevant exercises interspersed in the regular courses - have continued, so that almost all 40 language programs now contain at last three such exercises. "FAST" (Familiarization and Short-term) courses, 6-10 week courses in 16 languages for employees and family members who do not have a professional need for the language, are now offered once or twice a year in languages like Indonesian and Thai, and every four weeks in French and Spanish. The Sub-Saharan French and Latin American Spanish FAST courses have now been published and are available through the National Audio-Visual Center with accompanying tapes. Others are being prepared for publication.

The revised oral proficiency test, reported on at BILC 1983, has now been fully implemented so that there are now standardized scoring criteria and a single format across languages.

FSI has intensified its efforts on instructor training. In addition to workshops on Bridges and FAST courses for current instructors, new instructors are now enrolled in an extensive First Year Instructor (FYI) orientation program, addressing such topics as teaching methodology, proficiency testing, organizational objectives, and administrative information.

The two model language competence posts - Dakar and Montevideo - called for by the Foreign Service Act of 1980 were staffed by language competent personnel by October 1983, with the exception of only one employee. This means that every employee at those two posts, including secretaries, communicators, and Marine security guards have some degree of foreign language competence.



SHAPE LANGUAGE CENTRE (SLC)

Report to 1984 BILC Conference

A. Internationally Funded Programme ("Official Programme")

1. Language Training

The move towards individualized instruction, especially for students of English, is continuing. Appropriate materials are being adapted or prepared. The Centre is currently using the self-study course referred to in our 1983 report (Belgian Ministry of Education) which is giving good results in the language laboratory.

The past year has seen the introduction of a new course in French "Archipel" by J. Courtillon / S. Raillard (CREDIF, France) which is also giving good results.

Video and micro-computer assisted learning continue to be researched as equipment comes in.

The SLC continues to provide technical management of the language testing and training programmes at the NATO Headquarters, Brussels. These programmes serve several NATO agencies: the International Military Staff (IMS), the International Staff (IS), the Military Agency for Standardization (MAS), NIC SMA etc.

2. Language Testing

Alternate forms to the test (described in previous reports) are still under trial.

3. Seminars

The list of seminars attended or organized by the SLC staff since the last conference is enclosed. Copies of individual reports can be obtained on request.

B. Community Funded Programme (the "Language Circle")

4. This year we offered more intensive courses for beginners in English and in French at the start of the year. The idea was to give beginners a "headstart" in their study of the language.

The results were very encouraging. Those who attended these classes were motivated by their faster progress and were encouraged to sign up for another term.

Besides the two official languages we are currently offering Italian, Spanish, German and Turkish.

We will be trying out the new "Kernel" series with our English classes during the summer and our French teachers will also be trying out the new "Archipel" method. We also hope to begin using some of the new Video English material.

LANGUAGE CENTRE SHAPE/NATO

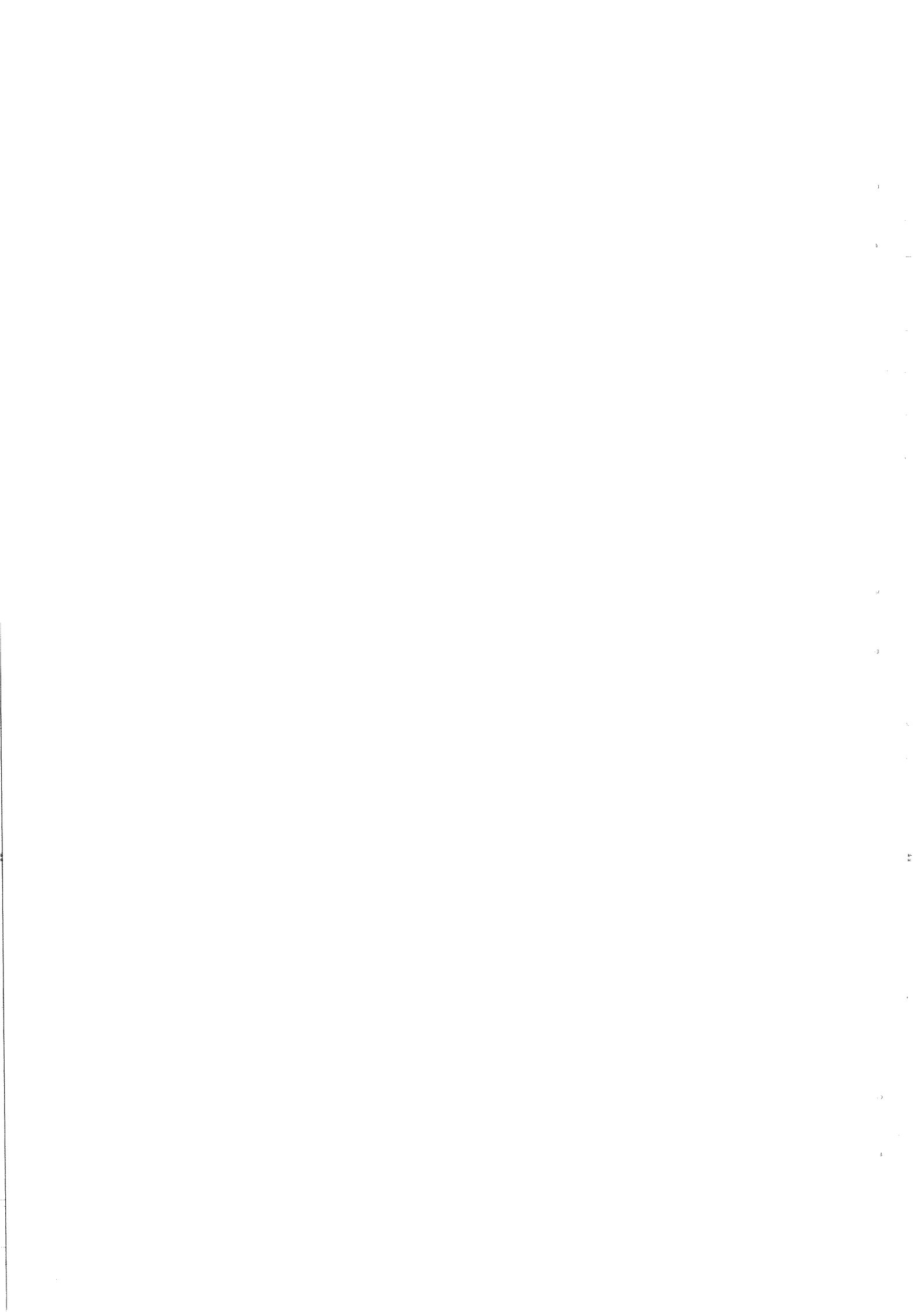
SEMINAR REPORTS

1983

SERIAL NO	DATE	PLACE	SPEAKER	SUBJECT	SLC REP.
1 377	3 Feb	British Council PARIS	Chris Harrison	Using Computers as aids in learning English	DHE/JL
2 378	12 Feb	Irish Franciscan College, Louvain	Maire O'Reilly	Creation & Maintenance of Motivation & relaxed attention in Language Learning Situation	JL
3 382	9 Mar	British Council BRUSSELS	Jimmie Hill	What is Wrong with Grammar Teaching	LC Staff
4 384	6, 7 & 8 April	University of Mons		Troisièmes Journées Informatiques	MGA/DHE/JL
5 383	23 Apr	SLC SHAPE	SLC Staff	La grammaire dans les cours de langue	Association SGAV Belgique
6 386	23 Jun	SLC	Dr Pat McEldowney	English Teaching & Testing workshop	SLC Staff & IMS NATO
7 388	6-10 June	Bundessprachenamt Hurth, FRG	Reps from 11 NATO Nations	1983 Annual BILC Conf- erence	Reps from 11 NATO Nations
8 387	23 Jun	NATO Brussels	Janine Courtillon Archipel		SLC & NATO
9 389	18 Nov	British Council Brussels	Chris Bury	Demonstration of Video English	JE/MGA/AM/JL

SEMINAR REPORTS 1984

SERIAL N° LTC(84) SR/ (N/REF N°)	DATE	PLACE	SPEAKER	SUBJECT	LTC REP
1 (390)	5 March	British Council, Paris	Mike Lavery	Creative Work with video	JL (+)
2	22 March	British Council, Paris	Dr F. Frankel	Developing Writing Skills : beyond the sentence	DHE (+)
3 (391)	24-25 mars	Collège Condorcet, Paris	Antoine de La Garanderie Hélène Trocmé	Forum de Pédagogie Diffé- renciée	DHE (+)



Report of Study Group 1

Brain and Memory Research

Chairman: Mr. J. Melady

Members: LtCol Bellillo  
LtCdr Cottone  
Cdr Rollo  
Mme Lefrançois

INTRODUCTION

1. The focus of our study group was on teaching/learning strategies which could impact on the brain of learners in several language learning situations. These strategies would be intended to influence memory or the retention of vocabulary and language structures. The assumption is therefore made that the brain has a key role to play in the acquisition and retention of language and that the instructional process may impact positively on the brain for the improvement of learner language retention and even internalization.

LEARNING STRATEGIES

2. The study group discussed learning strategies from a systems point of view which would have the potential to affect the brain in three areas - physiological, cognitive and affective. Attached as Annex A is a list of strategies which were believed to be important for positive results in those areas.
3. As a synthesis at the end of our deliberations, the group attempted to sharpen the focus of the discussion by identifying strategies which it felt to be priorities for the improvement of learner memory and retention of second language structures. While each of the group members had his or her preference, there was largely a consensus on the following priorities.
4. It was first considered that an analysis of each learner's type of memory, visual or auditive (how he learns best) as reported by each learner involved was important at the outset. Proceeding from this analysis, course design would center on those teaching techniques most appropriate for each individual - repetitions, transformations, etc. - and most likely to be consistent with the learner's learning style assuming an analysis of that style being carried out in the initial phase of the pedagogical process. This therefore implies, in the conduct phase of programming, a multisensorial approach to instruction. It was considered essential that the vocabulary and structures be taught in scenarios relevant to the learners in question and that if at all possible there be made available opportunities to use the language immediately in real life situations, in the target milieu. Enrichment programming involving socio-cultural excursions and living in the families for periods of time are examples to accomplish that objective.
5. Repetitions of the structures as part of a sequenced curriculum was considered important for learner retention as part of a "spiral" to assist in not only retention but internalization of the language taught for use in a variety of situations over a period of time (up to six months).
6. While most of the strategies examined were cognitive in nature, our group believed a holistic approach was needed embracing physical activity as part of the program to the extent permitted by physical plant and resources to affect in a positive way the flow of oxygen to the brain as well as a general

feeling of well being. Taking into account a human being's power to think, feel and create, the group discussed as well strategies likely to influence the affective component of the brain. A reasonably relaxed atmosphere, arrangement of physical facilities and use of colours having a calming effect were mentioned. Above all, our study group considered that a positive student/teacher rapport was highly desirable as well as positive group cohesion and interaction.

#### CONCLUSIONS

7. The group felt that the subject of brain memory and techniques to improve learner memory in second language contexts was one meriting consideration and further examination by individual members of BILC as they deemed appropriate. The basic conclusion drawn by our group was that memory and retention of language could be influenced positively by the pedagogical process. Teaching can make a difference in this area. Exposure to the concept of the three areas of the brain and the function of each appears to have been most useful for the members of our group which attempted to make a link between research theory and classroom practice.
8. Our group concluded as well that while the three areas of the brain each had its distinctive role to play, that instructional strategies need to be holistic focusing on the learner as an entity. There are implications, therefore, for a pedagogical process which embraces physical activity, analysis of student learning strategies in the physiological, cognitive and affective domains. Perhaps the Greek ideal of the importance of the whole person - mind, body and soul - need be the focus for our approach to students in second language contexts.

KINETIC	COGNITIVE	AFFECTIVE
- conditions in class i. e. length of time breaks facilities	- define objectives, criteria for success, means of evaluation	- interest, motivate students
- total fitness sports nutrition	- identification of learning strategies of the learner	- rapport teacher/ student
- arrangement of class- room facilities	(1) varied, multi- sensory presentation	- atmosphere which is positive and reinforcing
- open windows, use of outdoors to increase oxygen flow	(2) repetition, transformation	- group cohesion through use of group dynamics techniques
	(3) anchor structures in relevant scenarios	
	(4) reactivate struc- tures over period of time "Spiral curriculum"	
	(5) individualize based on diagnosis	
	(6) use (immediate) in real life situa- tions, i. e. enrich- ment programs, living with families, etc.	





Report of Study Group 2

The Application of Inner Speech to  
the Construction of Language Materials

Chairman: Dr. B. Rollason

Members: Mr. J. Ratliff  
Mr. F. de Ryck  
LtCol Brace  
LtCol Arcella  
Mr. L. de Winde

1. Study Group No. 2 recognizes inner speech as an important element in the range of means of communication available to skilled native speakers and to educated non-native speakers of second languages. It is also recognized, however, that this element is not yet sufficiently defined nor even adequately described to be considered as a teachable sub-language. Therefore, the application of inner speech to the construction of language learning materials would seem to be premature at this stage.
2. It was unanimously decided that the first step towards the inclusion of inner language in curricula should be the gathering of data from members in order that the nature of inner language may be satisfactorily defined.
3. Since it is recognized that inner language will eventually have a role in
  - (a) curriculum design
  - (b) teacher training

the following proposal is submitted to BILC members for consideration:

- (a) that delegations request that examples of cases where inner language/outer language conflicts have contributed to a *rupture of communication, cultural conflict or misunderstanding*, where inner language has constituted a *barrier to communication* and where conscious or unconscious use of the inner language *has contributed positively to the learning process* be collected by practising teachers and be reported to BILC 85;
  - (b) that the organizers of BILC 85 be requested to reserve a seminar period of 1 - 1 1/2 h. to enable delegations to report on the instances of the above phenomena;
  - (c) and that this project be given the status of a continuing project of BILC in order
    - that members of BILC can in fact see the results of surveys and requests for raw data translated into action;
    - that authorities financing BILC be made aware that BILC does have continuity and that our deliberations can affect national language programs at a practical level.
4. It would appear that an appropriate goal for BILC would be the description, classification and analysis of instances to be reported in § 3 above, particularly in relation to the role of inner language in the relationship between language input and language output. This analysis would be helpful to

member nations in their quest to provide more cost-effective IT programs, consistent results and effective use of ever-decreasing resources.

5. It is requested that the Plenary Session adopt this report and that the Organizing Committee for BILC 85 take appropriate measures to ensure the continuity of this project.

BILC SURVEY 84/85

(This survey is part of an ongoing data gathering exercise concerned with inner language. Please read the paper "Inner Speech" by Josef Rohrer and complete as much as possible of the details requested below.)

I. GENERAL INFORMATION

I<sup>st</sup> Language \_\_\_\_\_ Date \_\_\_\_\_  
Target Language \_\_\_\_\_ Age \_\_\_\_\_  
Occupational Group \_\_\_\_\_ Sex \_\_\_\_\_ M/F \_\_\_\_\_  
Instructor Native/Non-Native \_\_\_\_\_ Level of Target Language \_\_\_\_\_  
Characteristics of Class: Size \_\_\_\_\_ Hours/Week \_\_\_\_\_  
Sessions/Day \_\_\_\_\_ Length of Session \_\_\_\_\_ Classroom \_\_\_\_\_ Lab \_\_\_\_\_  
Methodology \_\_\_\_\_

II. NATURE OF THE EVENT OBSERVED

Positive  Negative   
Individual  Inter-personal

III. NARRATIVE OF EVENT

SUBMITTED BY \_\_\_\_\_ (COUNTRY)



Report of Study Group 3

Proxemics and Kinesics

Chairman: Col Kilborn

Members: SqnLDR Bishop  
Dr. Isselé  
Col Magaldi  
Mme Beaudouin  
Mr. Kozoriz

The working group wishes first to express its appreciation to Maire O'Reilly for her obvious in-depth research, her interest and presentation on the subject of proxemics and kinesics.

Proxemics is a study of the spatial organization and the effects of distance and space on people. Kinesics can be simply described as body language, but also takes in the adjustment of perception based on peripheral stimuli. It is less clearly defined than proxemics.

The working group very strongly recommends that this subject be an important part of any initial instructor qualification programme and should additionally be thoroughly covered in periodic refresher or inservice training. There is, we feel, a profound impact that proper use of available information on this topic can have in language learning. The magnitude is a consequence of instructor cognizance and proper use of the principles involved. Additionally those individuals responsible for curriculum development should be thoroughly familiar with the group dynamics which can be predicted through a sound understanding of proxemics and kinesics. They should make use of this information in lesson development, in order to build in techniques and activities to reduce both physical and emotional stress.

Proper application of these principles can enhance language learning to the point of accelerated completion of course standards, or the production of a more fully qualified student if training time is not reduced.

A copy of Mrs Maire O'Reilly's paper "Some Implications of Posture in the Language Class" is attached.

Some Implications of Posture in the Language Class

Maire O'Reilly

Introduction

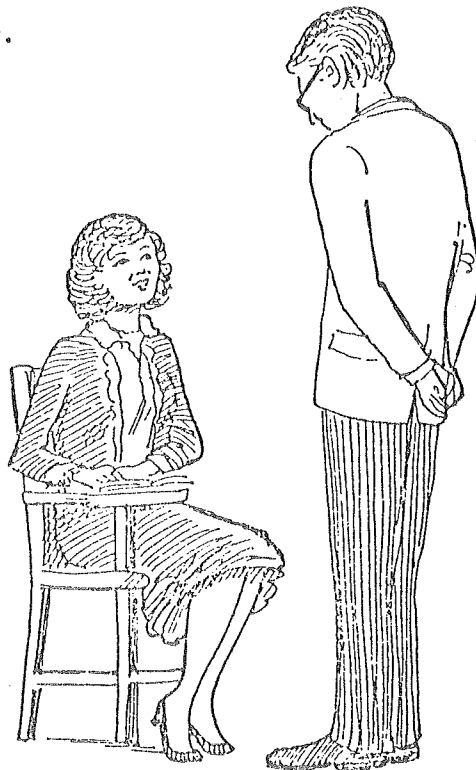
The entire brain deals with communication, but in two parts. The left brain takes in the words; the right brain processes the non-verbal data. Ideally, these two halves should blend harmoniously. Yet, we often find ourselves spontaneously reacting to an attempted communication in a way which does not at all correspond to the words. Psychiatrists and therapists know that, when the two parts are not coordinated, the gut level reaction will be to the non-verbal information.

Studies into non-verbal communication, or NVC, have produced a number of neo-sciences - kinesics, proxemics, pragmatics, and so on. Without a doubt, the information passing between bodies directly influences the behaviour of the individuals concerned. To an even greater extent, the information passing from a person's own body to his brain dictates what his behaviour will be.

One learns body positions as a result of certain conditions. Particular positions eventually become structured as a person develops. However, some positions are imposed in special circumstances. When this happens, the individual's behaviour will eventually adjust to correspond to the posture he has adopted.

The American psycho-therapist, Virginia Satir, was the first to develop a coherent approach to this phenomenon. She is renowned as the originator of what are now known as the Satir Modes of behaviour. There are five, but I propose to discuss some implications of two of them: the Placator and the Blamer.

*Behaviour is related to posture.*



*Drawing by Arthur Ostroff*

*The person standing will tend to blame, and is perceived as an authority figure. The person sitting will tend to placate. Neither can easily play a different role.*

The power symbol/barricade effect

In most classrooms, a particular seating plan is imposed. It is not always possible to do anything about altering this. Language classes frequently take place in rooms adjoining those where other classes are in progress, or which will be used by another teacher for a different subject later on. Moving furniture around the noise it causes, and the time it takes from the lesson period are considerations which cannot be ignored.

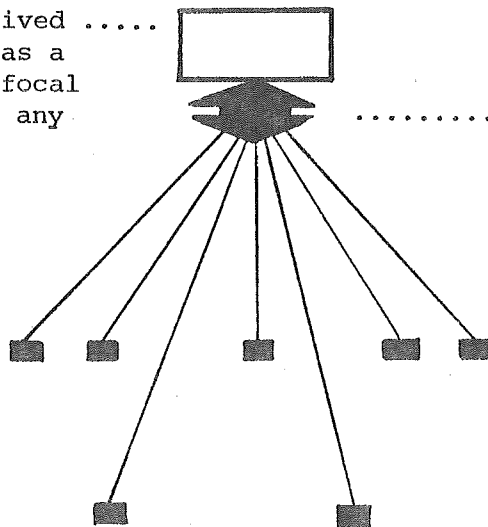
The classical seating plan, with the teacher's desk at the front, faced by rows of students, creates all kinds of impediments to the sort of spontaneous communication which helps language learning, largely because it has tremendous symbolic value.

It may be argued that the teacher, having more books and materials to cope with than the students, needs more space on his desk. It is also true that the height added by the podium gives greater visibility. Craning necks, and forbidden activities indulged in because they pass unseen, are thus kept to a minimum in the student population. Just as true is the fact that it sets the teacher apart, and designates him symbolically as being Different-From-The-Rest.

This can work in two ways. Either the teacher sees himself as more powerful than his students, the boss, and is perceived as such by his students; or he sees the desk as a barricade, behind which he can hide from the class which, as a group, is a threat. In this case, the students tend to become the more powerful element in the class in order to complement the teacher's attitude.

Regardless of whether he establishes and maintains his authority, or is ultimately dictated to by his students, the teacher is under great stress.

The desk may be perceived ..... as a power symbol or as a barricade. It is the focal point of the class in any case.



..... The battle for power is localized at the teacher's desk. Since real communication is not possible, either the teacher or the class will impose authority. In both cases, attention is focused on the teacher.

Not everyone can cope satisfactorily with this situation.

has already gone wrong. A group insisting on more writing, for example, does not necessarily need more writing. They may merely be asking for it because they feel that they need something. Not knowing what that is, writing seems as good a possibility as any. If the source of the problem is not perceived, then next week they will want more grammar; the week after that, more listening, and so on. Swinging to and fro with their requests will only aggravate the basic difficulty.

While flexibility is desirable, it is most unwise to chop and change simply because the students ask for something different. Any change must be founded on a careful consideration of the course objectives, and the possibility of achieving them efficiently if the change is incorporated. It is a good idea, whenever possible, to please one's students, but not at the expense of intelligent teaching and class management.

Just as a teacher can have a deliberately negative effect on the student's future, so dissatisfied students can sometimes be the cause of a teacher's losing his job. In addition, a teacher has to keep an eye on his superiors in the administration. Even if his students are happy, they may not be. While a Placator can, therefore, be understood, he cannot effectively learn, nor can he efficiently teach, since his energies are given over to looking for signs of displeasure and for ways of allaying it.

#### The Blamer

The behaviour which is spontaneously triggered off by placating, is blaming. Looking at the same traditional seating plan, we discover that, just as it facilitates placating, it might equally well have been designed with blaming in mind.

Fundamentally, the Blamer, like the Placator, feels threatened. The difference is that, for him, the best means of defence is attack. Whereas the Placator will accept any punishment in order to ward off disaster, the Blamer's attitude is that, if anything goes wrong, it is someone else's fault.

#### *The student*

Do not imagine that blaming is the prerogative of teachers. Students are very capable blamers in their own right. Imagine the following statements made in a domineering, angry manner, or with an affronted air.

"I'm sorry, but this is just not the sort of course I was expecting."

Implication: This is all your fault. You should have known what I was expecting, whether I told you or not.

"I've got an accent when I speak."

Implication: I should not have an accent when I speak a foreign language. You could fix that for me, if you wanted to. You will not get rid of my accent. Therefore, you do not want to help me.

"I cannot repeat what I do not understand."

Implication: This is obvious to any intelligent person. You persist in asking me to do the impossible. You do not make me understand. You do not want to make matters easier for me. You want me to appear ridiculous. You do not like me.

Whereas a class run by a Blamer exerts maximum audience effect on the students, a teacher faced with a class of Blamers, or even with one vociferous Blamer, finds the opposite to be true. The audience effect works in reverse, so that the teacher may feel he is fast losing his ability to deal with the situation.



Strangely enough, it is easy to find oneself facing a group of Blamers, though a class of Placators is a rarity. It is almost as if, as soon as the students realize they are of like mind, the negative group force takes over. They form a sort of mob, and they need a scapegoat. The teacher is the obvious choice.

An insecure teacher will find this a harrowing experience, due to his readiness to believe that he probably merits the students' displeasure. If he is sure of himself, then this may be nothing more than an unpleasant and tiring business. In any event, it is far more constructive to gain time than to submit to pressure. If the class insists on changes, you can possibly tell them that you have to maintain the present arrangements for this class, since they have been carefully planned. However, you will study their suggestions, and come back with an answer for the next session.

This covers you on a number of scores. The present position gains in credibility. You do not drop it at the first sign of disagreement, so you maintain your authority. Yet you are flexible enough to consider change. If you do, in fact, introduce it, this will be after serious thought. If you choose to continue with the existing approach, that, too, will be after serious thought. Either way, you get time to think about what to do.

### *The teacher*

Blamers are very seldom liked by their students. In all but the most authoritarian of situations, they cause tension to increase beyond the bearable. Their students either placate or become aggressive, depending upon how they choose to respond. In any event, learners will not work comfortably, mainly because they know that, whatever happens, they will be held responsible.

No matter what problems arise, they are not the fault of an able Blamer.

All of the students failed the last exam?

Reasons: They did not study. They were an unruly, disobedient, ill-tempered lot. The exam itself was badly prepared, and did not test what the teacher had been instructed (by someone else) to teach.

The students do not like the class?

Reasons: They are never satisfied. They will not cooperate. They are not interested. It is impossible to do anything with them.

They want something more modern?

Reasons: They will not listen to the voice of experience. No matter what they get, they are never happy.

They want grammar and translation?

Reasons: They refuse to accept the fact that someone knows better than they what is good for them. They lack goodwill. They will not believe that grammar and translation are outdated, next to useless.

With a Blamer, you can't win. It is a little like the story of the woman who found a new job as a psychiatrist's secretary. After a couple of weeks, she handed in her notice. Her explanation for this was as follows.

"If I arrive late, it's because I'm rebellious; if I'm early, it's because I'm anxious; if I'm on time, it's because I'm compulsive."

The Blamer is permanently affronted, thwarted in his teaching by everything and everyone. His is a constant battle against responsibility. Even if someone accepts his suggestions and acts upon them, should anything go wrong, it is not beyond a Blamer to deny all knowledge of having proffered advice in the first place.

### *Conclusion*

There are other modes of behaviour besides that of Blamer or Placator. Satir mentions the Distractor, the Computer and the Leveller. However, I am going to limit myself to the two extremes discussed for two reasons. Firstly, they give a rough idea of what can go wrong if the situation doesn't "feel" comfortable. Operating on right-brain processed data, we can end up in confusion, often wondering how we managed to get there. We are frequently completely unaware of how easy it is to upset the balance because we tend to limit ourselves to a search for reasons which are outside of ourselves. Secondly, in the great majority of language classes which I have observed over the years, the seating arrangement lends itself admirably to one of the two modes of behaviour in question.

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