NETAJI SUBHAS OPEN UNIVERSITY

STUDY MATERIAL

PGELT

PAPER 2

Modules 1-4

POST GRADUATE

PREFACE

In the curricular structure introduced by this University for students of Post- Graduate degree programme, the opportunity to pursue Post-Graduate course in a subject is introduced by this University is equally available to all learners. Instead of being guided by any presumption about ability level, it would perhaps stand to reason if receptivity of a learner is judged in the course of the learning process. That would be entirely in keeping with the objectives of open education which does not believe in artificial differentiation.

Keeping this in view, study materials of the Post-Graduate level in different subjects are being prepared on the basis of a well laid-out syllabus. The course structure combines the best elements in the approved syllabi of Central and State Universities in respective subjects. It has been so designed as to be upgradable with the addition of new information as well as results of fresh thinking and analysis.

The accepted methodology of distance education has been followed in the preparation of these study materials. Cooperation in every form of experienced scholars is indispensable for a work of this kind. We, therefore, owe an enormous debt of gratitude to everyone whose tireless efforts went into the writing, editing and devising of a proper lay-out of the materials. Practically speaking, their role amounts to an involvement in 'invisible teaching'. For, whoever makes use of these study materials would virtually derive the benefit of learning under their collective care without each being seen by the other.

The more a learner would seriously pursue these study materials the easier it will be for him or her to reach out to larger horizons of a subject. Care has also been taken to make the language lucid and presentation attractive so that they may be rated as quality self-learning materials. If anything remains still obscure or difficult to follow, arrangements are there to come to terms with them through the counselling sessions regularly available at the network of study centres set up by the University.

Needless to add, a great deal of these efforts are still experimental—in fact, pioneering in certain areas. Naturally, there is every possibility of some lapse or deficiency here and there. However, these do admit of rectification and further improvement in due course. On the whole, therefore, these study materials are expected to evoke wider appreciation the more they receive serious attention of all concerned.

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Vice-Chancellor, NSOU

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POST GRADUATE : ENGLISH LANGUAGE TEACHING
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NETAJI SUBHAS OPEN UNIVERSITY

Post Graduate
PG : ELT - 2

Module - 1

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Module - 4

Unit 1 ❐ Applied Linguistics : Scope and Definition

CONTENTS

1.0. Objectives

The purpose of this unit is to give you an idea of what Applied linguistics means, how it began, how it developed into a discipline, the sources which fed into it and in particular, its implications for English Language Teaching or ELT.

Having worked through this unit. You should be able to :

- define applied linguistics
- become aware of its scope and theories
- understand the way it is linked to language pedagogy.

This unit will also serve as a general background to the other units of this module.

1.1. Introduction

English language teaching in a class room activity involving interaction among the learner and the teacher. The aim is to bring about a change in the learner. This is effected through a three–directional interaction; the teacher mediating between the learner and the learning material, in the process interacting with the learner as well as the learning materials. During the process, the teacher and the learner participate in various activities, which may or may not contribute to the final outcome, and during which same things may go wrong and break down, while other things may operate smoothly, without any hitch.

As an every day practitioner, a language teacher has to keep in sight the ultimate outcome and at the same time be alert to what is taking place in the classroom and has to handle it instantaneously. This may be for controlling the classroom, rewarding or praising the learner, rebuking or punishing him, transacting a techniques, facilitating the teaching objective, or for repairing the damage that has taken place within the process or activity. These involve not only verbal interaction but also "doing" things within the classroom.

Just as a person able to drive a car may not be able to identify the fault if the car breaks down and may be completely at a loss as to how to repair the damage, similarly, a classroom teacher may be able to handle interaction between the learner and the teacher, but may feel helpless if things begin to go wrong. Just as repairing a car requires the knowledge of how the parts of the vehicle operate individually and collectively and how they are interlinked, in the same way the ability to control, guide and repair the teaching activity requires a knowledge and insights far beyond the obvious activities within the classroom.

What is the nature of this knowledge and insight? Is this systematic? Is it based on certain principles? If so, where do these principles derive from?

It is believed that Applied Linguistics is the interdisciplinary area which provides systematic and informed answers to the questions raised in the previous paragraph. In the following sections you will gather some idea of how this discipline came to exist and what it is expected to contribute to language pedagogy in particular and to the total field of language teaching in general.

1.2 The Concept of Applied Linguistics

As the term Applied Linguistics implies, initially it referred to rather direct application of linguistic principles to either the analysis of language or to language pedagogy. The earliest illustration of such an application are the three books of Harold E. Palmer of England, namely. *The Scientific Study and Teaching of Languages* (1917), *The Oral Method of Teaching Languages* (1921) and *The Principles of Language Study.(1922),* all making an attempt to base language pedagogy on the theoretical disciplines of linguistic and psychology.

In this sense structural linguistics in America from the very beginning was concerned with the application of linguistic principles for the analysis and description of the fast disappearing Amerindian languages.

During World War II, guided by the belief that linguistic scholars could provide solutions to the language teaching problems faced in the learning of exotic languages, the Army called in linguists for their wartime language programmes known as the Army Specialised Training Programme or ASTP.

Faced by such a task in language teaching, the linguists broke away from the traditions of conventional language teaching and developed certain approaches and sets of techniques derived from linguistic principles. The approaches can be expressed as the five tenets given below.

- Language is primarily speech, not writing
- A language is what native speakers say, not what someone thinks they ought to say (as opposed to the hatmate fallacy)
- Languages are different (hatemate fallacy)
- A language is a set of habits (How languages are learnt)
- Teach the language, not about the language
  (Language is a skill, not knowledge)

The set of techniques that were developed for the programme, included mimicking the spoken model, memorization of the structures through repetition and intensive practice on language drills.

Apart from providing a specific framework for ASTP, the five principles mentioned earlier influenced the content and design of teaching materials, classroom techniques

and specially teacher training till the sixties. For instance, a structural analysis of the language to be learnt become the basis for the graded teaching materials used. Oral skills were emphasizedand practised intensively. For the use of such materials and techniques teachers needed to be trained.

1.2.1. Origin and history of applied linguistics

Around the same time, another group of linguists in America were demonstrating the usefulness of linguistics in the teaching of English as a second language. This was being done in the English Language Institute of the University of Michigan, set up in 1941 under the leadership of Charles C. Fries. Here, for preparing new teaching materials, an attempt was made "to interpret, is a practical way for teaching the principles of modem linguistic sciences and to use the results of scientific linguistic research." Flies himself demonstrated how the sound system, the structures of the language and the most useful lexical material could be derived from existing linguistic knowledge and organised for language teaching purposes. According to Fries, the contribution of linguistics to pedagogy comprises the descriptive analysis of a language which forms the basis for building teaching materials. He further insisted that the descriptive analyses of both the language to be studied and the native language of the student are needed.

The comparsion of these two descriptions formed the contrastive linguistic principle which then could provide a clue to the learning difficulties of the learner. The comparative study can identify the likenesses and differences of the two languages and the linguist can then predict which areas of learning will be difficult or easy for the language learner.

Robert Lado applied the principle of contrastive linguistics systematically to the teaching of English as a second language. It was not meant to offer a new method of teaching, but was a form of description which was applicable to curriculum development, the preparation and evaluation of teaching materials, to the diagnosis of learning problems and to testing. Lado infact outlined procedures for making comparisons in phonology, grammar, vocabulary and in the cultural aspects of a language.

Following such procedures, after the establishment of the Centre for Applied Linguistics inWashington in 1959, there was a spurt of contrastive studies, almost for all the major European languages and for Japanese. In the early sixties, contrastive linguistics become one of the most important means of relating linguistics to language teaching.

It is only fitting that the first public use of the term applied linguistics should occur is this context. The journal published by the English Language Institute in 1948 had the title language learning, a journal of applied linguistics, and referred directly to the activities of Fries, Lado and other members of staff of the Institute.

It is from these activities that we get a picture of applied linguistics as a field of activity. Charles Fries sees applied linguistics as a hiearchical model. First, descriptive linguists produce the descriptions of the source and target languages. The applied linguist then takes over in a dual role. First he has to select and grade the structures taken from the original description to suit the relevant pedagogical purposes and prepare a contrastive description of the source and target languages so that areas of potential difficulty may be pinpointed. Secondly, he has to write teaching materials illustrating the patterns of the new language and providing special practice on difficult points. The emphasis is thus on content, derived from the descriptions of the languages, and the methodology is not influenced in any direct way. The description categories are taken over, but the organising principles of the materials are derived from outside linguistics, : relevance and pedagogy.

1.2.2. Evolution of the concept of applied linguistics

What has been described so far may be referred to as the first or earliest phase of the development of applied linguistics where linguistics is seen to apply directly to second language teaching, mainly in providing its content.

The second phase of development is the one exemplified mainly by S. Pitcorden, associated with the centre for Applied linguistics at the University of Edinburgh. He diverges from the first phase in two ways. First, he acknowledges that the relationship between linguistics and classroom activities is an indirect one; and that the application can take place at various levels. He demonstrates this by distinguishing between three orders of application of linguistics, contributing in three different ways to language pedagogy (see Fig. 1 below).

Application	Theory	Process	Data
First order	linguistic and socio-linguistic	description ⟹	language utterance
Second order	linguistic and socio-linguistic	comparison and selection ⟹	description of languages
Third order	linguistic socio-linguistic and psycho-linguistic	organization and presentation ⟹	content of syllabus ⇓ teaching materials

Fig. 1.1. Corder's view of the application of linguistics.

However, he accepts the basic view that applied linguistics involves an application of linguistics. He looks upon it as an activity and asserts categorically that it is not a theoretical study, but something which makes use of the findings of theoretical studies.

The second point of divergence from the earlier phase lies in the fact that Corder envisages disciplines other than linguistics contributing to applied linguistics. You can see this cleanly from Fig. 1 on the previous page. At the first level of application the concepts of theoretical linguistics are used to analyse language data leading to the description of the second language. On this basis the second order of application determines the selection of items. Such selection in helped by contrastive analysis and error analysis and will yield an inventory or list of items from which the linguistic, content of the syllabus as well as the teaching materials can be determined at the third level of application.

Corder in effect maintains a paradoxical position. By denying any theoretical status to applied linguistics, he assigns a narrow definition to it. At the same time he is unable to maintain the stance that linguistics contributes significantly to the principle of designing a teaching programme. Consequently he attempts to broaden the base of applied linguistics by conceding that other disciplines also feed into it.

The third phase in the development of applied linguistics is characterized by an attempt to establish it as –

> "a field in its own right, a discipline with an independent body of knowledge, one with an evolving methodology of its own–a theory independent of other disciplines to the extent that any theoretical formulation can be independent of the total body of human knowledge.

Peter Strevens provides a fundamental definition of applied linguistics as a discipline in its own right. According to him, applied linguistics has a basis in theory and principle, and is not simply a body of techniques, procedures and practicalities. The practitioners of applied linguistics seek the underlying principles, rationales, generalizations, hypotheses, and theories which account for and help to explain the vast diversity of practical activities with which they are concerned. Secondly, and more importantly, these basis are multiple. Applied linguistics seeks and accepts illumination from any and every source and is essentially multi-disciplinary in nature. At various times and in relation to various tasks it looks to disciplines such as linguistics, psychology, neurophysiology, information theory, social theory, education, philosophy, logic and scientific method, involving the relevant areas of the appropriate disciplines. Strevens claims that it is this multiple basis of interlocking disciplines which makes applied linguistics the only discipline capable of responding in a principled way to any language related problem. Third, applied linguistics is not restricted to an interest in the teaching and learning as languages, though this has usually been its longest single area of concern.

According to Peter Strevens, because of its multidisciplinary nature, applied linguistics redifines itself afresh for each task. The precise aims of a particular task

will determine which of the theoretical bases are likely to be the most relevant and in what proportions and this in turn will affect the methodology and approach of the applied linguist. Strevens illustrates his point in relation to the learning and teaching of languages, which has the following three components : (1) The underlying disciplines like linguistics, education, psychology and pedagogy etc, (2) teaching techniques and (3) aids and equipment.

As a result of its nature then, applied linguistics is dynamic and not static. This has two principal advantages. First, it permits a maximum adaptability to the precise needs of each different task. Second, it ensures that applied linguistics remains dynamic, changing by the addition of new sources of illumination or by incorporating new developments within existing components. Hence Strevens claims for it the unique distinction of fulfilling a multi based, interdisciplinary, language related function. Robert Kaplan (1980) takes a similar position. Applied linguistic is thus envisaged as a discipline which derives principles from various bases, seeks to find a principled way for decision-making at various levels and serves as an appropriate interface between theory and practice.

Review Questions I

1. What is the basic assumption behind applied linguistics? (Answer in one or two sentences)
2. Identify two areas of practices activity where the principles of linguistics were put to use during the forties.
3. In which areas of language pedagogy did Charles Fries think linguistics could contribute?
4. What is meant by contrastive linguistics?
5. In what ways does contrastive linguistics contribute to language pedagogy?
6. Name two issues which were debated during the evolution and development of applied linguistics as a discipline.
7. What is Strevens' view of applied linguistics ?
8. What are some of the advantages of this view?

1.2.3 Error analysis

In the foregoing account, one important development within applied linguistics has not been included. This is the area of Error Analysis. Along with contrastive linguistics, error analysis at one time was an area of prolific research and was an important aspect of applied linguistics. It began as an area of pragmatic research where errors were taken to be an indication of learners' difficulties, or of teaching lapses. The findings were then made the basis for remedial measures, either in the area of content or in the field of methodology or both.

From this simplistic interpretation, errors gradually come to assume greater significance. For example, in Pit Corder's scheme, the second order applications determind the selection of items. This selection, helped by contrastive linguistics and error analysis provides an inventory of items which forms the linguistic content of the language syllabus.

In 1967, Pit Corder at the University of Edinburgh suggested that a systematic investigation of learners' errors would lead to the discovery of a "built-in-syllabus" of the language learner and would provide a better understanding of the language learning process. In fact, around this time researchers were trying to discover the natural sequences of learning a second language.

Related to the assumption that there is a natural sequence in the learning of a second language, there was the concept of "interlanguage", postulated by Larry Selinker in the early seventies. It proposes that a learner's language, at every stage, is systematic; that is, it differs from both the learner's mother tongue and the language being learnt, in systematic ways. [Inter language has also been referred to as "approximative systems."] This means that the forms of utterances produced by the learner, the so-called 'errors', are not random but form a system which is deviant in terms of both the L_1 and L_2. Looked at in this way, errors are inevitable for the process of learning. Showing the ways learners explore the learning area and make sense out of it.

Selinker related errors to various processes of learning and teaching languages and other cognitive processes like generalisation and fossilization. From this perspective, errors provide an insight into the ways in which learners learn second languages. You will learn more about learning processes in subsequent modules.

Error analysis usually proceeds through three stages or phases : (1) identification of errors, (2) classification and description of errors and (3) explanation of errors.

Error analysis and inter-language studies have been used to compare first language acquisition and second language learning and also to build theories of second language acquisition (e.g. The Restructuring Hypothesis or the Creative Construction Hypothesis.).

One of the consequences of considering errors as an integral part of learning a language has been in the providing of practice of language items. Earlier techniques recommended rapid, automatic "drill" or practice while later techniques attempt to provide opportunities for trial and error. Another fall-out has been the focus on 'fluency' and communication rather than on strict "accuracy" in language production.

1.2.4. Issues related to the concept of applied linguistics

From the diverse positions held by various practitioners of applied linguistics, as set out in section 1.2.2. it would appear that certain issues need to be kept in mind while defining the scope of applied linguistics. Some of these are listed below, in a random order.

- Is applied linguistics an independent discipline?

- Is linguistics the only discipline which is 'applied' ?
- Which other disciplines contribute to applied linguistics?
- Are the "applications" direct or indirect?
- Which aspects of language pedagogy can be or are determined by applied linguistics?
- How can one solve a practical language related problem with the help of applied linguistics?

Some of these questions will be attended to in the following sections, specially the one related to the theories of applied linguistics.

1.3. Nature of Inputs to Applied Linguistics from Other Disciplines or Sources

As applied linguistics operates today, we find in it contributions and applications from disciplines other than linguistics for arriving at principled decisions for language pedagogy. You have already noted that H. K. Palmer in the nineteen twenties had relied on principles of psychology for constructing his framework for foreign and second language teaching. Charles C. Fries mentions two organizing principle of language content from outside linguistics, those of 'relevance' and 'pedagogy.' One of the uses of contrastive linguistics was the determination of learners' "difficulty" a concept related to psychology and learning. So you can see that even at the earliest stage, principles other than those of linguistics were not kept out for the solution of practical tasks. In the following sections you will get some idea of how linguistics, along with other disciplines or areas of study, have fed into applied linguistics.

1.3.1 Inputs from linguistics

As we have already seen in the earlier sections, linguistic descriptions have contributed primarily to the determination of the content of language teaching : sounds, vocabulary, structures and the like, which were organised following the various principles of selection, gradation, frequency, availability, teachability and the like. Above all, descriptive linguistics has brought about a change in the way one looks at language and language teaching, and hence in the way language learning is conceived of. Learning a language now essentially means learning how to communicate through that language, both in the spoken and the written mode. The recognition of the existence of language varieties has helped determining the issue "which variety shall we teach or learn ?" Awareness of the existence of functional varieties and choices within one language : style, register, domain and formality for example, have helped focus on relevant aspects of a language course. English for specific purposes (English for science and technology, Business English, English for law, English for Academic purposes etc.) for instance, is a partial application of the principle of recognizing the importance of variation within a language.

Certain basic concepts of linguistics now underly language teaching programmes. One of these is the interrelationship of units within the language system, e.g. opposition or contrast and various combinatorial possibilities. These relate to the selection of content and their organization.

1.3.2 Inputs from Psycholinguistics

Principles of psychology relate to how something (a language, for example) is learned, which factors contribute to learning (e.g. motivation, attention etc.), negotiation of meaning through language, retention or memory, the process of learning itself, what makes learning interesting or boring and so on. These then have implications mainly for the teaching process,–how something is presented, practised, consolidated and explored. These relate primarily to methodology and perhaps the organization of the content of a language course. the question of whether the learner's mother tongue helps or hinders second language learning has bearing on second language teaching methodology as to whether to include or exclude the use of the first language for second language learning.

1.3.3. Inputs from education

Developments in education has drawn attention to the factors like the following in language teaching : philosophy of education, goals of education, domains of education, curriculum design and so on. Research in analysing teacher task has provided insights into how discourse is organised in the classroom through language for (1) classroom management, (2) instructions and (3) transaction of the educational goals. These have implications for organizing the syllabus, presentation and use of materials in the classroom and organizing interactional and other activities, that is, for methodology. Language pedagogy then, via the interface of applied linguistics, utilises the principles drawn from education for drawing up and implementing a language course.

1.3.4. Inputs from sociology

Language is invariably used in social contexts and fulfils social goals. This location of speech in society has focussed attention to the concept of communicative competence of an individual and the conventions in use within a speech community. The issues of an individual's role and status in society, his networking and the concrete problems of face-to-face interaction, relate directly to language pedagogy as they touch upon such features as relevance, appropriateness, focus of the message, target audience, formality, politeness, social functions of the language and the like.

It is in this context that the communicative approach to language teaching and the national functional syllabus proposed by D. A. Wilkins for the threshold level language teaching for the Council of Europe were developed in the early seventies. The first of these is the product of the change in the concept of what language is, while the second is an attempt to implement the approach through an innovative content.

As is well known, the communicative approach to language teaching emanated from the concept of "communicative competence". Communicative competence includes, over and above grammatical competence, the intuitive grasp of social and

cultural rules and meanings that are carried by an utterance. The aim of second language learning, according to this approach, is the development of the communicative competence of the learner. This view thus has implications for both the content and methodology of second language courses.

David Wilkins took a more semantic, more social and more communicative view of language than that provided by linguistics in the early seventies. He then proposed a semantic or notional framework for syllabus making or organizing the content of language courses. His outline of the syllabus consisted of three components : (1) semantico-grammatical categories (e.g. notions like space, time, location, measurement etc which have linguistic manifestations in a language. For instance, time in English is expressed through tense, aspect and time adverbials); (2) Categories of modal meaning (notions of probability, ability, uncertainty etc. expressed through modal verbs and other means) ; and (3) categories of communicative functions (e.g. suggestion, suasion etc.).

Within categories of functions of speech, other classifications have also been made. These include, for example, the (1) expressive function (2) interactional function, (3) phatic function, (4) referential function, (5) instrumental function and (6) metalingual function. Other concepts derived from the inter-relationship between society and language use are those of the speech event, speech act, illocutionany force, turn-taking, adjacency pairs, exchanges and conditions for successful exchanges and so on. These have influenced the specification of the goals of language learning as well as the content of such courses.

1.3.5. Inputs from communication

Since the main function of language is communication, any language related task has to take into account the fluency, the negotiation of meaning and the like in language transactions.

From information theory comes the concept of language as a code transmitting messages through a channel, requiring encoding and decoding. Fig. 1.2. below is a diagrammatic representation of this process. The model suggests, in simple terms, that both the sender (source) and the receiver (destination) must already be familiar with the code if the message to be sent is to be encoded at the source and decoded and understood by the receiver.

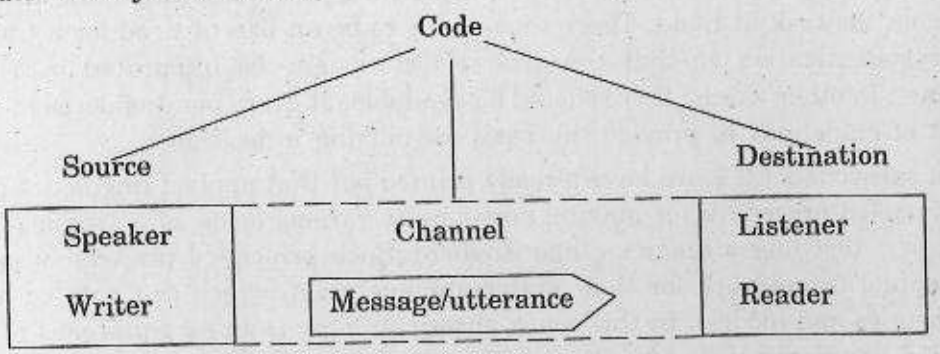


Fig. 1.2. A model of communication

Communication engineering further provide concepts like noise, and redundancy in the operation of languages. For language pedagogy such notions influence the methodology of language teaching. Such concepts have been utilised also in the use of language in computers.

1.3.6 Summing up

In section 1.2. and its subsections we have considered the evolution and development of applied linguistics as a discipline. In the present section (1.3 and subsections), the nature of the contributions from various disciplines and their influence on various aspects of language pedagogy has been considered.

Review Questions II

9. Which disciplines have influenced the **content** of language syllabuses?
10. Which disciplines have implications for language methodology?
11. What is a notional-functional syllabus?
12. Whose name is associated with this syllabus?
13. What is the basis of communicative approach to language teaching?
14. Name at least three categories of the function of speech.
15. What do you understand by the term 'English for specific purposes' ?
16. Name the main components in the process of communication.

1.4. Theories of Applied Linguistics

It should now be obvious to you that a large number of disciplines, both established and newly emerging ones, have the potential to influence and determine various aspects of language pedagogy. However, if there are conflicting principles and/or too many inputs, there is the problem of organising and balancing these in order to focus on the task at hand. There thus seems to be an urgent need for a framework for systematization so that the diverse factors may be integrated in a cohrent manner. In other words, there should be available, at every point of decision making, a set of guidelines to provide the basis for making a decision.

In subsection 1.2.2. we have already printed out that applied linguistics provides a principled procedure for making decisions at various levels of a language related task (e.g. teaching a language like English). Such principled procedures require a conceptual frame-work for their systematic operation, which can only be provided by theories and models. In this sense, theory building is an essential part of "doing" applied linguistics, just like in any other discipline.

1.4.1. 'The meaning of "theory"

What is a 'theory' ? In this subsection we will consider the meaning of the term as well as several models of language teaching and learning. It is possible to distinguish three meanings of the term "theory" related to their generality. According to H.H. Stem. theory at level 1 or –1 is the widest or most comprehensive in its scope. In this sense, it refers to "the systematic study of the thought related to a topic or activity". It thus offers a system of thought, a method of analysis and synthesis, a framework in which to place different observations, phenomena and activities. It is in this sense that educational philosophers often use the term. A theory considers a topic or certain practical activities as something coherent and unified but divisible in parts. In this widest sense one can also conceive of theories of second language teaching.

In this sense theory is a synonym for systematic thinking or a set of coherent thoughts. Applied linguistic theory thus contains all thinking about language teaching, teaching methods, and psychological, sociological and philosophical questions underlying these.

The second meaning of "theory" is less comprehensive than this. Within the general framework of T1, it is possible to "subsume different schools of thought or 'theories' (T 2.5) each with their own assumptions., postulates, principles, models and concepts." Language teaching "methods", approaches, schools of thought like the grammar-translation method, the direct method, the communicative approach, cognitive approach or theory, are all examples of T2 or theories in the second sense.

Theories of language teaching and learning, based on different linguistic and psychological assumptions, emphasising different objectives and utilising different procedures are theories at this second level of generality. They function within the general framework of applied linguistics but are more specifically theories of second or English language teaching.

In the natural and human sciences, the concept of theory is implied in a more rigorous third sense (T3), as "a hypothesis or set of hypotheses that have been verified by observation or experiment.", or as "a logically connected set of hypotheses whose main function is to explain their subject matter." Theories of linguistics, psychology and psycholinguistics or sociolinguistics are T3s in this sense and have played a role in the development of language teaching approaches (= T2s), thus contributing to language teaching theory or theories of applied linguistics in the widest sense.

In the light of all these, we can view a good applied linguistic theory as one which strives to provide a conceptual framework devised for identifying all the factors relevant in the teaching of languages and the relationships between these and for giving effective direction to the practice of language teaching, supported by the necessary research and theory. The theories of applied linguistics we are going to consider in this section are all instances of TJ.

1.4.2. Evolution of the theories of applied linguistics

Theories of applied linguistics, like the discipline itself, has undergone changes and development. For instance Fig. 1.3. below is an early example of a fairly simple

framework showing the direct application of theoretical bases. In this view, R. N. Campbell, an American applied linguist, conciders applied linguistics as a mediator between theory and practice.

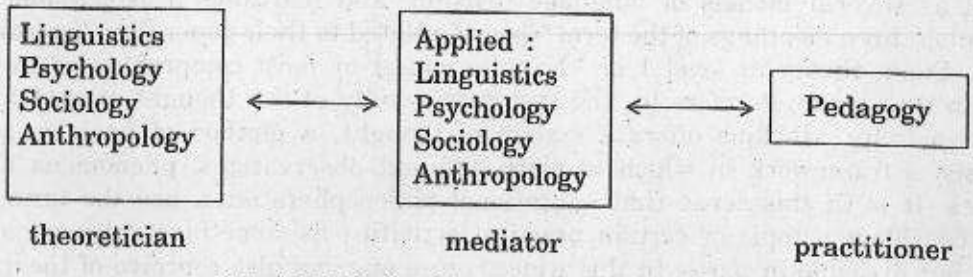


Fig. 1.3. Relationship between theory and practice

This model is too undifferentiated and does not specify the ways in which applications can operate.

To remedy this, B. Spolsky presented a more elaborate model, and tried to show that not only is linguistics alone an inadequate basis for language teaching but even a combination of linguistics and psychology is insufficient. Fig. 1.4. below represents a more adequate conceptual framework relating to such relationships.

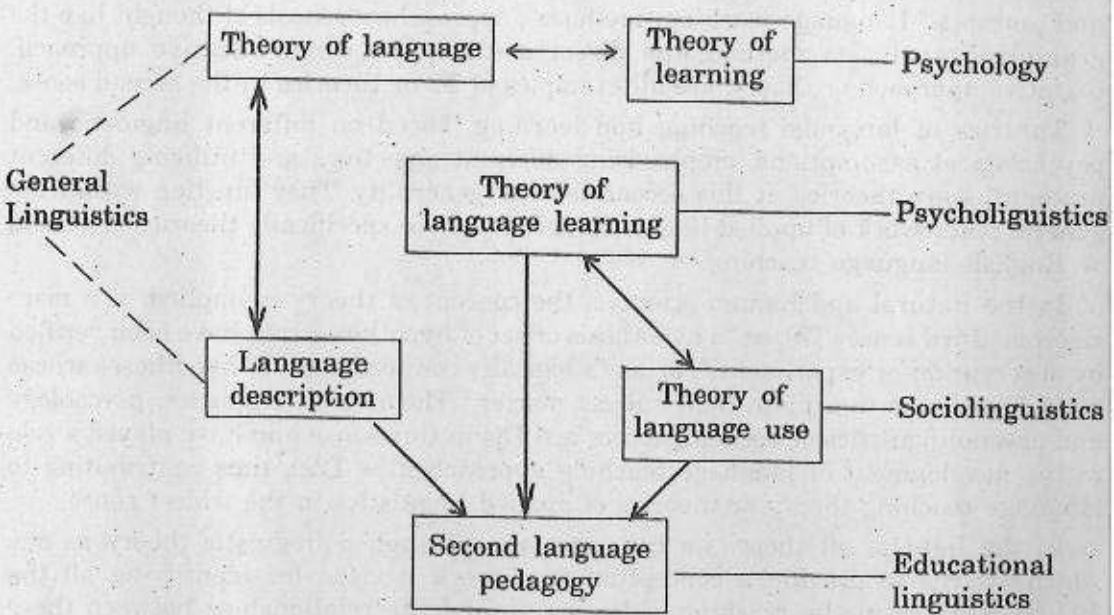


Fig. 1.4. The way in which disciplines contribute to language pedagogy

It should be noted that what Spolsky calls educational linguistics has been called applied linguistics by others. Spolsky's model leaves out the practicalities of a teaching situation and hence cannot be regarded as a complete representation of the teaching learning process.

D. E. Ingram's model, as represented in Fig. 1.5. illustrates some of these missing features.

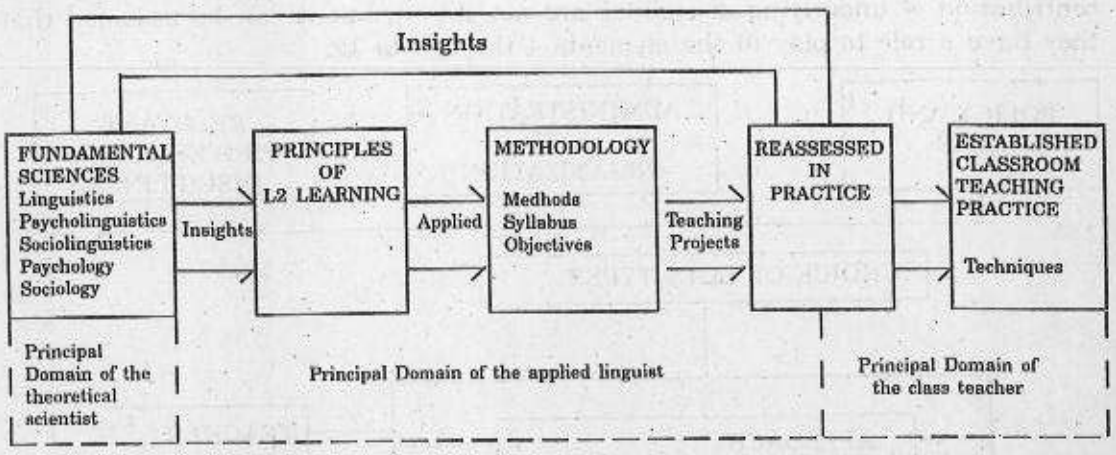
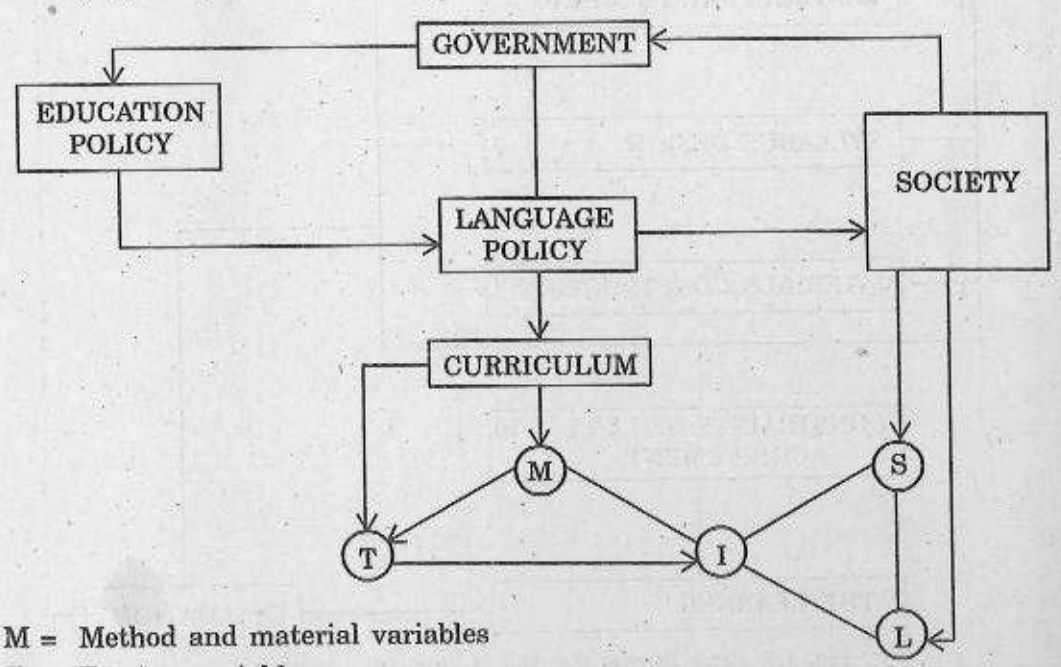


Fig. 1.5. Showing functions of the applied linguist and distribution of tasks.

W. F. Mackey provided an interactional model, as set out in Fig. 1.6. below. He places language learning in its socio-political context and assumes the importance of underlying disciplines in relation to the various factors represented in the model.



M = Method and material variables
T = Teacher variables
I = Instruction variables
S = Sociocultural variables
L = Learner variables

Fig. 1.6. Showing variables in the teachng situation

The model presented by Peter Strevens, a British applied linguist, combines in a single design, all the essential features that make up language teaching. The contribution of underlying disciplines are not shown, but it can be assumed that they have a role to play in the elements 4 through to 12.

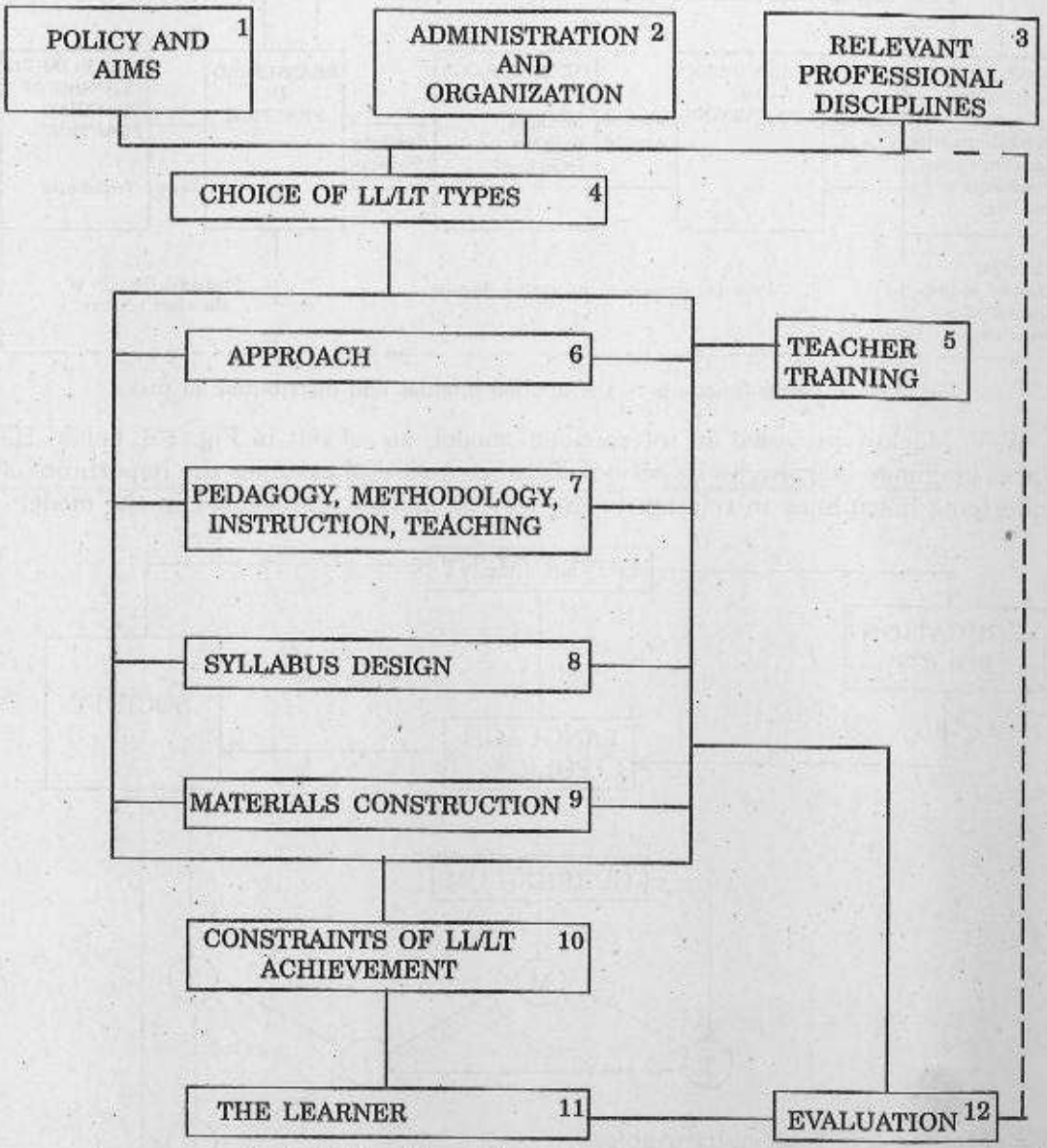


Fig. 1.7. Peter Strevens' model of language teaching.

Rejecting all of the models presented so far, Stern Strove to propose a general conceptual framework for language teaching. It aims to offer a basis for an unbiased consideration of all the relevant factors of language pedagogy. Fig, 1.8. below shows Stern's model.

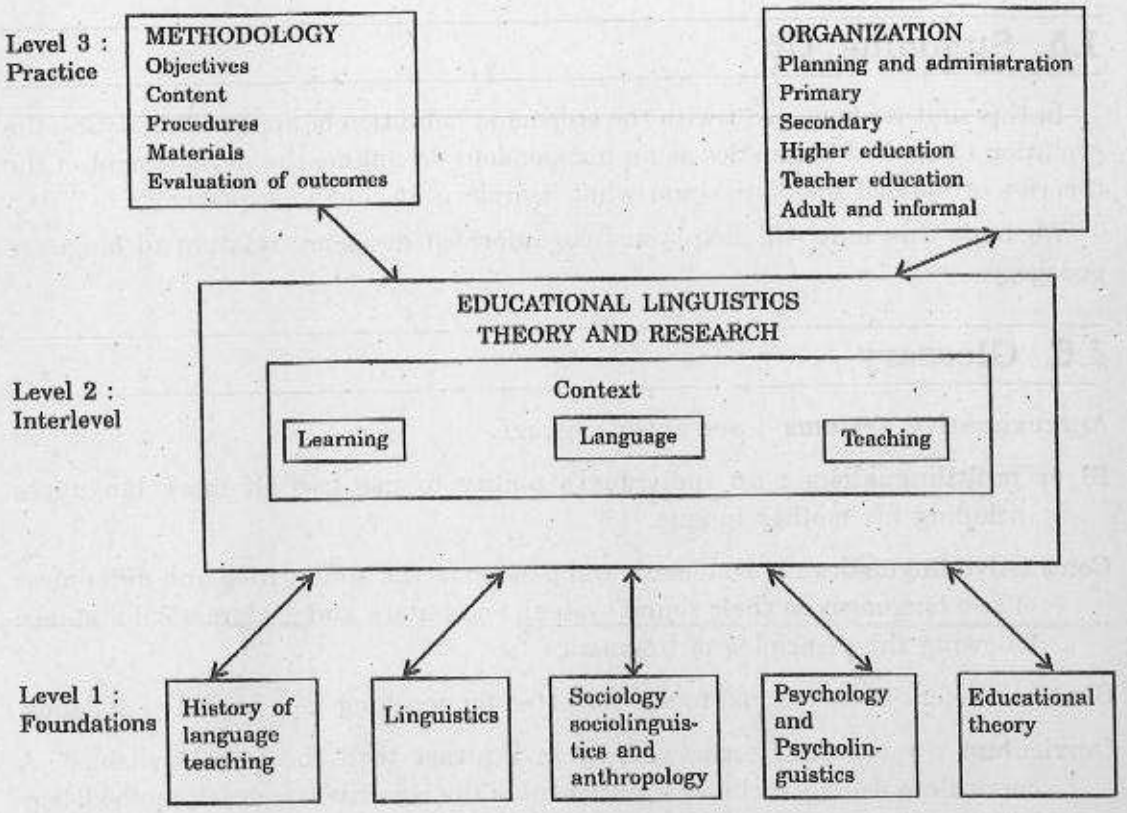


Fig. 1.8.

This model does not provide or advocate any particular method of teaching or a particular point of view. But it provides a basis for arriving at some criteria which will lead to the making of more informed judgements, better policy decisions and guiding practice more effectively.

1.4.3. Summing up

This section has dealt with the three distinct ways in which the term "theory" is used. Theories of applied linguistics are the most comprehensive in nature and exemplify T1. Methods and approaches of language teaching are instances of T2, T3 is the narrowest and most stringent in nature. These are exemplified by theories of natural sciences, of linguistics, psycholinguistics and so on.

The evolution of applied linguistic theories has also been shown and various models have been presented.

Review Questions III

16. What is error analysis?
17. What is its contribution to language pedagogy?

1.5. Summing Up

In this unit we have dealt with the scope and definition of applied linguistics, the evolution of applied linguistics as an independent discipline, the development of the theories of applied linguistics and what its role is in language pedagogy.

We hope this unit will help you take informed decisions relating to language pedagogy.

1.6. Glossary

Approximative systems : see interlanguage.

Bi or multilingualism : an individual's ability to use two Of more languages including his mother tongue.

Contrastive linguistics : a systematic comparison of the similarities and differences of two languages in their sound system, vocabulary and grammatical systems, following the principles of linguistics.

Content : refers to the terms, topics etc listed for teaching in a course or syllabus.

Curriculum : a technical term, usually in contrast with the term "syllabus". A curriculum usually includes a statement of the objectives, content, methodology and the scheme of evaluation procedures of a course of study.

Error Analysis : a systematic study of the errors made by a language learner. It involves identifying, classifying, describing and explaining the source of errors.

First language : the mother tongue of a language speaker.

Graded/grading : refers to the principle of organization of content in a syllabus. The principle may be 'difficulty' where items are arranged from the less difficult to the most difficult. The principle may be of complexity where earlier items are simpler and they get more complex later in the syllabus. Other principles like teachability, availability etc may also be used.

Inter language : proposed by L. Selinker in the early seventies, the concept refers to the internal language system a language learner possesses at anyone particular time. For production, such a system manifests deviant forms of language or errors. A learner passes through progressively non-deviant stages of inter-language till he arrives at the system of the language being learnt. Children learning their mother tongues as well as children and adults learning a second language. Show evidence of the existence of inter-language. Inter-language is also referred to as an approximative system.

Mother-tongue : the language used in the family in which a child grows up, and which he learns as a part of the growing process.

Notional-functional syllabus : proposed by David Wilkins in the early seventies, it is a proposal for a samantic organisation of the *content* of a language syllabus.

Pedagogy : the practice of teaching; but more specifically, in a technical sense, the *study* of teaching.

Second language : a language that a person learns over and above his mother tongue.

Selection : a principle in syllabus design, by which items of language are chosen for inclusion in the content of a language syllabus. One such principle is frequency, of vocabulary and grammatical structures.

Semantics : the systematic study of meaning in language.

Source language : the language a language learner already possesses. Usually this is his mother tongue or the first language.

Target language : the language being taught to a learner over and above his existing language or languages.

1. 7. Books Recommended

1. Allen, 1. P. B and Corder, S. P. (eds) 1973-77. *The Edinburgh Course in Applied.Linguistics. Vol* 1. *Readings in Applied Linguistics,* 1973; *Vol* 2, *Papers in Applied Linguistics 1975, vol.3. Techniques in Applied linguistics,* 1974 ; *vol.* 4, *Testing and Experimental Methods,* 1977. London and Oxford : Oxford University Press.
2. Pit Corder, S. P. 1973, *Introducing Applied Linguistics.* Harmondsworth : Penguin.
3. Kaplan, Robert, 1980. *On the Scope of Applied Linguistics.* Rowley, Mass : Newbury House.
4. Stem. H. H. 1983, *Fundamental Concepts of Language Teaching.* London etc. : Oxford University Press.
5. Widdowson, H. G. 1979, *Explorations in Applied Linguistics.* Oxford : OUP
6. Wilkins, D.A. 1972. *Linguistics in Language Teaching.* London : Arnold
7. Wilkins, D. A. 1976, *Notional Syllabuses.* London : OUP

Unit 2 ❐ Application in English Language Teaching (ELT) : Issues, Problems and Practices

CONTENTS

2.0. Objectives

This unit will enable you to

- consolidate your understanding of the theories of applied linguistics;
- become aware of the applications of these theories is various aspects of language pedagogy;
- understand the issues involved and the problems that are likely to arise;
- become familiar with the practices prevalent in the classroom from time to time, and
- identify the lacuna that still remains.

2.1 Introduction

Any 'good' theory must be relevant, useful and applicable. They must also be appropriate. Since language teaching is a practical activity, it is imperative that a related theory should be applicable in all teaching situations. It should not only be relevant to practice, but should also be coherent and consistent. Above all, it should stimulate investigation and research. It is in this light that we need to consider the various theories of applied linguistics that have been presented in Unit 1.

2.1.1. Components of language teaching

Language teaching does not operate in isolation from other aspects of life and society. If we view second language teaching in its totality, we find that it is a very complex taste indeed. In order to understand the nature of this complex task, it is necessary to approach it in a systematic manner. It is necessary to organize the various components, map out their relationships and analyse the way in which they operate. Fig. 2.1. below is an attempt to link the main components of language pedagogy and their interaction.

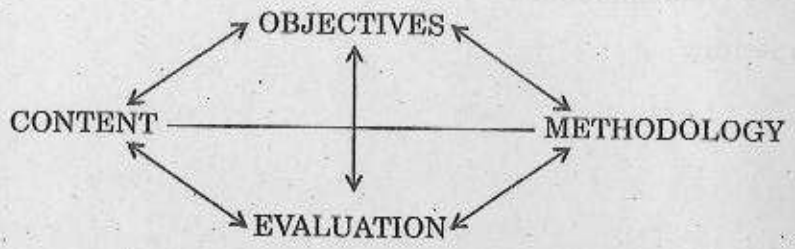


Fig. 2.1. Showing various components of language pedagogy.

In the later sections of this unit we will see how applied linguistic theories have been applied to each of these components. Fig. 1.1 (Unit 1) has already shown the step by step application of principles of linguistics to provide description of languages, content of syllabuses and language teaching materials.

Let us now consider these components in some detail. The starting point of a language course is its purpose or 'objectives'. The purpose is the reason why a language course comes into existence, later parts of the unit will tell you how various factors like social, economic, political, educational and pragmatic needs etc. determine the objectives.

Objectives in their turn determine the content of the course. Content refers to both the syllabus (the list of topics, concepts, items etc.) and the materials (text books, supplementary and audio-visual teaching materials). Together, objectives and content shape the 'methodology' to be adopted for the course. Objectives, content and methodology constitute the *why, what* and *how* of a course. In order to measure

whether the objectives have been achieved or not, evaluation of the learners has to be carried out.

In Fig. 1.8. of Unit 1 you have already seen how applied linguistics functions as an interface or an interlevel between various disciplines and language teaching. Fig. 2.2. below shows, in a simplified way, how the practice of language teaching is influenced by various disciplines through the inter level of applied linguistics. The context of language teaching plays a significant role in determining both methodology and organization. Similarly, learning processes, learner and teacher variables and the nature of language itself are factors which influence practices in the classroom.

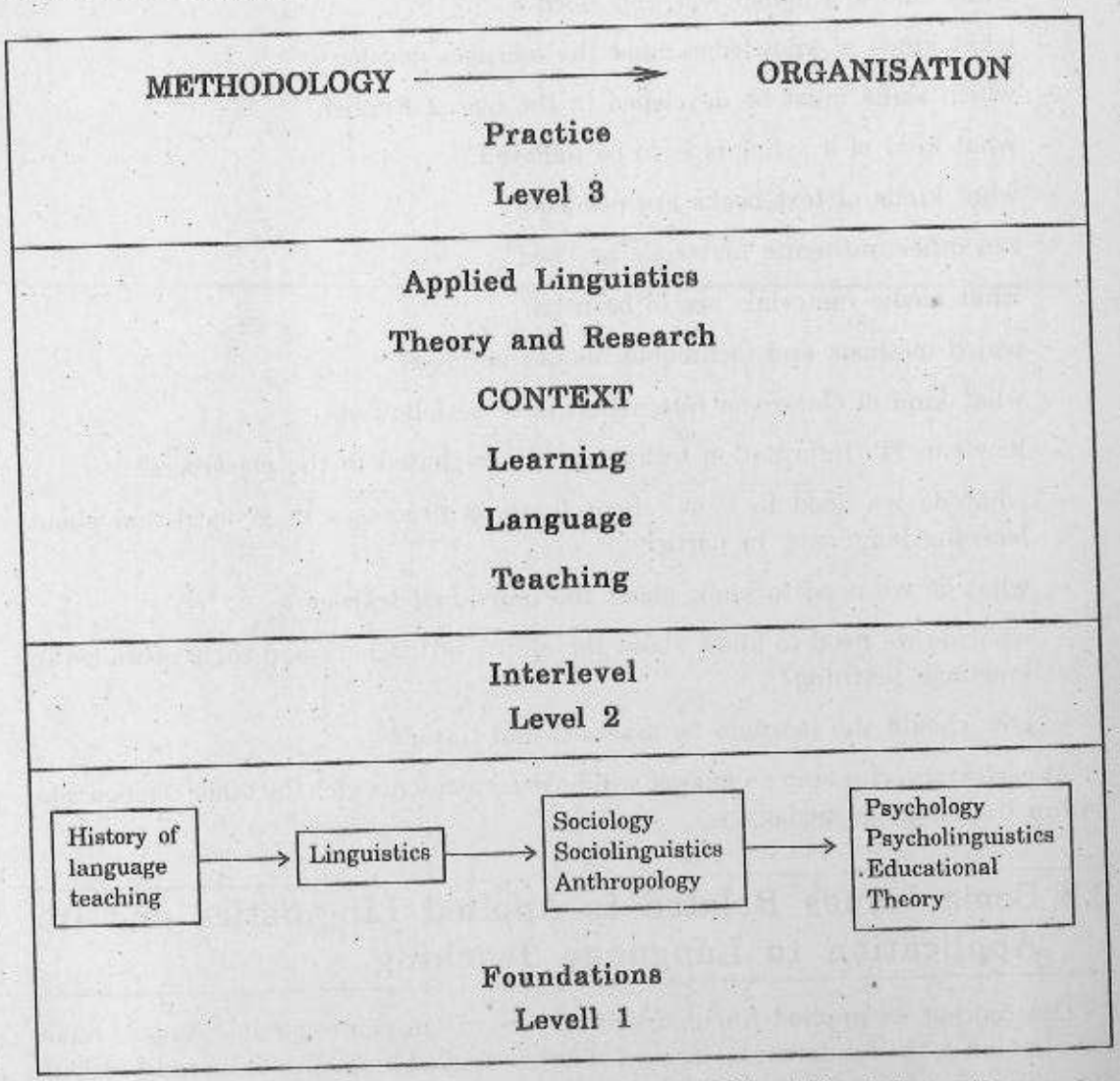


Fig. 2.2. Showing the interrelationship of Applied Linguistics to language teaching and other disciplines, (Modified from Stern, 1983)

2.1.2. Choices and decisions

Within the complex area of language pedagogy, choices are available and decisions need to be made at every stage. Some of the questions that need to be settled for a course are listed below :

- what kind of planning needs to be done and at what points or stages?
- for what purpose are the learners learning English?
- what kind of English are the learners normally exposed to ?
- what kind of English will they need ?
- what kinds of knowledge must the learners develop?
- which skills must be developed in the use of English?
- what kind of a syllabus is to be followed?
- what kinds of text books are needed?
- can other authentic materials be used?
- what media materials are to be used?
- which methods and techniques should be used?
- what kind of classroom interaction is to be followed?
- how can IT (Information technology) be exploited in the classroom?
- what do we need to know about learning processes in general and about learning languages in particular
- what do we need to know about the individual learner ?
- what do we need to know about the ability of teachers and their attitudes to language teaching?
- how should the learners be assessed and tested?

At each stage, choosing an answer will have consequences for the other components within the language pedagogy.

2.2. Some Issues Related to Applied Linguistics and its Application to Language Teaching

The concept as applied linguistics is not free from controversies. As you have seen in Unit 1, the fundamental issue of whether applied linguistics is an independent discipline or not, was raised. Related to this are the following :

- what does applied linguistics apply?

- is the application direct or indirect?
- what is the process through which applied linguistics influences or determines the various components of the language teaching situation?

Let us consider each of these briefly.

2.2.1. Is applied linguistics an independent discipline?

In Unit 1 this issue has already been touched upon. In spite of initial denials and declarations to the contrary (e.g. S. Pit Corder), applied linguistics has now been accorded the status of an independent discipline, with its own objectives, theories, methodologies, interest groups, journals and international conferences.

2.2.2. What does applied linguistics apply and is the application direct or indirect ?

By now you must have realized that applied linguistics applies its own theory or theories to a language related practical task, for a feasible solution. Insights derived from other disciplines are organized in a systematic manner, and are "variably" applied to a particular task. In this sense, the applications are indirect, via the models or theories of applied linguistics.

This view answers the second issue as well. Applied linguistics applies its own theories, which may have taken over insights and principles from other disciplines, but which organizes them according to its own objectives, principles and methodology.

2.2.3. Processes of application

This issue is more difficult to answer. Broadly speaking, the process is one of selection, after balancing the various options available. It is also one of decision-making. For a particular activity, it has to be decided which particular factor is to be given more weight and how the various elements are to be combined. The result is a unique profile of elements needed for a particular task. Perhaps this concept will become clearer later when we consider the contribution of applied linguistics to various components of a language teaching situation.

2.3. Practical Areas where Applied Linguistics can Contribute

In Unit 1 of this module it has been said that applied linguistics can contribute to the solution of any language related task or activity. You have also already understood that applied linguistics is not to be equated with language teaching alone. Its scope extends much further. We list below some of the areas where "principled" decisions of applied linguistics (whether acknowledged or not), have

contributed in a significant way. The list provided is not exhaustive, and it is quite likely that many more areas will emerge where applied linguistics will be of immense use and value.

The activities which have benefitted and can further benefit from the contributions of applied linguistics are :

i) practical literacy work, both for children and adults (in the mother tongue)
ii) the development of writing systems and grammars for unwritten languages
iii) dictionary compilation or lexicography
iv) development of first and second language teaching methodologies
v) designing language syllabuses
vi) designing a language curriculum
vii) the development of special teaching strategies for speakers of non-standard English
viii) development of materials and methodology for disadvantaged groups e.g. dyslexic learners
ix) speech synthesis and speech recognition through machines
x) development of teaching materials for specific purposes like law, medicine etc
xi) the development of machine translation

Review Questions I

1. Can ELT and applied linguistics be equated?
2. Is applied linguistics an application of linguistic theories?
3. According to Pit Corder, which components of language pedagogy are determined by linguistic and other principles. (You can refer to Unit 1)

The answers must be brief, in 2-4 sentences

2.4. Practices in Second Language Teaching

Chomsky once listed three main questions that linguistics should try to answer, namely, i) what does knowledge of language mean, ii) how is knowledge of language acquired, and iii) how is knowledge of language put to use. These are also the questions language pedagogy is concerned with an attempts to deal with them in an effective manner. The components of language pedagogy deal with various aspects of these three basic questions. In Unit 1 we have considered general theories of applied linguistics (= T 1). As has already been pointed out, any systematic thinking about an activity can be accepted as a theory in this sense. In fact, all assumptions and attitudes behind language teaching, stated or unstated, explicit or implicit, fall

within this category. For this reason, in this section we will take into account even those practices in second language teaching, which were in vogue before the concept of applied linguistics came into existence.

2.4.1. The grammar translation method or the traditional method

The method is referred to in this way because of the distinct teaching strategy associated with it. The strategy is a combination of brief presentation of grammar points and rules, a vocabulary list and massive translation practice, of sentences as well as connected prose passages. The assumptions of the method can be summarised as follows : i) language learning is an intellectual activity and involves rule learning, the memorization of rules and facts related to first language meanings, ii) the target language consists of a system of rules which have to be observed and applied in sentences and texts and related to the first language rules, iii) language rules are learnt explicitly, iv) the focus is on languages a code or forms of language, and v) learning a language is a kind of mental training.

You will note that certain attitudes to language and language learning are inherent in these assumptions. The practices mentioned above are the ways and means of manifesting those attitudes within the classroom. (Stem, 1983)

2.4.2 The direct method

The method is so called becuse from the very beginning, all instruction in the class room is carried out in the target language. There is a shift away from literary language–to spoken everyday language. Hence there is an emphasis on the acquisition of good pronunciation. The standard procedure in the class room involved the following : i) the presentation of a specially constructed text in the foreign language, ii) explanation of difficult words or expressions through paraphrase, synonyms, demonstration or context, iii) asking of questions on the text, iv) reading aloud of the text, v) use of wall pictures for asking questions, vi) giving dictation, vii) use of exercises in transpositions, substitutions, dictation, narrative and free composition viii) use of phonetic transcription.

The main assumption was that learning a second language is similar to first language acquisition. The learning processes involved were interpreted in terms of associationist psychology. Hence there was an emphasis on the learning of sounds and simple sentences and the direct association of language with objects and persons of the immediate environment. (Stem. 1983).

2.4.3. The audio-lingual method

This method introduced memorization of dialogues and imitative repetition as specific learning techniques. It further developed pattern drills of various kinds. Because speaking was the main focus, tape recordings and language laboratory drills were used for rehearsing verbal exchanges of ordinary talk.

Audiolingualism reflects the descriptive, structural and contrastive linguistics of the fifties and sixties. The psychology of learning it is based upon is that of stimulus and response, operant conditioning, reinforcement, emphasis on learning in small steps and successful error-free learning. (Stem 1983)

2.4.4. Summing Up

In this section we have looked at some prevalent practices in language teaching and the assumptions behind them. There are other practices also.

Review Questions II

4. Name two techniques used in Grammar Translation Method.
5. What is the main focus of the direct method?
6. In what ways is the audiolingual method different from the Grammar Translation Method?

2.5. Contributions of Applied Linguistics to Language Teaching

In this section we will consider the impact of applied linguistics on various components of language pedagogy at different times.

2.5.1. Impact of systematic decision-making on the objectives of a language course

The objectives of a language course include not only the *reason* for learning a language but also determine the level of proficiency or knowledge or skill and the kinds of ability that are seen as the end-product of a course. Answers to questions like the following have to be found before the course is actually planned : should learners learn to speak and/or read and write a language? To what uses will they put their knowledge or skill? What level of proficiency should they attain? If you refer back to subsection 2.1.2. you will find that the first six questions relate to the determination of objectives of a course. Further, political, academic, religious or pragmatic demands may contribute to the setting up of objectives.

But the crucial question is : how are the various demands synthesized, organized and planned? Prior to the advent of structural linguistics. Objectives were determined either in an intuitive way, or under the pressure of some exigency and not in a systematic way. The examples are galore. For instance, in Mediaeval Europe, the knowledge of Latin was necessary for academic and religious purposes. So the aim was to develop the abilities of reading and writing Latin. Speaking was not considered necessary. In India, the ability to read, recite and write Sanskrit were the objectives of learning Sanskrit.

After the advent of structural linguistics, the aim of language learners was seen to be the attainment of the spoken skill, specially or ordinary, everyday conversation.

Hence the inculcation of a "good" pronunciation in the target language became an indispensable element of the language courses.

When the threshold level courses for the Council of Europe were being developed during the seventies, the objective was seen to be the ability of a person to operate effectively in a job situation as well as within the social context, in a country not his own. As a result, separate language courses for waiters, shop assistants, air traffic controllers etc. were drawn up. The reasons were pragmatic as well as economic. In addition, language needed for social interaction (e. g. dating) was also focussed upon, the aim was to make foreigner feel at ease in becoming a part of the social environment.

Such a situation gave rise to the concept of language (often English) for specific purposes (L$P or ESP), where the mastery of the total range of language ability and language use was not the target. Social, pragmatic and economic factors combined to evolve the aim of learning and teaching a language for specific use. The recent trend of teaching 'Communication English', 'Business English", "Entrepreuer's English" etc, are all consequences of the realization that language use for specific purposes and in specific contexts has characteristic features which need to be learnt for effective communication.

How are these features arrived at ? The objectives for such courses are derived from a detached and systematic study of the actual "needs" of prospective learners and users. In other words, a systematic "needs analysis" throws up the features that need to be learnt and attained through the course.

John Munby (1978) proposed a systematic and fairly exhaustive framework containing components like purposive domain, setting, interaction, instrumentality, dialect, target level, communicative event, communicative key or attitudes and so on, for the analysis of a particular situation and the language use required within that context. Such an analysis is expected to yield a 'profile' of the 'need' and this in turn becomes the objective for a particular course.

The broad area of 'language planning' on the decisions made by various authorities regarding the role, status and teaching of languages within a country, state or an institution can also determine the objectives of language teaching. In India, the position of English as an associate official language ensures that a 'formal" variety of English, primarily written, will be in use.

If we consider the audiolingual method, the objectives of language learning appear to be the achievement of grammatical mastery, whereas during the seventies, the aim was the development of the ability to communicate through the language, or interaction.

Perhaps in this connection we should mention that during the fifties, B. Bloom, an American educationist established "an ordered classification or taxonomy of educational objectives," : one on the cognitive domain and the other on the effective

domain. Because these were not prepared with language teaching in mind, Rabecca Valette in 1971 attempted to apply the scheme to language teaching. In the process she was able to show how test items could explore these objectives.

2.5.2. Impact on content

The content of a language course refers to *what* is to be taught. These may be concepts, topics, grammatical rules, language items of various kinds, functions, literary pieces and so on. These can be arrived at either in an intuitive way or as a result of systematic enquiry. The second option emanates from a theoretical position. The other important aspect of content is its organization or syllabus design. So the two related questions that can be posed with reference to content are : (1) what will be taught and (2) what kind or type of syllabus will be followed.

Objectives of language teaching are achieved through content. Prior to the influence of linguistics, as in the Grammar-Translation way of teaching, study of literary pieces, study of grammar and grammatical rules formed the content.

With the emergence of structural linguistics, a complete change in the concept of content occurred. The categories of descriptive analysis–sounds, morphemes, lexis or vocabulary, structures or sentence patterns–become the content.

A further change occurred with the emergence of the communicative language teaching approach. Semantic categories rather than grammatical categories became the content. Functional-notional categories, elements derived from discourse analysis, speech acts and communicative events were used as items of content.

2.5.2.1. Types of syllabuses

Syllabuses are basically organization of content. The most broad-based organizing principles are those of selection and gradation. From a wide repertoire of item, some are selected following several criteria like frequency, usefulness, teachability, availability and so on. These selected items are then put in a sequence, also according to a few recognized principles. Depending on the type of items it deals with, a syllabus can be classified as structural, situational, functional or notional-functional, procedural, communicative task- based, topic based etc. Syllabuses can be linear or cyclical, depending on whether an item is dealt within one place of the course or whether it recurs in different places within the course.

The point to be noted is that because well defined guildelines are available through theory, it has been possible to explore various possibilities in syllabus design and come up with alternative answers. Far instance C. Candlin and Michael Breen have talked of a "negotiated" syllabus. Postman and Weingertner experimented with the situation where the learners were not 'given' any syllabus. They evolved their own as they progressed with the course. One can took upon such an example as a student generated syllabus.

2.5.3. Impact on materials

Objectives and lists of content on syllabus cannot be used directly in the classroom. These need to be translated into teaching materials before they can be meaningfully utilised by the teacher and the learner.

When literature and grammar formed the content of language courses, teaching materials were straightforward enough : grammar books and specimen of literary work comprised text books or the teaching material. When linguistic categories became the content, teaching materials had to be specially written.

In the following pages you will be shown some samples of materials developed along with the structural approach to language teaching. As you already know, the audiolingual method is an example of such an approach. Here the major part of the materials focussed on structures of language. Pattern practice was the main activity adopted in the classroom. A sample of such drilling can be seen in the substitution table given below :

Where	can	I	buy	a	leather bag?
	might				
	will	he	find		
	did	she	get		Kashrniri shawl?
	do	I	sell		
	does	we			

Such tables were very commonly a part of all textbook materials used for the structural approach.

Another sample highlighting the Present Continuous Tense at the elementary level would look something like this :

What are the boys doing ?	*They are eating mangoes.*
What are you doing?	*I am playing football.*
What is your mother doing?	*She is cooking.*
What is the teacher doing ?	*He is writing on the blackboard.*

The following example shows a standard grammar box presentation of **yes/no** questions with *be*.

Verb	Subject	Rest of sentence	Answer
Are	you	single?	Yes, I am.
Are	you	married?	No, I'm not.
Is	Devi	from Punjab?	Yes, she is.
Is	Manas	your best friend?	No, he isn't.
Are	you and Julie	friends?	Yes, we are.
Are	You and Julie	in the same class?	No, we aren't.
Are	Jaya and Mona	teachers?	Yes, they are.
Are	Mr. and Mrs. Gupta	Bengalees?	No, they aren't.

This would then typically be followed by one or more language manipulation exercises such as a fill-in-the blanks exercise.

The **pedagogic principles** underlying these materials are :

– *Language is primarily speech.*

– A *language is a set of habits. Therefore practice of language items is necessary.* However, the underlying

assumption is that *mastery of language forms is central to language acquisition and conscious learning of forms is imperative.*

Since the advent of **Communicative Language Teaching (CLT)** and the belief that language is best learned when it is being used to communicate messages, the *communicative task* has assumed prominence as a unit of organization in both syllabus and materials design. The task syllabus (Long, 1988) has a richer potential for promoting successful second language learning than do other syllabus types (e.g. structural, notional/functional, situational, topical).

Let's now try and define a *task*. The rise of *Task-Based Language Teaching* (TBLT) has led to a variety of different interpretations of what exactly is a *"task"* is and to different proposals for task-based syllabuses (e.g. Breen, 1984; Prabhu, 1984). What all these proposals have in common, however, is that they recognize **tasks** as being the *central component in a language programme,* endorse the concept of organizing a syllabus around communicative tasks that learners need to engage in *outside* the classroom, and accept the view that curricula should be *learner-centered,* rather than *language centered.* So, materials for CLT are usually authentic and task based.

The task, or what students are supposed to do with the given material, is what often makes all the difference. There is material that can be used for beginners, intermediate or advanced students, provided the task that comes with it is suitable. This task should relate to the student's own life as much as possible, as proposed by theories of CLT.

You will find some sample materials and tasks in the Appendix to this unit.

2.5.4. Impact on methodology : what is methodology?

Methodology in language teaching has been explained in a variety of ways. A more or less classic formulation suggests that methodology is that which links theory and practice. Theory statements would include theories of what language is and how language is learned or, more specifically, theories of second language acquisition (SLA). Such theories are linked to a whole design of language instruction. These design features might include stated objectives, syllabus specifications, types of activities, roles of teachers, learners, materials, and so forth.

Design features in turn are linked to actual teaching and learning practices. This whole complex of elements defines language teaching methodology.

The diagram below gives a comprehensive view of the role of theories in teaching and learning. Study it carefully.

LANGUAGE TEACHING METHODOLOGY

Fig. 2.3. Language Teaching Methodology

In order to understand this diagram it is necessary to refer to C.J. Brumfit (1984) who has outlined **three possible approaches** to language teaching.

1. Concentrate on the classroom and deal with techniques without attempting to justify why something is being done. This approach concentrates on *'doing'*.
2. Concentrate on the principles rather than on the techniques in the classroom. There is a danger of the techniques being far removed from what is actually needed. This concentrates on *'knowing'*.

3. Integrate the two approaches as suggested in the diagram above. The diagram suggests that the teacher has not only to master all the fundamental skills of teaching but also he should be able to see the strengths and weaknesses of all the techniques. This will help him to justify what he is doing at any moment of the lesson. This approach concentrates on the *relationship between 'knowing' and 'doing'.*

Within methodology a distinction is often made between methods and approaches. *Methods* are related to the particular teaching systems with set techniques and practices. *Approaches* represent language teaching philosophies and theories that can be interpreted and applied in a variety of different ways in the classroom.

The period from the 1950s to the 1980s has often been referred to as "The Age of Methods," during which a number of quite detailed prescriptions for language teaching were proposed. *Situational Language Teaching* evolved in the United Kingdom while a parallel method, *Audio-Lingualism,* emerged in the United States. In the middle-methods period, a variety of methods were proclaimed as successors to the then prevailing Situational Language Teaching and Audio-Lingual methods. These alternatives were promoted under such titles as *Silent Way, Suggestopedia, Community Language Learning, and Total Physical Response.* In the 1980s, these methods in turn came to be overshadowed by more *interactive views* of language teaching, which collectively came to be known as *Communicative Language Teaching* (CLT).

2.5.4.1 How does methodology operates

It must be noted that objectives, syllabuses and teaching materials on their own do not result in learning a language. Methodology is the means by which these are utilised for bringing about the learning outcome. The teacher interacts with the learner through the materials. The learners in their turn interact with the teacher and the materials. This can be shown in the following diagram.

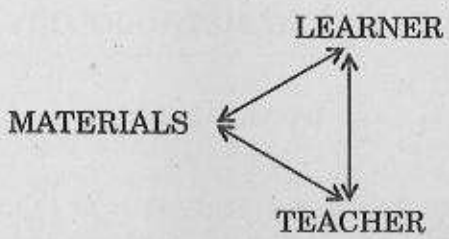


Fig. 2.4. Showing interaction of teacher, learner and materials

How this interaction takes place can be directed in a number of ways. It is here that theories contribute in a significant way.

2.5.4.2. Where does methodology derive from?

The general approach in methodology is determined by the objectives and the broad view adopted by a language course. Within this approach a 'bundle' of techniques or actual practices make up the method. Objectives thus determine the nature of the techniques to be adopted, for example, mechanical, repetitive, creative practice etc. The syllabus and materials, drawn up to implement the objectives, by their nature, require the use of specific techniques. (E.g. oral skills require students to practise these in class). These in turn are determined by learner and teacher variables. The techniques used in the classroom are thus the consequence of decisions adopted at various points of this process. An example will make this clearer. If the objective is the attainment of the *knowledge* of grammar rules, the syllabus or materials will include descriptions and illustrations of such rules. The learners can then be required to (1) memorize the rules, (2) memorize examples of such rules, (3) apply the rules in translating sentences and passages from the another tongue to the target language and vice versa. Another possibility may be the use of substitution tables for intensive practice of sentence patterns which demonstrate the relevant rule.

However, these techniques have implicit in them general concepts of (1) the nature of language, (2) the nature of language learning and (3) the nature of language pedagogy. In example used earlier, language is equated with rules of grammar. Language learning is seen to be some kind of problem solving and memorization. When such concepts change, related techniques of teaching also change.

Such a shift took place when the audiolingual approach and related methodology like structural-oral-situational (S-O-S) approach carne to be used. Language was seen to be a system of sentence structures, used orally within a specific situation. Language learning was seen to be a matter of habit fomation or automatic response developed through association and practice. So the following techniques carne to be used : (1) practice through mimicry and memorization, (2) quick and intensive repetition for automatic response leading to habit formation. (3) use of the second language in the classroom, (4) use of objects, pictures, gestures, demonstration (audio-visual aids) for making meaning clear, (5) use of dialogues and role-play for extrapolation to real-life situation, (6) games for practice of linguistic items, (7) use of pair and group work, (8) use of the language laboratory for pronunciation and pattern practice. In all these we can find the application of the principles of linguistics, language learning and language pedagogy.

2.5.4.3. The communicative approach

When language came to be considered as communication and the learning of a language was looked upon as the development of the ability to communicate through that language (mainly oral but also written), the techniques associated with language teaching underwent a radical change. At the same time, learning a language came to be looked upon as "creative" : at every stage of learning, learners were seen to

operate a system of rules of their own. In keeping with these changes, the following come to be associated with the communication approach :

(1) teaching of language *use* (rather than linguistic rules)
(2) use of authentic materials
(3) focus on 'situation' and its various aspects, e.g. field, mode and tenor
(4) use of task or activity based materials
(5) focus on "meaningful" language use, getting something 'done' through language
(6) use of role play and dialogues
(7) creating conditions for learning
(8) learners' response not controlled but open-ended
(9) errors considered a part of language learning
(10) focus on fluency and communication rather than on strict grammatical accuracy

These pedagogic principles and practices subscribe to a broad set of assumptions such as the following :

- Learners learn a language through using it to communicate.
- Authentic and meaningful communication should be the goal of classroom activites.
- Fluency is an important dimension of communication.
- Communication involves the integration of different language skills.
- Learning is a process of creative construction and involves trial and error.

The samples of activites illustrate how a language teaching theory finds focus in the order of presentation of authentic materials leading to grammar explanation, practice exercises, and a fluency activity.

Perhaps the most noteworthy feature of the above framework is that it moves learners from fluency tasks to accurate production rather than from accurate production of target structures to fluency tasks as recommended by the audiolingual theories.

2.5.5. Learner variables in language teaching

The traditional approaches concentrated on the formal aspects of language. Hence the learner was seen as an imitator and a recipient of knowledge. These views are very clear in the Grammar Translation and the Direct Methods and in the Structural Approach. All the learning took place through mechanical drilling and repetition, memorization and pattern practice. *The teacher* was the central figure responsible for his learning.

The modern approaches have a different focus. All communicative syllabuses highlight *the learner.* The teacher is just a facilitator of learning–a person who

manages the materials, the classroom environment and the learning process in the learner. The learner is seen as a "resource" who brings to the language learning situation his own abilities, attitudes and motivation. He interacts within the teaching situation and creates his own strategies and opportunities. This can be described as a "leamer-centred" approach, where the learner assumes responsibility for his own learning. Materials and techniques then have to explore these possibilities. The general approach thus contributes both to materials and methodology.

2.5.6. Teacher lariables

We have seen how the concept of the role of the teacher has changed through time. In the present context, we may speak of three crucial roles for the teacher. *Firstly,* the teacher is the primary source of input that is understandable to the learner. It is the teacher who attempts to maintain a constant flow of comprehensible input. *Secondly,* the teacher creates a friendly classroom atmosphere which facilitates learning. *Thirdly,* the teacher chooses the most effective materials and employs a rich mix of classroom activities.

Hence the teacher's own attitude and the techniques he uses need to change. However, this is an area where change is slow to take place. In general, teachers are not interested in theory and resist any kind of change. Why is this so ?

Teacher attitudes towards theory are likely to be determined by three things: Their own educational experiences as learners, the type of training they received, and the general state of the profession. That teachers think and teach as they themselves have been taught is hardly new or surprising. As students, we saw only what our teachers did. We did not know *why* they did what they did. Given such a background, it is not surprising that both students and teachers are unfamiliar with the role of theory, and generally have negative attitudes towards discussions of theory.

But if we ask the question why a teacher uses a particular technique or what are his beliefs about language teaching, the answers would need systematization of concepts. This is 'theory" in its broadest sense. Theory is helpful because it unifies and explains common experience and allows teachers to go beyond common experience.

Some teachers are unreceptive to discussions on theory because they do not see the necessity of the discussion. Other teachers are receptive to discussion of theory because they have been exposed to research literature which sometimes explicitly discusses theory. Nonetheless, we need theory in order to evolve as teachers, and as a profession. We must change our attitudes towards theory, and see it as something that we do as a matter of course (Prabhu, 1992). We must begin to bring our observations to bear on our theories and the theories suggested by others.

Theory is only a tool. But we need theory, or we will be forever wandering from goal to goal with all our questions unanswered.

2.5.7. Impact on evaluation

In this section we will deal very briefly with evaluation since this will be dealt with in greater detail in later units. Here it will be enough to point out that significant changes in the area of evolution have taken place as a consequence of changes in theories of language and language learning. From translation exercises and essay type questions, testing has moved to psychometric testing (objective type, valid, discrete-pointtests) and then to the testing of communicative ability.

2.6. Summing Up

In this unit we have tried to understand how all the aspects of language pedagogy—objectives, content, methodology and evaluation–have been influenced by a systematic approach, in fact a theory (of applied linguistics). We hope you will now be able to understand the reason why a language teacher does something in the classroom.

Review Questions III

Answer each question briefly :

7. What do you understand by the 'objectives' of a language course?
8. What is a syllabus?
9. Are text books teaching materials?
10. What are techniques?

2.7. Questions for Comprehension

1. In which areas of language pedagogy are choices available?
2. Name three factors which determine the objectives of language teaching.
3. How do learners learn languages? Mention two different views.
4. What are materials? What kind of materials are used for the grammar-translation method?
5. Name some of the techniques that are used in the audio-lingual method?
6. What is communication language teaching approach?
7. What kind of materials and techniques are used in this approach?
8. In which areas of language pedagogy has applied linguistics made significant contributions? Explain with examples.
9. Trace the development of applied linguistics from the early period to recent times.

10. What are the basic assumptions of audio-lingual theory?
11. Why is Applied linguistics considered a multidisciplinary subject?
12. Consider the statement "If you want to teach John Greek, you must know John, you must know Greek and you must know how to teach Greek."
    i) What must you know about Greek?
    ii) What must you know about John?
    iii) What must you know about teaching Greek?
13. Children use inaccurate grammar in their early years of speech formation. Why do you think this happens?
14. Referring to Fig. 2.2, discuss the levels of application of theories of various kinds.
15. Having studies the various levels of application of theories, what, in your opinion, is the major concern of Applied linguistics?
16. How is Applied linguistics relevant in the classroom?
17. What are some of the current assumptions about
    (i) the role of the mother tongue in the teaching of a second language
    (ii) learner's errors
18. How does Brumfit link theory and practice?
19. What is the difference between a method and an approach?
20. What are the common features of materials catering to the Structural Approach?
21. What are the pedagogic principles underlying the selection of these materials?
22. How are CLT materials different from materials used in traditional courses?
23. What is a "task" in a communicative approach?
24. Communicative language teaching is based on certain assumptions. What are these?
25. Do teachers of language need any theory? Give reasons for your answer.

2.8. Glossary

Audio lingual method : A method of teaching a foreign or a second language. It a) emphasizes the teaching of speaking and listening before reading and writing, b) uses dialogues and drills, c) discourages the use of the mother tongue in the classroom.

code : any system of signals that can be used for sending a message. A natural language is an example of a code.

decode : the process of trying to understand the meaning of a message. In a natural language words, phrases and sentences have to be understood.

encode : the process of turning a message into a set of symbols, as part of the process of communication.

information theory : a theory which explains how communication systems carry information. It also measures the amount of information being sent.

language variation : the way a language uses different forms depending on the geographical area, social class or situation in which it is used.

language planning : a process through which major decisions are made and implemented on a nation-wide basis.

Pragmatics : the study of the ways in which context affects meaning.

Role-play : Drama-like classroom activities in which students act out the part, of a participant in a situation. e.g. shopkeeper and customer, doctor and patient etc.

2.9. Books Recommended

1. Brown, Douglas 1980. *Principles of Language Learning and Teaching.* New York : Prentice Hall
2. Brumfit, C. J. 1984. *Communicative Methodology in Language Teaching.* Cambridge: Cambridge University Press
3. Brumfit, C. J. (ed) 1984. *ELT Documents* 118 : The British Council.
4. Brumfit C. J. and J. T. Roberts 1983. *A Short Introduction to Language and Language Teaching.* Batsford Academic and Educational Ltd.
5. Cook, V.J. 1991. *Second Language learning and Teaching.* London : Arnold
6. Krishnaswamy, N. K., S. K. Verma and Nagarajan 1992. *Modern Applied Linguistics.* Macmi llan India
7. Larsen - Freeman, D. 2000. *Techniques and Principles in Language Teaching.* Oxford : Oxford University Press. .
8. Richards, J. *et al.,* 1991. *Longman Dictionary of Applied Linguistics.* Essex : Longman Group Limited.
9. Richards. J. and Rodgers, T. 2001. *Approaches and Methods in Language Teaching.* 2nd ed. Cambridge : Cambridge University Press.

10. Rivers, W. M. 1964. *The Psychologist and the Foreign Language Teacher.* Chicago and London : University of Chicago Press.

11. Widdowson, H. G. 1979. *Explorations in Applied Linguistics.* Oxford : Oxford University Press.

11. Widdowson, H. G. 1990. *Aspects of Language Teaching.* Oxford : Oxford University Press.

12. Also refer to the books listed at the end of Unit 1.

2.10. Appendix

Sample Materials and Tasks for the Communicative Approach

Job Advertisements

A series of 4-5 *want ads can be used with learners in the following way :*

Learners are divided into groups of three. One group is asked to say which of the jobs they could qualify for, the second group can write an application letter or write a C. V., and the third group may discuss who in the class could qualify for the job and why. Also the whole class could re-write the ads or role-play job interviews.

Treasure Hunt

Students get a news item or magazine article and a sheet of paper with a series of questions so that they look for certain items : dates, events, people involved, etc.

Shop Lists

Shop lists have great potential as authentic material. Students willingly get involved in a role-play where one is a shopkeeper and 2-3 students are the customers, provided they have been supplied with the necessary functions and structures to carry out such task, i.e. sentences like "What would you like ?", "I"ll have ... ", "Anything else?", and so on.

Ads In Magazines

Guessing the product. In this task, the teacher cuts out advertisements from magazines, hides the products being advertised and shows them to learners one by one to see if he can guess what product is being advertised. To practice specific vocabulary, the teacher gives learners three or four options per ad.

A second example involving magazine advertisements is the following : Students are set in groups of 3-4 and get some 4 adverts. They are to imagine they are working for a newspaper and compare the ads taking into account the texts and the photographs. Students are to decide which is the best and which is the worst. Then

they re-design the worst ad, including the text. Ads with short texts are used with basic students, whereas those containing more complex texts are for intermediate or advanced students.

Letters to the Editor

Four or five letters to the editor are cut in half and pasted onto cards. Students work in pairs or groups of three and match the beginnings with the corresponding ending of the letters, and they match the corresponding answer to each letter.

Travel Brochures

An example of how to use travel brochures is the following :

Students sit in groups of 4-5. They are given travel brochures of interesting places. They are to design another brochure of a new place. In it they include a mixture of characteristics of that place. e. g. rice is the typical food, you can visit the sea beach, drink coconut water, etc.

Locating and Designing Goal-oriented Tasks

Coming up with appropriate tasks is critical to the CLT process because everything the students do is derived from the task(s) and it is the task(s) that **generates the language to** be used. The following activities are examples of typical Communicative activities, Task 1 illustrates a typical store clerk/customer role-play; a common activity found in CLT materials in school level texts.

1. ROLE PLAY Shopping

A. Work in pairs. Collect items in the classroom and place them on your desk (e.g. a pencil, a notebook, a handbag). Take turns being a store clerk and a customer.

- **Clerk** : Decide on a price for each item. Answer the customer's questions.
- **Customer** : Ask the clerk how much each item costs. Say if you want to buy it. Have conversations such as the following :
- **Clerk** : Hello. May I help you?
- **Customer** : Yes. How much is/are————————?
- **Clerk** : It's/They're ————————.
- **Customer** : ————————.

B. Switch roles. Do the role play again.

The problem here is that this activity is not a real task. As Willis (1996) points out, in this kind of activity, students are being asked to act out their roles with no purpose other than to practice specific language forms. There is no goal to aim for,

no reason to strive to explain something fully or to convince someone to follow a particular course of action, and no consequences for the student to face (no winner or loser) if the goal is not met.

To make this activity more communicative it may be redesigned it as follows :

Role-Play : Shopping

Group A : You are store clerks. Answer the customer's questions. Your goal is to be the first clerk to sell his or her merchandise and make more money than the other clerks.

Group B : You are customers. You have Rs. 75. You must buy the items on your shopping list. Different clerks are selling the same kinds of items for different prices. Ask the clerks for the price of the items you have to buy. Decide which ones you want to buy.

- A : Hello. May I help you ?
- B : Yes. How much is/are ..... ?
- A : Which one(s) ?
- B : It's/They're ...
- A : ...

Switch roles. Do the role-play again.

The activity is now an extension of the earlier task. It involves the whole class. The clerks have to try to sell their merchandise for more money than the other clerks do and to sell all their merchandise. The customers compete to see who can buy the items on their lists for the least amount of money. Half of the students play clerks assigned to different workstations representing department stores and half play customers. Each department store has four of twelve possible items for sale (e.g. watch, books camera, phone, shoes, walkman radio) and each shopping list has four items. The customers, therefore, have to find the stores which are selling the items on their shopping list, ask the clerks how much the items cost (determined individually by each clerk), and get the best deal before the items on their list are sold out. Once a clerk has given the price of an item to a customer, he or she cannot change the price unless that customer comes back to the store after rejecting the initial price. When they finish, they add up the prices and find out who were the most successful clerks and customers. These changes add goals and problems to the activity and make it more communicative. (Rooney, '99)

Some of the advantages of using **task-based** materials for language teaching are :

1. Student needs are identified after a needs analysis and course content and materials are matched to identified student needs.

2. Decisions regarding materials design and methodology are based on the research findings of classroom-centered language learning. (This distinguishes it from other syllabus types and methods, which have little empirical support)
3. Evaluation is based primarily through items that are task-based. Students can now be evaluated on their ability to perform a task according to a certain criterion rather than on their ability to successfully complete a discrete-point test.
4. The use of grammar is not discouraged. Form-focused instruction is allowed. There is now considerable evidence (Long, 1988), particularly from research studies which have compared naturalistic L2 learners to instructed L2 learners, that form-focused instruction within a communicative context can be beneficial.

The concept of a task or an activity emerges as a convenient tool for practical application of these assumptions.

A task may be defined as *an activity* in which "the target language is used by the learner for a communicative *purpose* (task) in order to achieve *an outcome*". For the communicative framework, a three-phase, **pre-task, task cycle,** post-task (language focus) process, was developed.

Let's now look at some classroom practices.

A) *The teacher decides to practise the structure "If I had .....1 would..... She creates different situations in which the structure is drilled orally. Then she puts up the sentences on the blackboard. Students read out the sentences mechanically after the teacher. Then the teacher gives them writing practice in using the structure through substitution tables.*

In this approach the learner gets to learn the structure or language items orally at first and then through reading and writing. This conforms with the behavioural psychology and the audiolingual theory of language learning.

B) *Teacher gives oral instruction to perform some physical actions like*

Come to the blackboard and draw a line. Write A at the beginning of the line ..... *Students try to follow the instructions and to negotiate the meaning. In case of failure to perform he is given some more exposure to the instructions which might be rewarded and modified for better comprehension.*

The learner struggles to negotiate the meaning and uses cognitive strategies.

In this approach, the teacher assumes the role of a facilitator of the learning process. Evidence of learning is seen in the struggle to learn and not in the actual performance. This is the communicative approach in which the learner is in focus.

Let's now look at a synoptic view of the roles defined for teachers and learners within various methods.

TEACHING METHODS AND TEACHER & LEARNER ROLES		
Method	**Teacher Roles**	**Learner Roles**
Situational Language Teaching	Context Setter Error Corrector	Imitator Memorizer
Audio-lingualism	Language Modeler Drill Leader	Pattern Practitioner Accuracy Enthusiast
Communicative Language Teaching	Needs Analyst Task Designer	Improvisor Negotiator
Total Physical Response	Commander Action Monitor	Order Taker Performer
Community Language Learning	Counsellor Paraphraser	Collaborator Whole Person
The Natural Approach	Actor Props User	Guesser Immerser
Suggestopedia	Auto-hypnotist Authority Figure	Relaxer True-Believer

Figure 2. Methods and Teacher and Learner Roles

As suggested in the chart, some schools of methodology see the teacher as an ideal language model and commander of classroom activity (e.g., Audio-Lingual method), others see the teacher as a background facilitator and classroom collegue to the learners (e.g. Communicative Language Teaching). The learner assumes different roles accordingly.

The Development of skills and the role of theories

Since the 70's interest in teaching the 'real language' has become the major area of interest both in researchers and in teachers. As a result there has been a major shift of research and practice from audio lingual and grammar –translation methods to the exploration of communicative language teaching. Much attention is paid today to the focus on integrative tasks involving **skill development** rather than on discrete structures.

In **communicative language teaching** the teaching of Question forms would be focused in partner interviews (e.g. partners ask each other questions such as : What is your name? Are you named after someone? Where are you from? Are you married? What are your hobbies and interests? etc., and then report their findings to a group or the whole class.), some kind of role play (e.g. students assume the identity of a famous person and answer personal questions),or a mingle activity (e.g. Find a student who ... has a birthday in the summer, ... is named after a famous person, etc.).

This would allow for a task such as the following "get to know your classmates" task. It is based on information gathered informally through Questions. Another activity commonly practiced would be something like this :

A. Talk to your classmates. Write a classmate's name only once.

Find someone who/whose ...

Name

1. ..... speaks three languages.
   "Do you speak three languages ?" _____
2. ..... comes from a large family.
   "Do you come from a large family" _____
3. ..... has a brother who is a teacher.
   "Is your brother a teacher ?" _____
4. ..... family lives in Mumbai
   "Does your family live in Mumbai ? _____
5. ..... is named after someone famous.
   "Are you named after someone famous ?" "Who ?" _____

B. Pair work. Compare the information you found with the information found by a partner.

This task now allows for the following **language focus** that involves students in analyzing the differences between yes/no questions with *be* and yes/no questions with *do/does*.

A. Pair work. The following table contains some of the questions you used in Unit 1.

Read the questions and then answer the questions below.

Are you married?	Do you speak French?
Is your father in the military?	Does your family live in Nagpur ?
Are you from Patna ?	Do you come from a large family?
Is he from Mumbai ?	Does your name have a meaning?
Is she married ?	Does she live in Bankura ?

B.

1. How are the two sets of questions the same?
2. How are they different from each other?
3. Circle the verbs. How are the verbs in column 1 different from the verbs in column 2.

C. Pair work. Change the following statements into questions.

1. You are married.
2. You play football.
3. Your name is John.
4. I am late.
5. Your friend lives in Kalyani.
6. Your friend goes to Midnapore.

Do you know the rules?

To turn statements with the verb to be into yes/no questions, move am, is, are to _____

To turn statements with action verbs into questions use :

- do with _____
- does with _____

This techniques allows for a focus on language forms.

So we have discussed various ways of developing the knowledge of the language system and skills in using the language.

MODULE - 2

Unit 3 ❐ Introduction to Information and Communication Theory

STRUCTURE

Functional Aspects of Language and Semiotics

Philosophy of Communication

Chomskyan Perspective and Sociology of Communication

3.0 Objectives

The aim of this unit is to introduce the pupil to the basic concepts in Information Theory. Care has been taken to explain these concepts within a framework which is not too mathematical, keeping in mind the social-science background of the majority of pupils. The foundations of information theory has also been discussed briefly with the help of schematic diagrams. The important relation between information and understanding has been elaborated. The importance of information theoretical approaches to education and psychology with emphasis on semantic interpretation has been highlighted upon. A major portion of this unit has been devoted to the theory and practice of network-based language teaching, the importance of computer aided language learning (CALL) and network based language teaching (NBLT) and multiple intelligence systems.

3.1 Introduction

Shannon founded the mathematical theory which underlies the current revolution in communication. He first defined information, and then showed how to transmit information faultlessly over a noisy channel by suitable encoding. The requirements for a good code have guided the search for codes ever since, and we can see that communication in the natural world is governed by the same model.

Information is defined as 'that which removes uncertainty'. The measure of an item of information is the amount of uncertainty it removes. Shannon chose entropy as his measure of uncertainty. Entropy had entered physics through the thermodynamics of heat engines. In thermodynamics it serves as a measure of disorder, complexity, or the quality of energy. The second law of thermodynamics tells us that entropy does not decrease.

The mathematical expression of entropy goes beyond its physical origins. We now see it as a measure of the size of a space. The information necessary to specify a point in any space is equal to the entropy of the space. So, if we think of the English language as a space of, say, one million words, we may say that the entropy of English is one million per word, and the transmission of one English word conveys one million units of information.

The mathematical definition of entropy uses a logarithmic scale, and takes into account the relative frequency of different points in the space to be measured, but entropy remains fundamentally a count of points in space. The essence of error free

communication is for the sender to transmit designations of points in the communication space to the receiver without error. This is achieved by coding messages so that points of interest are as far apart as possible.

Shannon modeled a communication system as a source of messages, and a channel through which the messages are transmitted. The source is understood to emit a sequence of symbols drawn from a certain alphabet. By considering the number of these symbols and the probability of each, we calculate the source entropy. A similar calculation yields the entropy of the channel. Shannon found that a channel, no matter how prone to error, can transmit the output of a given source provided that the channel entropy is greater than the source entropy.

The trick lies in encoding. The entropy of any source with a fixed alphabet is maximized when all the symbols are equiprobable. In most realistic cases, this is not so. We see this in our own language. Some words, like a, and, the, etc. are very common, whereas others, like quixotic or entrepreneurial are very rare. The entropy of the average source of English words is much less than its theoretical maximum. This sub-optimal coding is called redundancy, and can be exploited as a barrier against error.

Coding takes advantage of redundancy by transforming the original output of the source into a new string of symbols, arranging things so that these symbols are equiprobable. Such coding exploits the full entropy of the channel. Coding works by collecting sections of the source output and transmitting them as large blocks which have a negligible chance of being confused with one another. The receiver then decodes these blocks to get the original message.

We see this mechanism operating in nature. All natural communications contain the redundancy necessary to reduce error to an acceptable level.

3.2 Foundations of Information Theory : The Communication System

In its original form, information theory refers to exchanges of signals between technical systems. When its concepts and methods are applied to human communication processes and these are studied in the light of and by the methods of information theory, it is necessary at first to disregard the complex character of the possible forms of communication. This, of course, exposes us to the criticism that the relationships investigated are irrelevant. Weaver, who wrote an introduction to Shannon's (1949) fundamental work on information theory appreciated and discussed

this difficulty. He distinguished three levels at which the exchange of information takes place :

(A) The statistical level :

(B) The semantic level :

This involves the question: When signals are sent, does the recipient receive and decode the signal correctly so as to understand their meaning?

(C) The pragmatic level :

Here the question is : When a message has been received, does the recipient change his behaviour in the way intended by the sender?

Mathematical information theory makes statements at level (A) and so. Weaver argues, the Laws governing this formal exchange of information provide the basis for all understanding of the process of communication at levels (B) and (C).

What interests the educational theorist is the multiplicity of interactions between human beings. He is interested exclusively in levels (B) and (C). Nevertheless, it is a fascinating thought that the complex interaction involved in human communication might be traced back through a sequence, however long, of intermediate steps to an origin determined by the mathematical unit of information.

In physics, the fundamental concept of energy defines the framework ordering and bounding physical relationships; yet a knowledge of the law of conservation of energy, for example, does not enable us correctly to derive principles for the design and construction of machines or energy transducers. In the same way a knowledge of the aspects of communication processes which can be described in term of information theory can determine the framework within which complex communications may be classified and understood.

The rules, conditions, and laws which can be expected from the application of the procedures of information theory to education often have the character of necessary but not sufficient conditions. Thus, a knowledge of these laws is no substitute for creative imagination and ingenuity in teaching, any more than a knowledge of the main laws of thermodynamics is a substitute for the constructive imagination of the engineer in developing thermodynamic machinery.

We cannot expect to derive an instruction book for teachers directly from the application of the methods of information theory. We do, however, derive procedures which can help us to analyze the communication processes relevant to teaching and to test the feasibility of any plan of action.

3.3 The Basic Problems of Information Theory

In the area of human communications, and this includes communications between teacher and pupil, it is possible to distinguish cases at different levels of complexity.

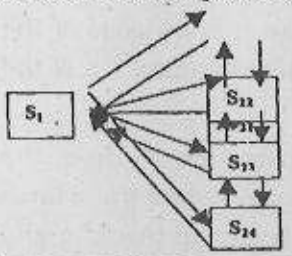
The simplest case is that of directional, one-way communication, where information flows from one partner to the other. This simple scheme may be realized in many ways. It may be communication between one teacher and one pupil, or conversely communication of one pupil with one teacher. This scheme is realized in pure form in a radio talk, in television, or the cinema.

In these examples the role of one partner is characterized by his passivity and assimilation of information during the communication, while the other partner is actively generating information. Meyer-Eppler (1959) calls this "living" information. In a figurative sense communication between a book and a person also falls into this category. Meyer-Eppler (1959) calls this "dead" information because it is stored in a data bank and requires activation by the communication partner.

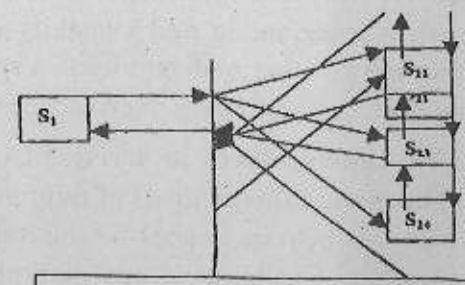
Directional one-way communication between Two partners S_1 and S_2 – radio talk, television, Film, and as an approximation, also lecture

Two-way communication between two partners (people or technical systems) – discussion, communication between adaptive teaching machine and pupil

The next higher step is two-way communication with the two partners exchanging information. This is realized in conversations between teacher and pupil. conversations between two persons in general, and communication between a pupil and a teaching machine where the behaviour of the adaptive teaching machine depends upon the pupil's reactions. In this case we are dealing with a feedback cycle. The scheme reaches a higher degree of complexity when more than two communication partners are involved.



Communication between one partner S_1 and many other partners, who may also communicate amongst themselves. Teacher-pupils in class



Simplified communication scheme

Within this complex scheme, if we select a given aspect, for example, communication from teacher to pupils, we can recognize the simple cases. The pupils can be considered collectively as a complex integrated system and the teacher may be considered to communicate with this system (see Fig. 1.4). Even though the situation has been formally simplified and we have in principle derived the second scheme, we must not forget that the arrow stands for an information flow of any level of complexity. What has been said here about the communication partners applies equally to the various possible channels of communication, such as speech, writing gestures, and mime. Therefore the first step in applying theory is to investigate and analyze the information flow and to ask how much of this information flow can be measured.

3.4 The Relationship Between Information and Understanding

That there is a relationship between information and understanding seems intuitively obvious. If we try to express this relationship mathematically, however, it soon becomes clear that the relationship is complex and mysterious. Knowing more about the connection, however, is important, not the least because we need more understanding as our world becomes faster paced and increasingly complex. The influence of increasing the amount of information, increasing the effectiveness of information mining tools and ways of organizing information to aid the cognitive process are briefly discussed.

We practice information science and call ourselves information scientists. As scientists we seek to understand—the thirst to comprehend, to know how things work is, after all, the passion that drives science, for it certainly can only be the thirst to know and not money or fame! We seek to know and we have been puzzling at it for a long time. In this century in particular we seem to have made enormous progress in understanding as our stockpiles of information have grown at a dizzying rate. As information scientists we are interested in information. How does it work?

At the outset we are not really interested in information just for its own sake, revelling merely in piling it up and moving it around. We recognize information as a means to an end. It is what it can do for us, what it has done for us, what we might do to make it do even more that drives us. And what it can do is to promote understanding and to help us acquire knowledge and give us the basis for action, for decisions, for planning and doing. Information is useful—it helps us understand and when we understand we can do useful things, like invent things, develop better strategies for business success, and we even feel better. We are richer not poorer in the face of the rising sun for understanding something about how it may have

formed, for how it creates the heat and light that enable life, for knowing how long the light has been travelling before streaming through our window and we are enriched for knowing its relative insignificance in the overall scheme of things in the universe.

It isn't useful in any economic sense about acquiring this particular knowledge but it helps clear up some of the mystery around us. Information above all is useful, helping education and commerce, powering art and science, driving technology and innovation before it, commerce and industry. Knowing more about the relationship should help us to exploit it more effectively. Our final argument is right now, at this of all times, when we seem to stand poised at the edge of a node of almost cataclysmic change, with not much help of controlling it, maybe thinking ourselves lucky if we can just survive as the storm of change breaks around us, we shall need understanding if we are to have any hope at all of avoiding the perils and steering as best we can for safer ground. Understanding then is a prescription above all for managing, if that's the word, or perhaps more realistically coping with the future, the next millennium and beyond. In terms of cognition, Clifford Stoll (1995) said "There's relationship between data, information, knowledge, understanding, and wisdom. Our networks are awash in data. A little of it's information. A smidgen of this shows up as knowledge. Combined with ideas, some of that is actually useful. Mix in experience, context, compassion, discipline, humour, tolerance, and humility, and perhaps knowledge becomes wisdom. Minds think with ideas, not information."

Ideas! Minds! Thinking! The process clearly connects at some stage with the cognitive process. Somehow understanding is one of the products and magically it seems that understanding also feeds back in some way into the information itself suggesting new arrangements, new organizations, so that it reaches out and influences information, opening new layers of it up, exposing new veins of thought, new wisps of connection, new insights, may be just by providing the context for it.

3.5 Information theoretical approaches in education and psychology

Anyone who seeks to apply information theory in the social sciences particularly in education and psychology very soon comes up against a central difficulty; in the form developed by Shannon information theory excludes the semantic aspect. This problem is fundamental for in education as in psychology, the semantic aspect is the very heart of the matter. Thus while Attneave, Miller and Quastler among others successfully employed the concepts and units of measurement of information theory in the interpretation of the findings of experimental psychology, they were obliged to restrict their work to its syntactic and statistical aspects.

Before we can make use of the methods and results of information theory in actual teaching, we have to solve the central problem: How can we measure the sementic information of a verbal message? The only way to do it is to extend the theory. A special concept has been developed for this purpose : **subjective information.** In place of an objectively measurable quantity (frequency of sign sequences) we set an empirically determined one: the subjective probability with which the recipient expects a certain sign sequence. The approach is consistent in that we regard subjective information as a function of the recipient and his state of mind at a given time. This is a distinct advance for it enables us to break down subjective information into a semantic part and a syntactic part, using transinformation analysis to isolate the semantic information. Now we can usefully apply the concept of information theory to the problem of educational psychology and teaching in general.

We can state the information of subjectmatter to be taught, of rules, definitions and operations, in **bits**, the unit of measurement of information theory. For example, the information of a rule is the semantic information of its redundancy-free formulation in words. Once we can measure the information, we have an index of the complexity of the material.

It is important for teachers to be able to evaluate the subjectmatter, estimate the extent of the teaching task, and measure the learning increment.

3.6 Multiple Intelligences and Learning Styles

Multiple intelligences and learning style preferences both refer to the ways that individuals approach information processing and learning. Howard Gardner's theory of multiple intelligences proposes that there are a least seven different abilities that individuals can develop to solve problems or create products: <ULTYPE=DISC verbal/linguistic, musical, logical/mathematical, spatial/visual, bodily/kinesthetic, interpersonal, and intrapersonal (Gardner, 1993). Each intelligence is distinguished by its own competencies and skills and directly influences the way an individual will carefully examine interpret and in the final analysis utilize information.

Learning styles are the broad preferences the learners tend to exhibit when faced with new content or problems that need to be solved. These styles encompass cognitive, affective, and behavioural elements, and describe learners in terms of their preferences for group or individual learning contexts, the degree to which they separate details from complex backgrounds (field dependent vs. field independent), or their affinity for analytic, abstract perspectives as opposed to more integrated,

comprehensive ones. (analytic vs. global) (Oxford, 1989). Awareness of different intelligences and learning styles, and individuals' preferences for them can help teachers create positive learning experiences (Christison. 1996; Oxford, 1989). By varying instructional activities to accommodate learners' preferences (lectures, visuals, hands-on-activities, songs) or by offering options for responses to instruction (write a paper, create a model give a demonstration), teachers can support learners' access to and understanding of content.

3.7 Theory and Practice of Network-Based Language Teaching

3.7.1 Introduction

Over the past thirty years language teachers have witnessed dramatic changes in the ways that languages are taught. The focus of instruction has broadened from the teaching of discrete grammatical structures to the fostering of communicative ability. Creative self-expression has come to be valued over recitation of memorized dialogues. Negotiation of meaning has come to take precedence over structural drill practice. Comprehension has taken on new importance, and providing comprehensible input has become a common pedagogical imperative. Culture has received renewed interest and emphasis, even if many teachers remain unsure how best to teach it. Language text books have begun to distinguish spoken and written language forms, and commonly incorporate authentic texts (such as advertisements and realia) alongside literary texts. It is in the context of these multifarious changes that one of the most significant areas of innovation in language education-computer-assisted language learning (CALL) has come of age. Nowadays, audiotape-based language labs are gradually being replaced by language media centers, where language learners can use multimedia CD-ROMs and laserdiscs, access foreign language documents on the World Wide Web, and communicate with their teachers, fellow classmates, and native speakers by electronic mail. If language teaching has become more exciting, it has also become considerably more complex.

We discuss one form of CALL, what we call *network-based language teaching* (NBLT). NBLT is language teaching that involves the use of computers connected to one another in either local or global network. Whereas CALL has traditionally been associated with self-contained, programmed applications such as tutorials, drills, simulation, instructional games, tests, and so on, NBLT represents a new and different side of CALL, where human-to-human communication is the focus. Language

learners with access to the Internet, for example, can now potentially communicate with native speakers (or other language learners) all over the world twenty-four hours a day, seven days a week, from school, home, or work. That learners can communicate either on a one-to-one or a many-to-many basis in local-area network conferences further multiplies their opportunities for communicative practice. Finally, the fact that computer-mediated communication occurs in a written, electronically-archived form gives students additional opportunities to plan their discourse and to notice and reflect on language use in the messages they compose and read.

Given these possibilities, it is not surprising that many language teachers have enthusiastically embraced networking technology and have developed creative ways of using networked computers with their students (see Warschauer, 1995, for 125 such examples). On the other hand, many other teachers remain skeptical of the value of computer use in general. A 1995 survey of instructional use of technology in twelve academic areas (Cotton, 1995), for example, showed that 59% of foreign language programs and 65% of ESL programs used no form of computer technology in their courses-placing language teaching at the bottom of the list of academic areas surveyed.

To date, there has been relatively little published research that explores the relationship between the use of computer networks and language learning. The simple question to which everyone wants an answer: does the use of network based language teaching lead to better language learning? turns out not to be so simple. The computer, like any other technological tool used in teaching (e.g., pencils and paper, blackboards, overhead projectors, tape recorders), does not in and of itself bring about improvements in learning. We must therefore look to particular *practices of use* in particular contexts in order to begin to answer the question. Furthermore. these practices of use must be described as well as evaluated in terms of their specific social context. Who were the learners? What exactly did they do? For what purpose? In what setting? With what kinds of language? In what patterns of social interaction? What were the particular outcomes in terms of quantity/quality of language use, attitudes, motivation?

The strategy is two-fold : (1) to frame a conceptual rationale for network-based teaching in terms of trends in language acquisition theory and educational theory, and (2) to present a variety of recent empirical studies that will help scholars and educators to make informed decisions about both pedagogical practices and future research.

First, we situate NBLT within the history of approaches to second language education as well as the particular history of computer-assisted language learning. We also discuss some of the particular research issues associated with network-based language teaching, and identify gaps in our knowledge.

3.7.2 Shifting Perspectives on Language Learning and Teaching

While the changes in language teaching described at the beginning of this chapter are often characterized in terms of a polar shift from structural to communicative perspectives on language teaching, we perceive a more complex overlapping of three theoretical movements; structural, cognitive and sociocognitive, in the recent history of language teaching. Because each of these three theoretical perspectives has influenced how computer technology has been used in language teaching, we will begin by briefly tracing the development of these perspectives.

3.7.3 Structural Perspective

For much of this century (as well as preceding centuries) language teaching has emphasized the formal analysis of the system of structures that make up a given language. The grammar-translation method, for example, trained student to memorize verb paradigms, apply prescriptive rules, parse sentences, and translate texts. From the 1920s through the 1950s, influenced by the work of American structural linguists (e.g., Bloomfield, 1933) various structural methods of language instruction were developed, culminating in the audiolingual method of the 40s and 50s. Although audiolingual teaching focused on spoken rather than written language skills, it shared two principal assumptions with the grammar-translation method: that language teaching syllabi should be organized by linguistic categories and that the sentence was the primary unit of analysis and practice. Strongly influenced by the work of behavioral psychologists such as John Watson and B. F. Skinner, structural methodologists conceived of language learning as habit formation and thus saturated students with dialogues and pattern drills designed to condition learners to produce automatic, correct responses to linguistic stimuli. Contrastive analyses of the structural differences between the native and target languages (e.g., Lado, 1957; Moulton, 1962; Stockwell, Bowen, and Martin, 1965) provided the basis for the careful selection, gradation and presentation of structures. Practice, not abstract knowledge, was the key.

Approaches to the teaching of reading and writing also reflected the emphasis on structure. During the audiolingual period, reading was largely seen as an aid to the learning of correct structures; students were instructed to read out loud in order to practice correct pronunciation. Second-language writing instruction focused on students' production of formally correct sentences and paragraphs. At more advanced levels, contrastive rhetoric was used to provide examples of L1L2 essay structure differences. In sum, the emphasis in speaking, reading, and writing was on the achieved linguistic product, not on cognitive or social processes.

3.7.4 Cognitive/Constructivist Perspective

By the early 1960s, the audiolingual method began to be criticized as being overly mechanical and theoretically unjustified. Noam Chomsky (1959) had rejected B. F. Skinner's behaviorist notion of language learning, arguing that because a speaker of a language can produce (and understand) an infinite number of well-formed utterances, language competence could not possibly be explained by a model based on imitation and habit formation. Instead, Chomsky (1957; 1965) proposed a transformational-generative grammar that mediated between deep structures and surface structures of language. The development of an individual's grammatical system was guided by innate cognitive structures, not behavioral reinforcement. In the language teaching world, Chomsky's theory contributed to a gradual shift in goals from in tilling accurate language habits to fostering learners' mental construction of a second language system. Errors came to be seen in a new light, not as bad habits to be avoided but as natural by-products of a creative learning process that involved simplification, generalization, transfer, and other general cognitive strategies. Language learning had thus come to be understood not as conditioned response but as an active process of generating and transforming knowledge.

While this new perspective at first led to renewed attention to the teaching of grammar rules (e.g., the Cognitive Code Learning method), it later led to an emphasis on providing comprehensible input, in lieu of an explicit focus on grammar (Krashen, 1982). Yet the purpose of providing comprehensible input, at least in Krashen's view, was not to foster authentic social interaction (indeed, Krashen felt that learners' speech was largely irrelevant to language learning), but rather to give individuals an opportunity to mentally construct the grammar of the language from extensive natural data.

The influence of cognitive approaches was seen quite strongly in the teaching of reading and writing. Following developments in first-language reading and writing research, second-language educators came to see literacy as an individual psycholinguistic process. Readers were taught a variety of cognitive strategies, both *top-down* (e.g., using schematic knowledge) and *bottom-up* (e.g., using individual word clues) in order to improve their reading processes. Second-language writing instruction shifted its emphasis from the mimicking of correct structure to the development of a cognitive, problem-solving approach, focused on heuristic exercises and collaborative tasks organized in staged processes such as idea generation, drafting, and revising.

3.7.5 Sociocognitive Perspective

At about the same time that cognitively-oriented perspectives on language acquisition were gaining popularity, Dell Hymes, an American sociolinguist, and Michael Halliday, a British linguist, reminded educators that language is not just a private, "in the head" affair, but rather a socially constructed phenomenon. Hymes, who coined the term *communicative competence* in response to Chomsky's mentalistic characterization of linguistic competence, insisted on the social *appropriateness* of language use, remarking "There are rules of use without which the rules of grammar would be useless" (Hymes, 1971, p. 10). For Hymes, syntax and language forms were best understood not as autonomous, acontextual structures but rather as meaning resources used in particular conventional ways in particular speech communities. Grammaticality was not separable from social acceptability, nor was cognition separable from communication.

Halliday posited three principal functions of language use; ideational, interpersonal, and textual. In doing so, he brought attention to the fact that language teaching had really only dealt with the first of these; ideational (i.e., referential language use to express content) while the interpersonal function (i.e., use of language to maintain social relations) and the textual function (i.e., to create situationally relevant discourse) had largely been neglected.

During the 1980s, communicative competence became the buzzword of the language teaching profession. What needed to be taught was no longer just linguistic competence but also sociolinguistic competence, discourse competence, and strategic competence (Canale, 1983; Canale and Swain, 1980). With interactive communicative language use as the call of the day, communicative processes became as important as linguistic product, and instruction became more learner-centered and less

structurally driven. In a sociocognitive approach, learning is viewed not just it terms of changes in individuals' cognitive structures but also in terms of the social structure of learners' discourse and activity (Crook, 1994, p. 78). From this point of view, cognitive and social dimensions overlap in a "dialectical, co-constitutive relationship" (Nystrand, Greene, & Wiemelt, 1993, p. 300). Or as Holquist (1990) puts it, "Discourse does not reflect a situation, it *is* a situation" (p. 63).

From this perspective, language instruction was viewed not just it terms of providing comprehensible input, but rather as helping students enter into the kinds of authentic social discourse situations and discouse communities that they would later encounter outside the classroom. Some was this to be achieved through various types of task-based learning, in which students engaged in authentic tasks and projects (see for example Breen, 1987; Candlin, 1987; Long and Crookes, 1992; Prabhu, 1987). Others emphasized content-based learning, in which students learned language and content simultaneously (e.g., Flowerdew, 1993; Snow, 1991).

In sociocognitive approaches, reading and writing came to be viewed as processes embedded in particular sociocultural contexts. Reading instruction focused not only on individual learning strategies but also on helping learners become part of literate communities through extensive discussion of readings and the linking of reading and writing (see for example Bernhardt, 1991; Eskey, 1993; Leki, 1993). Writing instruction focused not only on the development of individual strategies, but also on learning appropriate ways to communicate to particular audiences. In the field of English for Academic Purposes, for example, there has been a shift in emphasis from expressive writing toward helping students to integrate themselves into academic discourse communities through discussion and analysis of the nature of academic writing (e.g., Swales 1990). Literacy has been increasingly seen as a key to developing not only language knowledge but also sociocultural and intercultural competence.

Table 1.1 below summarizes the respective instructional foci commonly associated with structural, cognitive, and sociocognitive approaches to language teaching.

	Structural	*Cognitive*	*Sociocognitive*
Who are some key scholars?	Leonard Bloomfield, Charles Fries, Robert Lado	Noam Chomsky, Stephen Krashen	Dell Hymes, M.A.K. Halliday
How is language viewed?	As autonomous structural system.	As a mentally constructed system.	As a social and cognitive phenomenon.
How is language understood to develop?	Through transmission from competent users internalization of structures and habits through repetition and corrective feedback.	Through the operation of innate cognitive heuristics on language input.	Through social interaction and assimilation of others â speech.
What should be fostered in students?	Mastery of a prescriptive norm, imitation of modeled discouse, with minimal errors.	Ongoing development of their interlanguage. Ability to realize their individual communicative purposes.	Attention to form (including genre, register, and style variation) in contexts of real language use.
How is instruction oriented?	Toward well-formed language products (spoken or written). Focus on mastery of discrete skills.	Toward cognitive processes involved in the learning and use of language. Focus on development of strategies for communication and learning	Toward negotiation of meaning through collaborative interaction with others. Creating a discourse community with authentic communicative tasks.
What is the primary unit of analysis?	Isolated sentences.	Sentences as well as connected discourse.	Stretches of connected discourse.
How are language texts (spoken or written) primarily treated?	As displays of vocabulary and grammar structures to be emulated.	Either as Î input â for unconscious processing or as objects of problem-solving and hypothesis testing.	As communicative acts (Î doing things with words â).
Where is meaning located?	In utterances and texts (to be extracted by listener or reader).	In the mind of the learner (through activation of existing knowledge).	In the interaction between interlocutors, writers and readers; constrained by interpretive rules of the relevant discourse community.

Table 1.1 Pedagogical Foci in Structural, Cognitive, and Sociocognitive Frameworks

3.8 Changing Nature of Computer Use in Language Teaching

It is within this shifting context of structural, cognitive, and sociocognitive orientations that we can understand changes in how computers have been used in language teaching, and in particular, the role of network-based language teaching today. Interestingly, shifts in perspectives on language learning and teaching have paralleled developments in technology from the mainframe to the personal to the networked computer. As will be seen below, they also correspond roughly to three metaphors of computer-based educational activities posited by Charles Crook (1996); namely, a tutorial metaphor (computer-as-tutor), a construction metaphor (computer-as-pupil), and a toolbox metaphor (computer-as-tool).

3.9 Structural Approaches to CALL

The earliest CALL programs, consisting of grammar and vocabulary tutorials, drill and practice programs, and language testing instruments, strictly followed the computer-as-tutor model. Developed originally for mainframe computers in the 1960s and 1970s, though still used in different variations today, these programs were designed to provide immediate positive or negative feedback to learners on the formal accuracy of their responses. This was consistent with the structuralist approach which emphasized that repeated drilling on the same material was beneficial or even essential to learning.

As an example of a simple drill program, consider *MacFrancais' drill program.* The student selects the appropriate chapter, level, and number of desired chances. A target French word appears in the first line (here *"habiter")* and the student types in a translation in line two ("live"). The program does not accept this answer, however, so it highlights the student's initial response in line three, leaving line two blank again. The student then types in the full infinitive "to live" in line two, which is accepted, and the prompt then changes to the next word to be tested.

Drill programs of this type generally stirred little excitement among learners and teachers, however, because they merely perpetuated existing instructional practices, albeit in a repackaged form. Moreover, until recently, these programs tended to be technically unsophisticated, generally allowing only one acceptable response per item. These factors, combined with the rejection of purely behavioristic approaches to language learning at both theoretical and pedagogical levels, as well as the development of more sophisticated personal computers, propelled CALL into its second generation.

3.10 Cognitive Approaches to CALL

In line with cognitive/constructivist views of learning, the next generation of CALL programs tended to shift agency to the learner. In this model, learners construct new knowledge through exploration of what Seymour Papert has described as microworlds, which provide opportunities for problem-solving and hypothesis-testing, allowing learners to utilize their existing knowledge to develop new understandings. Extending a tradition of thought popularized by John Dewey and Alfred Whitehead that learning occurs through creative action, Papert (1980) and his colleagues at the M.I.T. Media Laboratory flip the earlier *computer-as-tutor* metaphor on its head, seeing computers as things to be controlled by, rather than controlling learners. The computer provides tools and resources, but it is up to the learner to *do* something with these in a simulated environment (e.g., in Papert's *Turtle Logo* program, learners program a turtle to carry out their instructions).

A more recent and sophisticated application in this tradition is the multimedia videodise program *A La rencontre de Philippe* (Furstenberg. Murray, Malone, and Farman-Farmaian, 1993), developed by the Athena Language Learning Project at the M.I.T. Laboratory for Advanced Technology in the Humanities. *Philippe* is a game for intermediate and advanced French learners that incorporates full motion video, sound, graphics, and text, allowing learners to "walk around" and explore simulated environments by following street signs or floor. Filmed in Paris, the video footage creates a sense of realism, and the branching of the story lines maintains the player's interest. To help language learners understand the sometimes challenging spoken French, the program provides optional comprehension tools, such as transcriptions of all audio segments and a glossary, as well as a video album that includes samples of many of the language functions one would teach in a communicative approach such as expressing feelings, saying hello and goodbye, and using gestures appropriately. Students can easily create their own custom video albums, which they store on their own computer diskettes.

This cognitive, constructivist generation of CALL was a significant advance over earlier tutorial and drill programs. But by the early 1990s, many educators felt that CALL was still failing to live up to its full potential (Kenning and Kenning, 1990; Pusack and Otto, 1990; Ruschoff, 1993). Critics pointed out that the computer was being used in an ad hoc and disconnected fashion and thus was "making a greater contribution to marginal rather than to central elements" of the language teaching process (Kenning and Kenning, 1990, p. 90). Moreover, as Crook (1996) points out, computer activities based on either a tutor or pupil metaphor potentially distance

the teacher from what students are doing individually and autonomously and can thus compromise the collaborative nature of classroom learning. Despite the apparent advantages of multimedia CALL, today's computer programs are not yet intelligent enough to be truly interactive. Although programs like *philippe* put the learner in an active stance and provide an effective illusion of communicative interaction, the learner nevertheless acts in a principally consultative mode within a closed system, and does not engage in genuine negotiation of meaning. Computer programs that are capable of evaluating the appropriateness of a user's writing or speech, diagnosing learner difficulties, and intelligently choosing among a range of communicative response options are not expected to exist for quite some time. Thus while Intelligent CALL (Underwood, 1989) may be the next and ultimate usage of computers for language learning, that phase remains a distant dream.

3.11 Sociocognitive Approaches to CALL

With sociocognitive approaches to CALL we move from learners' interaction *with* computers to interaction with other humans *via* the computer. The basis for this new approach to CALL lies in both theoretical and technological developments. Theoretically, there has been the broader emphasis on meaningful interaction in authentic discourse communities. Technologically, there has been the development of computer networking, which allows the computer to be used as a vehicle for interactive human communication.

Many uses of networked computers fit into Crook's (1996) computer-as-toolkit model. This metaphor emphasizes the role that computers can playas mediational tools that shape the ways we interact with the world (e.g., accessing and organizing information through databases, spreadsheets, and word processors). Word processors, for example, facilitate the invention, revision, and editing processes of writing, allowing quick, easy (and reversible) reshaping of text. In the 1980s, John Higgins developed as series of text reconstruction programs such as *Storyboard* and *Double Up*, which allowed learners to manipulate texts in various ways. The purpose of these programs was to allow the learner to reconstruct the original texts and, in the process, to develop their own constructions of language. Hypertextual writing assistants such as *Atajo* (Dominguez, Noblitt, and Pet, 1994) and *Systeme*-D (Noblitt, Pet, and Sola, 1992), and concordancers such as *Micro Concord* (Scott and Johns, 1993) have been valuable tools for helping learners to use language with greater lexical and syntactic appropriateness.

Computer networking allows a powerful extension of the computer-as-tool, in that it now facilitates access to other people as well as to information and data. Computer networking in the language classroom stems from two important technological (and social) developments : (1) computer-mediated communication (CMC) and (2) globally-linked hypertext.

CMC has existed in primitive form since the 1960s, but its use has became widespread only in the last ten years. CMC allows language learners with network access to communicate with other learners or speakers of the target language in either asynchronous (not simultaneous) or synchronous (simultaneous, in real time) modes. Through tools such as electronic mail (e-rnail), which allows each participant to compose messages whenever they choose, or Internet Relay Chat or MOOs, which allow individuals all around the world to have a simultaneous conversation by typing at their keyboards, CMC permits not only one-to-one communication, but also one-to-many communication. It therefore allows a teacher or student to share a message with a small group, the whole class, a partner class, or an international discussion list involving hundreds or thousands of people. Participants can share not only brief messages but also lengthy documents, thus facilitating collaborative reading and writing.

Globally-linked hypertext and hypermedia, as represented in the World Wide Web, represents a revolutionary new medium for organizing, linking, and accessing information. Among its important features are (I) informational representation through multilinear strands linked electronically, (2) integration of graphic, audio, and audio- visual information together with texts, (3) rapid global access, and (4) ease and low- cost of international publication. The World Wide Web offers an adundance of informational resources whose utility for language learning is just beginning to be tapped. Using the World Wide Web, students can search through millions of files around the world within minutes to locate and access authentic materials (e.g., newspaper and magazine articles, radio broadcasts, short videos, movie reviews, book excerpts) that correspond to their own personal interests. They can also use the Web to publish their texts or multimedia materials to share with partner classes or with the general public. These features can facilitate an approach to using technology in which authentic and creative communication is integrated into all aspects of the course. Furthermore, the World Wide Web has tremendous potential for creating and providing access to multiuser, interactive multimedia environments, although so far there have been few development projects in this area (see Chun and Plass, this volume).

These new technologies do not only *serve* the new teachingllearning paradigms, they also help *shape* the new paradigms. The very existence of networked computers creates possibilities for new kinds of communication. Because these new forms of communication are now so widespread, it is imperative that language students be exposed to them in the classroom. This is particularly important in English language teaching, since so much international online communication is conducted in that language, but it is likely to become increasingly important in the teaching of other languages as well, as cyberspace continues to become more multilingual. A pedagogy of networked computers must therefore take a broad view, not only examining the role of information technology in language learning, but also the role of language learning in the information technology society. If our goal is to help students enter into new authentic discourse communities, and if those discourse communities are increasingly located online, then it seems appropriate to incorporate online activities for their social utility as well as for their perceived particular pedagogical value.

To summarize, the computer can play multiple roles in language teaching. It originated on the mainframe as a tutor that delivers language drills or skill practice. With the advent of multimedia technology on the personal computer, it serves as a space in which to explore and creatively influence mocroworlds. And with the development of computer networks, it now serves as a medium of local and global communication and a source of authentic materials. This multiplicity of roles has taken CALL far beyond the early "electronic workbook" variety of software that dominated the second and foreign language marketplace for years and has opened up new avenues in foreign language teaching. These trends are summarized in Table 1.2 below.

	Structural	*Cognitive*	*Sociocognitive*
What is the principal role of computers?	To provide unlimited drill, practice, tutorial input explanation, and corrective feedback.	To provide language input and analytical and inferential tasks.	To provide alternative contexts for social interaction; to facilitate access to existing discourse communities and the creation of new ones.

Table 1.2 The Role of CALL in Structural, Cognitive, and Sociocognitive Frameworks

3.12 Research on Network-Based Language Teaching Brief Summaries

Just as the paradigms of CALL have changed, so has research on the role of computers in the language classroom. Early CALL research focused mostly on the language performance of students who had used CALL programs, attempting to determine whether those programs were superior to other methods for maximizing structural accuracy.

The cognitive paradigm engendered research that looked at the development of individual processes, strategies, and competencies, using measures such as' motivational surveys, observations, recordings of keystrokes, and think-aloud protocols. The sociocognitive paradigm and an emphasis on learning through computer networks have brought about a focus on the way that discourse and discourse communities develop during use of computer networks.

Table 1.3 summarizes the implications for research methods of the various CALL approaches. Research on network-based language teaching, while potentially spanning all of these approaches, has so far been largely limited to structural goals and methods.

	Structural	*Cognitive*	*Sociocognitive*
orientation	product	cognitive processes	social and cognitive processes
methodology	quantitative : experimental-control comparisons	both quantitative and qualitative	principally qualitative : discourse analysis, analysis of sociocultural context
principal kinds of data	quantities/frequencies of words, errors, structures	think-aloud protocols, questionnaires, computer-recorded data (e.g. keystrokes)	transcriptions of social interactions, ethnographic observations and interviews

Table 1.3 Research Implications for Various CALL Approaches

As NBLT is an emerging area, the corpus of NBLT research includes few published studies that examine in depth the development of discourse and discourse communities in online environments. Those studies that have been published have tended to focus on the most quantifiable and easily-measured aspects of online

communication. For example, a number of studies (e.g., Kern, 1995; Sullivan and Pratt, 1996; Warschauer, 1996) have quantitatively compared amount of participation in face-to-face and computer-assisted discussion, and have found more balanced participation among students (and between students and teacher) in the computer mode. Other studies have attempted to quantify the language functions used in online communication; concluding to little surprise that learners use a variety of functions ill computer-mediated communication (Chun, 1994; Warschauer, 1996). Researchers have also quantitatively examined the linguistic features of online discussion, finding that it is lexically and syntactically more complex than face-to-face discussion (Warschauer, 1996). These are all examples of a product-oriented, structuralist approach to NBLT research.

Attempts were made to expand the body of NBLT research into serveral important areas that have been so far relatively neglected. These areas are *context, interaction,* and *multimedia networking.*

The contexts in which networked-based teaching and learning occur have not, by and large, been studied in sufficient depth. As Gee (1996) explains, discourse represents not just language but "saying (writing)-doing-being-valuing-believing combinations" (p. 127). To understand the full impact of new forms of interacting in the language classroom, we must look beyond the texts of interaction to the broader contextual dynamics that shape and are shaped by those texts. This entails holistic, qualitative research that goes beyond inventories of linguistic features and attempts to account for the way classroom cultures take shape over time. While a number of educators have attempted to look at such phenonema, much of the published work to date in this regard has consisted of informal reports by teachers of what they have observed in their classes.

Carla Meskill and Krassimira Ranglova in their research on the implementation of new technology-enhanced EFL teaching in Bulgaria, show that the use of computer networks was part of a broader reconceptualization of the language program that resulted in a more "socio-collaborative" approach to learning. This is a sterling example of the fact that technology is not just a machine, or even just the use of a machine' but rather a broad form of social organization. Mark Warschaucr in his study, present the results on an ethnographic study of four computer-intensive language and writing classes in Hawai'i: two ESL classes, one indigenous language class, and one English class (in which the majority of students were second language learners). Warschauer's study shows that the: particular implementation of network-based leaching is highly dependent on sociocultural context, including, but not limited to, the attitudes and beliefs of the teacher. The study also illustrates the significance of new conceptions of literacy when considering network-based teaching.

The nature of interaction has been one of the most important areas of research in second language learning (for a review, see Pica, 1994). It has been suggested that computer-mediated communication provides an ideal medium for students to benefit from interaction, since the written nature of the discussion allows greater opportunity to attend to and reflect on the form and content of the communication. Yet most of the research on the linguistic nature of CMC has focused on counting or categorizing individual students' comments rather than qualitatively analyzing how and in what ways students actually negotiate meaning with each other.

Jill Pelletierri in her study uses a framework from Gass and Varonis to examine task-based real-time computer interaction between adult learners of Spanish. By analyzing the modifications that learners make in response to negotiation signals as well as corrective feedback, she provides evidence that computer-mediated interaction provides a useful mechanism for helping learners achieve higher levels of metalinguistic awareness. Whereas Pelletierri uses frameworks developed from oral interaction, Boyd Davis and Ralf Thiede use frameworks derived from writing research. They examine the interaction among L2 and L1 writers in asynchronous computer conferences to investigate the nature and degree of language learners a imitation and accommodation of writing styles. Their linguistic analysis indicates that L2 students shifted their style in response to L1 interlocuters.

Jean Schultz in her research focuses not so much on the linguistic interaction itself during electronic conferencing, but rather on its results, comparing how L2 learners make use of peer editing feedback which has been provided in computer-mediated or oral discussion. The results indicate a complex interrelationship of students' level, activity, and medium, rather than a simple conclusion of superiority or inferiority for computer-mediated feedback. She concludes with thought-provoking observations regarding the differences between written and oral communication. A final area which has been insufficiently investigated to date is the particular impact of combining a variety of media in networked-based learning. This area is so new that almost no research has yet been published. Researchers examine this issue from several angles: Dorothy Chun and Jan Plass examine concepts of networked multimedia in light of theory and research in second language acquisition. They then discuss criteria for the design of networked multimedia environments, illustrating with a prototype project under development based on SLA theory and research. Heidi Shetzer and Mark Warschauer focus on the theme of new onling literacies, providing a theoretical framework for how literacy and communication practices change in onling and hypertextual environments. They also discuss pedagogical implications of adopting an electronic literacy approach to language teaching. Christoph Zähner, Agnes Fauverge, and Jan Wong conducted a pilot study on the use of broadband audio and audio-visual conferencing to help college students

learn French. Their study indicates the potential of audio-visual networking for long-distance task-based learning. These three approaches bring us full circle, back to the issues of context and interaction, now redefined in terms of multimedia environments.

3.13 Conclusion

Network-based language teaching does not represent a particular technique, method, or approach. It is a constellation of ways by which students communicate via computer networks and interpret and construct onling texts and multimedia documents, all as part of a process of steadily-increasing engagement in new discourse communities. How that engagement takes place depends on a number of factors, including the nature of interaction via computer, the sociocultural context that shapes that interaction, and the way that students communicate and learn in multimedia modes.

And finally the biggest problem, I applying Shannon's selective information measure to human information-processing was to establish meaningful probabilities to be attached to the different possible signals or brain states concerned. After a flourish of 'applications of information theory' in the behaviourial and biological sciences, which underrated the difficulty of this requirement, it has come to be recognised that information theory has more to offer to the sciences in terms of its qualitative conceptsthan of its quantitative measures, though these can sometimes be useful in setting up upper or lower limits in information-processing performance.

3.14 Bibliography

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3.15 Questions for practice

1. What is *"Information"?* Discuss the goal and scope of the *Information Theory?*
2. What does the term *"Information"* mean in *Information Theory?* Elaborate your answer with suitable examples.
3. What are the main thresholds of *Information Theory?* Would you accept to deploy Information Theory in language teaching?
4. What is the relationship between *"Information"* and *"Understanding"?*
5. What are the possible approaches of Information Theory in education? What do you know about the theory of *multiple intelligences?*
6. Write an essay on *Network-Based Language Teaching?*
7. Discuss the applicability of *Information Theory* in Language learning.
8. What is CALL? Discuss the Changing Nature of Computer Use in Language Teaching.

3.16 Objectives

The emphasis in this module is to highlight especially the Saussurian concept of Semiotics, its origin, development and its high applicability in different branches of linguistics and allied disciplines. It discusses in detail the various types of relationships that exist under the broad banner of semiotics. There are suitable illustrations to help the pupils understand the importance of semiotic symbolism. There is an important conclusive portion on the relationship between Structuralism and Post-structuralism.

3.17 Functional Aspects of Language

Introduction : The 'linguistic turn' : Theoretical base :

In the 20th century leading to the 21st, Linguistics, the scientific study of language, has seen a quite extraordinary expansion. The study of language has held a tremendous fascination for some of the greatest thinkers of the century, notably Ludwig Wittgenstein and Noam Chomsky, whose influence has been felt far beyond linguistics.

Much of the impetus for this interest in linguistics originated with the Swiss linguist, Ferdinand de Saussure, from whose work *(Course in General Linguistics,* his lectures published in 1915 after his death by two of his students) French theorists developed 'structuralism', out of which (in part against which) grew 'post-structuralism', both of which have placed enormous influence on language and both of which have had a formative influence on cultural studies. This emphasis on language is often referred to as 'the linguistic turn' in philosophy.

What is language?

A language is a system of signs expressing ideas, and hence comparable, to writing, symbolic rites, forms of politeness, and so on. The language itself is not a function of the speaker. It is the product passively registered by the individual's parole. For example, K. Buhler proposed three functions of parole: 1. Representation 2. Appeal (to the listener) and 3. Expression (of the speaker). Roman Jakobson has attempted to systematize the relations involved in communication and the

correspondence between the specific function determined by these different relations and the functions whose manifestations are presented languages in various manners. Function of language deals the meaning of an expression as an object connected with it or corresponding to it. It would have been natural to use the word meaning, on the analogy of other gerundival words, to stand for the act or process or function of using word in meaningful manner.

To have an acceptable scientific basis of this ensemble of the components of signification attached to an act of enunciation, one should stress the fundamental characteristic of communication by language, i.e., interpersonal and referential relations which are instituted there. The aim of contemporary linguists should be to submit this order of phenomena which may be denominated information, to a linguistic analysis: this fundamental in typical linguistic functions, that is in functions engaging concomitant variations of the signifier and the signified. So the functions of language indicate the various aspects of meaning. It is needless to say that the term 'meaning' covers the entire faculties and levels of expressions. Every unit of a language contains such meaning to facilitate the ideas or the concepts of existing physical or metaphysical world of a creative speaking subject. A creative speaking subject has a few *signs* to communicate with other speaking subjects in a society. The occupation of these *signs* is not only to express some ideas but also to differentiate one speaking subject from the other. The situation and, if one considers an act of communication which enters into a series, the context preceding this act, constitute an important conditioning which determines largely the probability of repartition of the elements presented in an utterance between what will both be linguistically treated as an informative element and also as a non-informative element, a simple support for the *apport* (contribution) of information.

Functional aspects at the levels of Syntax, Semantics, and Pragmatics

Meyer (1986) on the interrelationship of the three levels of language: syntax (the study of the internal relationships between signs and their meanings, semantics (the study of the relationships, between signs and their meanings), and pragmatics (the study of the relationships between signs and their users) assumed that these dimensions of language or speech cannot be isolated because functions and contexts cannot be significantly defined and described apart from both semantic and syntactical constituents.

Pragmatism plays an important part in child language research. It approaches an individual's system of speech acts as synergistic in nature-semantic in nature and social in origin. In the case of an infant, the synergistic system can be described

as a speech act system between the child and a caregiver through which he is able to develop semantically in relation to his environment.

Larsen-Freeman (1980) noted that speakers demonstrate their knowledge of the pragmatics of the language while communicating with others. For example, when they address such a question as "How are you?" (considered to be more formal than "How's it going?") to someone, they demonstrate their pragmatic competency described below :

1. They are aware of the linguistic communicative function of opening a conversation.
2. They are able to use a conversational opening appropriately in a particular context (the listener is someone they presume to have a social status superior to their own).
3. They really mean "Are you in good health?" rather than merely exchanging a meaningless-greeting.

Functional Categories in childrens' communicative system :

Haliday (1973) pointed to six functional categories as descriptive factors interpreting the child's early communicative system: instrumental (I want), regulatory (Do as I Tell You), interactional (Me and You), personal (Here I Come), heuristic (Tell Me Why), and imaginative (Let's Pretend). According to Halliday, language is understood as meaning potential, and the meaning potential that they are building is a measure of what they can do with language. This semantic network is a specification of language and a hypothesis about patterns of meaning. The linguistic realization of patterns of behavior or social meaning is open ended. In the sociological context, the extralinguistic elements are the behavior patterns that find expression in language. Language functions in types of personal interaction (social) and types of situations or setting (situational) in which language functions. The function of the semantic network is to show how these social meanings are organized into linguistic meanings. Social meanings or behavior patterns are specific to their contexts or settings.

Keenan and Klein (1975) pointed out five categories of response in the interaction. between children: (a) basic acknowledgment or direct repetition, (b) affirmation or explicit agreement, (c) denial or opposition, (d) matching or claiming to be performing a similar action, (e) extension or new predication to previous speaker's topic.

Garvey (1975) stated that when children learn to talk, they learn how to interact. In their interaction they develop solicited and unsolicited queries, solicited queries seek mutual rapport whereas unsolicited queries seek mutual understanding. According to Garvey (1975), children make use of the following functions by the age of five and half: (a) getting attention, (b) taking turns, (c) making relevant utterances, (d) nomination and acknowledging topics, (e) ignoring and avoiding topics, (f) priming topics, (g) requesting clarification.

Saussure's vision of semiology : A new science

As this section deals with semiology (also known as *semiotics*, especially in the USA) rather than linguistics, we shall not dwell on linguistics here, but we need to look at Saussure's ideas as it was he who laid the foundation stone of semiology. It was he in fact who coined the term (which he developed from the Greek word for 'sign'). He used the word to describe a new science which he saw as *'a science which studies the life of signs at the heart of social life'*. (Saussure (1971 (p.33). This new science, he said, would teach us *'what signs consist of, what laws govern them'*. As he saw it, linguistics would be but a part of the overarching science of semiology, which would not limit itself to verbal signs only.

Communication and language

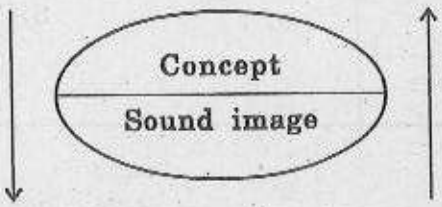
Many semiologists (or semioticians) when commenting on the media have used vocabulary which might strike you as more appropriate to the study of literature. Thus, for semioticians, a TV documentary, a radio play, a Michael Jakson song, a poster at a bus stop are all *texts*. We users of these texts are referred to as *readers*. Thus you will find Fiske and Hartley titling their book *Reading Television* and Monaco calling his *How To Read a Film*. Similarly, some semioticians will tend to talk about the *vocabulary* of film, the *grammar* of TV documentaries and so on, following through the analogy with language, though some commentators would argue that it is fundamentally impossible to draw glib analogies between language and cinema or photography.

3.18 Semiotics : Saussure - the sign

If you haven't looked through the section on meaning, you may not be familiar with the idea of *denotation*. You can take a look at it now, if you wish, but briefly the idea is that a sign 'denotes' or 'refers to' something 'out there in the real world'. It supposes that words (let's stick with words for the time being) are labels attached

to things much as labels might be stuck to artifacts in a museum. That seems a pretty sensible idea at first, perhaps - we can readily see how 'London', 'Margaret Thatcher', 'Michael Portillo' denote things 'out there'. But as soon as we get on to 'city', 'woman', 'man', things start to get a bit fuzzy. *Which* city, woman, man? And when we get on to words like 'ask' or 'tradition', this simple sign —> thing relationship starts to fall apart. As Wittgenstein puts it '[the idea that the individual words in language name objects] surrounds the workings of language with a haze which makes clear vision impossible.' (Wittgenstein (1985:4)

Saussure tried to get around this problem by saying that 'the linguistic sign does not unite a thing and a name, but a concept and a sound image' (see graphic). (Saussure (1971) p. 98).



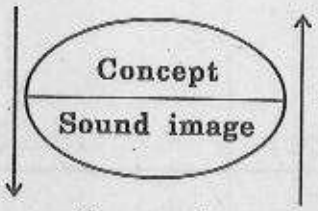
If we consider printed language, then we could say that a sign consists of the printed form of a word and a concept; if we consider a black and white photograph, then the sign consists of a particular set of shapes/shades and a concept. Structuralism (i.e. the philosophy which derived later from Saussurean linguistics), then, 'brackets the referent', in the current jargon. In other words, the thing referred to (the referent) is taken out of the sign —> thing (referent) relationship and is replaced by 'concept'. Clearly, the 'linguistic turn' is strengthened by this, since any notion of a reality external to language and concepts is de-emphasized.

3.19 Semiotics-Signifier—Signified

Saussure actually saw the division of the sign into sound image and concept as a bit ambiguous. So he refined the idea by saying it might make things clearer if we referred to the concept as the *signified* (signifié) and the sound image as the *signifier (signifiant)*–this idea is shown in the graphic, which attempts to show how the signifier and signified combine into what we call a sign. It's worth taking a little time to consider the graphic and it's worth asking yourself as well whether you think it makes good sense and whether it's very useful.

One may say that the distinction between sound image (signifier) and concept (signified) doesn't get us very far forward in trying to figure out what we mean by 'meaning'. It is probably true. After all, it's no easier to say what the concept of 'the' or 'of' is than to say what thing those words correspond to. And, of course, I don't know if the concepts 'city', 'woman', 'man' in your head are the same as those in mine. As the British linguist, David Crystal, puts it :

"Some words do have meanings which are relatively easy to conceptualise, but we certainly do not have neat visual images corresponding to every word we say. Nor is there any guarantee that a concept which might come to mind when I use the word *table* is going to be the same as the one you the reader, might bring to mind." (Crystal, 1987).



Saussure's graphical representation of the sign as being made up of a sound image and a concept

signifier ..... signified
(sound image) (concept)
Saussure's preferred terminology for the component parts of the sign

While that's quite correct, the fact remains that it also explains why Saussure's ideas took things forward. His notion of the sign places the emphasis on our individual 'concepts' corresponding to the sound images. Your mental picture of a car (indeed, for all I know, not only a mental picture, but also a mental smell, mental noise or whatever) will not be the same as mine, for a variety of reasons. (For a discussion of some of those reasons, see the section on **Meaning**).

Saussure shifted the emphasis from the notion that there is some kind of 'real world' out there to which we all refer in words which mean the same to all of us. Fairly obviously, we in our language community have much of this real world in common, otherwise we couldn't communicate, but, for various reasons, the 'real world' which we articulate through our signs will be different for everyone of us. (It is for this reason that Saussure saw semiology as a branch of social psychology.)

3.20 Semiotics—Arbitrariness of the sign

Saussure stressed the **arbitrariness of the sign** as the *first principle of semiology.* When we say something is 'arbitrary', we mean that there's no good reason for it. If you make an 'arbitrary choice' between two things, then you choose for no good reason; you probably don't care which one you choose. By saying that signs are arbitrary, Saussure was saying that there is no good reason why we use the sequence of sounds 'sister' to mean a female sibling. We could Just as well use 'didi', 'bahen', 'bon'. For that matter, we could just as well use the sequence of sound: 'brother'. Of course, as he pointed out, we don't have any choice in the matter. If we want to talk about female siblings in the English language, we can talk about 'female siblings' or 'sisters' - and that's all; there are no more options.

Saussure saw language as being an ordered system of signs whose meanings are arrived at arbitrarily by a **cultural convention.** There is no necessary reason why a pig should be called a pig. It doesn't look sound or smell any more like the sequence of sounds 'p-i-g' than a banana looks, smells, tastes or feels like the sequence of sounds 'banana'. It is only because we in our language group agree that it is called a 'pig' that that sequence of sounds refers to the animal in the real world. You and your circle of friends could agree always to refer to pigs as 'squerdlishes' (just an insignificant word) if you want. As long as there is general agreement, that's no problem–until you start talking about squerdlishes to people who don't share the same convention.

3.21 Semiotics—Semiotics and culture

Saussure freely admits that when he is stressing the arbitrariness of the sign, he is stressing something which is actually fairly obvious. As he sees it, though, the problem is that people haven't paid enough attention to the implications of the fact that sign-systems are arbitrary.

Since it is the case that the codes we use are the result of conventions arrived at by the users of those codes, then it is reasonable to suppose that the values of the users will in some way be incorporated into those codes. They will, for example, have developed signs for those things they agree to be important, they will probably have developed a whole array of signs to draw the distinctions between those things which are of particular significance in their culture. In other words, you might

reasonably expect that the ideologies prevalent in those cultures will have been incorporated into the codes used :

"...'reality' is always encoded, or rather the only way we can perceive and make sense of reality is by the codes of our culture. There may be an objective, empiricist reality out there, but there is no universal, objective way of perceiving and making sense of it. What passes for reality in any culture is the product of the culture's codes, so 'reality' is always already encoded, it is never 'raw'. Fiske (1987 pp. 4-5) Semiologists generally prefer the term 'reader' to 'receiver' (even of a painting, photograph or film) and often use the term 'text' to 'message'. This implies that receiving a message (i.e. 'reading a text') is an *active* process of decoding and that, that process is *socially* and *culturally conditioned.*

3.22 Semiotics—Paradigm & syntagm

One of Saussure's fundamental insights, then, was that sign-systems are arbitrary systems, a set of agreed conventions. Since there is no simple, natural sign=thing relationship between sign systems and reality, it is we who are the active makers of meanings. The sign-systems (or codes) which we use provide us already with sets of meanings (the 'always already encoded' reality which Fiske speaks of). We activate the meanings within the repertoire which the code offers us.

Saussure points out that the value (**valeur**) of signs is culture-specific. The French *mouton* may have the same meaning as the English *sheep,* but it does not have the same *valeur.* Why? Because English has the terms *mutton* and *sheep,* a distinction which is not available in French. He emphasizes that a sign gains its *valeur* from its relation to other similar *valeurs.* Without such a relationship **signification** would not exist.

Syntagm

This is a very useful insight in the analysis of signs. Language is linear: you produce one sound after another; words follow one another. When we think of signs interlinked in this way (for example; in language, coming one after another: *she+can+go),* then we are thinking of the in terms of what Saussure calls a **syntagm.** There is a syntagmatic relationship between them.

Paradigm

However, at the same time as we produce these signs linked to one another in time, we also do something which is outside that temporal sequence: we choose a sign from a whole range of alternative signs. So, when a journalist writes :

IRA terrorists overran an army post in Londonderry in Northern Ireland

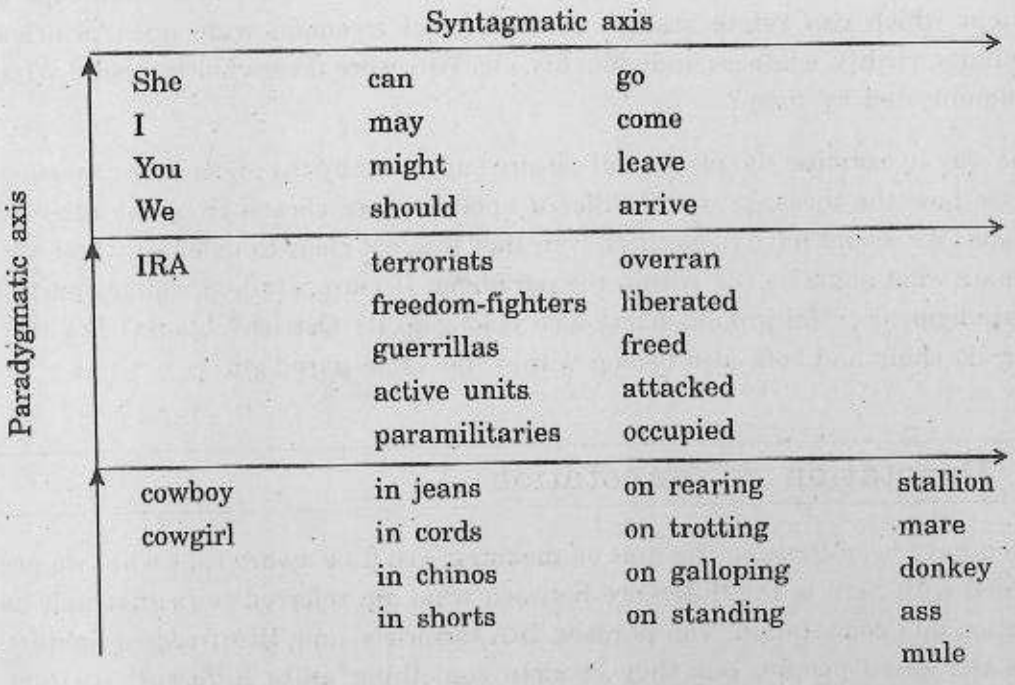
she chooses each sign from a range of alternatives. She could say :

'IRA scum', 'IRA active units', 'IRA paramilitaries', 'IRA freedom fighters'; 'IRA lunatics'

(Irish Republican Army, IRA)

She could refer to Londonderry as 'Derry', the mime more commonly used by nationalists; she could refer to Northern Ireland as 'Ulster', the 'Six Counties', the 'occupied counties' etc.

When we look at this range of possiblities, we are examining a **paradigm.** We are examining the paradigmatic relationship between signs. Not uncommonly, syntagm and paradigm may be conceived of as two axes :



The signs signify because of their *valeur*, which derives from the relationship between them. How can you say that repeat occurrences of the same word are in

fact the same word? Saussure gives the example of calling a meeting to order by shouting 'Gentlemen!' several times: there may be significant variations between each of the pronunciations, at least as significant 'as the differences used to distinguish between two entirely different words and yet we perceive it as being the same word. How come? The answer is that it is a relational identity which is at stake here. As an example of the sort of relationship we are talking about, Saussure gives the example of two 8.45 pm expresses from Geneva to Paris, leaving at 24 hour intervals. For us, they are the same express we are talking about the same entity when we refer to it, even though its carriages, locomotive and personnel are probably quite different on the two occasions. But it is not such material identities we refer to when we refer to the '8.45 Geneva-Paris express' ; rather it is the relational identity given in the timetable–this is the 8.45 Geneva-Paris express because it is *not* the 7.45 Geneva-Heidleberg express, the 8.45 Geneva-Turin etc. (Saussure (1971) pp. 151-2)

We can examine the syntagms and paradigms in any medium. In *Advertising as Communication* Gillian Dyer takes the example of a photographic sign, namely the use of a stallion (wild horse) in a Marlboro (cigarette ad.) The paradigm from which the stallion is drawn includes ponies, donkeys, dray horses, mules, mares. The connotations of stallion rely, as Dyer puts it, on the reader's cultural knowledge of a system which can relate stallion to feelings of freedom, wide open prairies, masculinity, virility, wildness, individuality, etc. Why were these choices made? What is communicated by them?

One way to examine the ideological closure suggested by the signs in the message is to see how the message would differ if another were chosen from the relevant paradigm. We would have to say, however, that it is not clear to us exactly how you determine what signs belong within the paradigm. If mare, stallion, donkey part of the paradigm, does fairground horse also belong to it? Ostrich? Llama? For that matter, do chair and sofa also belong within the same paradigm?

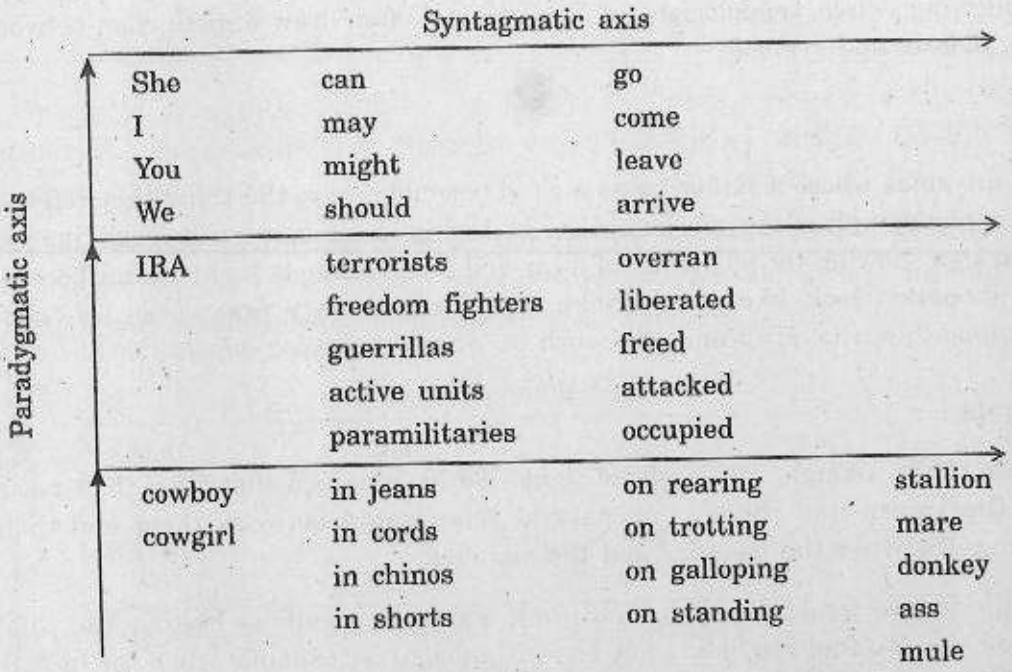
3.23 Denotation v. connotation

If you have been through the unit on **meaning**, you'll be aware that what we are concerned with here is the difference between what we referred to in that unit as **denotation** and **connotation**. The phrases 'IRA terrorists' and 'IRA freedom fighters' **denote** the same people, but they connote something quite different. (In fact, Saussure used the term 'associative relationship' rather more than 'paradigmatic relationship'–and that clearly suggests associations or connotations.) The sign we

choose to use gains much of its meaning, not so much from what it is, but what it isn't. Its meaning is determined by the rejection of all the other signs we have chosen not to use.

You may find it a little difficult to remember the difference between syntagm and paradigm. Students sometimes find it a bit easier if they remember that:

- the contents of your wardrode = **paradigm**
- what you are actually wearing = **syntagm**



As you can see from the above example, a paradigm is a set of associated signs which are all members of the same category. In language, the idea is fairly obvious, but don't forget that semioticians see other sign systems as having the same features as language. Thus, in TV the range of transitions between shots, cut, fade, dissolve, wipe, fancy computer effects and so on constitute a paradigm. The transition effect which is chosen signifies through its opposition to the other signs in the paradigm. Imagine, for example, those slow-motion, backlit, soft-focus shampoo ads which have dissolves from one shot to another. What difference would it make if they had straight jump-cuts instead. The meaning of the sign would also be changed by the genre. Imagine the same slow dissolves in a pacey Coke ad.

The paradigmatic analysis of a media text involves looking at the opposition between the choices which are actually made and those which could have been made. This structuralist analysis of texts tends to focus on binary oppositions.

3.24 Semiotics—Icons, indexes, symbols

At about the same time as Saussure was developing semiology, the American philosopher **C. S. Peirce** was developing semiotics (as it tended to be known in the US and is now generally known across the world).

Following Peirce, semiologists (of semioticians) often draw a distinction between *icons, indexes* and *symbols.*

Icons

Icons are signs whose signifier bears a close resemblance to the thing they refer to. Thus a photograph of me can be said to be highly iconic because it looks like me. A road sign showing the silhouette of a car and a motorbike is highly iconic because the silhouettes look like a motorbike and a car. A very few words (so-called onomatopoeic words) are iconic, too, such as *whisper, cuckoo, splash, crash.*

Symbols

Most words, though, are symbolic signs. We have agreed that they shall mean what they mean and there is no natural relationship between them and their meanings, between the signifier and the signified.

In movies we would expect to find iconic signs–the signifiers looking like what they refer to. We find symbolic signs as well, though: for example when the picture goes wobbly before a flashback. Certainly the 'real world' doesn't go wobbly when we remember a scene from the past, so this device is an arbitrary device which means 'flashback' because we have agreed that that's what it means. The road sign with the motorbike and car has, as we have just seen, iconic elements, but it also has symbolic elements: a white background with a red circle around it. These signify 'something is forbidden' simply because we have agreed that that is what they mean.

Indexes

In a sense, indexes lie between icons and symbols. An index is a sign whose signifier we have learnt to associate with a particular signified. For example, if we see someone walking down the street with a rolling gait, (manner of walking) we

may associate the rolling gait with the concept of 'sailor'. We may see smoke as an index of 'fire'. A thermometer is an index of 'temperature'. Peirce gives the examples of a weathercock, a barometer and a sundial.

In old movies, when they need to show the passing of time, they may typically show the sheets bearing the days of the month being torn off a calendar–that is *iconic,* because it looks like sheets being torn off a calendar; the numbers I, 2, 3 etc., the names January, February etc. are *symbols–they* are purely arbitrary; the whole sequence is *indexical* of the passing of time–we associate the removal of the sheets with the passing of time.

Don't think, though, that these three categories are mutually exclusive. A sign could very well be all three at the same time. For example, TV uses all three at the same time–a shot of a man speaking (iconic), the words he uses (symbolic) and the effect of what is filmed (indexical).

Don't think either that because a sign is iconic then it is in some way more natural than any other sign. With any kind of sign, we always have to learn the cultural conventions involved.

"Convention is necessary to the understanding of any sign, however iconic or indexical it is. We need to learn how to understand a photograph... Convention is the social dimension of signs... : it is the agreement amongst the users about the appropriate uses of and responses to a sign." Fiske (1982)

3.25 Semiotics—Signification : Signification and Ideology

Signs are not 'value-free'

If you have looked at the section on Semiology and Culture, then you will be aware that a question fundamental to semiotics is the way that the values of our culture (or sub-culture) are incorporated into the sign-systems we use. This is a theme which recurs again and again in communication studies, as you can see from the section on codes and ideology.

All such claims relate to the concept of ideology, which you will find particularly important in your study of the mass media.

3.26 Sign-systems and 'cultural baggage'

If you've read through the previous sections on semiotics, you may recall Gillian Dyer's reference to the *'reader's cultural knowledge of a system'*, which allows the reader to see the stallion in the Marlboro ad as signifying freedom. Sociologist have emphasised that language exists as a structured system of symbolic representations. We do not live among and relate to physical objects and events. We live among and relate to *systems of signs with meaning*. We don't sit on a complex structure of wood, we sit on a stool. The fact that we refer to it as a STOOL means that it is to be sat on, is not a coffee table. In our interactions with others we don't use random gestures, we gesture our courtesy, our pleasure, our incomprehension, our disgust. The objects in our environment, the gestures and words we use derive their meanings from the *sign systems* to which they belong.

The sign systems we use are not somehow given or natural. They are a development of our culture and therefore carry cultural meanings and values, cultural 'baggage'. They shape the consciousness of individuals, forming us into social beings.

The French philosopher and psychoanalyst Julia Kristeva expressed it this way: "What semiotics has discovered ... is that the law governing ... any social practice lies in the fact that it signifies; i.e., it is articulated like a language." (quoted in Billington *et al.* (1991).

The important idea in what Kristeva says is that *any* social practices is 'articulated like a language'. Any social practice has meanings which arise from the code it uses. Everything in our social life has *the potential to mean*. Not everything does mean. Wearing clothes in our society doesn't signify much in itself–though not wearing them certainly does! But *what* clothes we wear–that's a choice that signifies something. In any institution, senior managers are immediately recognised by their expensive pin-stripe suits, Communication Studies, Photography and Art & Design lecturers are recognised by their lack of ties, departmental secretaries by their stiletto (high) heels–and so on. In Algeria recently a young woman was shot by so-called Islamic fundamentalists–her failure to wear the veil signifed her refusal to accept Islamic law and Algerian men who do not wish to risk being seen as having espoused European values would be well advised to wear an Islamic beard.

Since the codes we use are located within specific cultures, it should not be surprising that those codes express and support the social organization of those cultures. From this point of view there is no such thing as meaning which is independent of the ideological and political positions within which language is used.

Many analysts have drawn attention to the way that codes express and maintain existing power relationships. The French sociologist, Bourdieu, for example, considers that 'every linguistic exchange has the potential to be an act of power' (1992). He highlights the way that the close correspondence between social structures and mental structures fulfils a political function. For him systems of symbols are not merely systems of understanding, they are systems of *domination*.

Thus, signification is not neutral, value-free. Therefore, Marxist critics of literature and the media have placed so much emphasis on the 'politics of signification.' If discourse is not merely a reflection of reality, but actively constitutive of it, then those who control the discourse control the reality. Therefore we have seen underprivileged groups (women, blacks, workers or their supposed champions, the Marxist intellectuals engaged in an assault on the dominant signifying practices.) For example, Eagleton describes Julia Kristeva's language as opposed to all fixed, transcendental significations; and since the ideologies of modem male–

"dominted class-society rely on such fixed signs for their power (God, father, state, order, property and so on), such literature becomes a kind of equivalent in the realm of language to revolution in the sphere of politics". Eagleton (1983: 188)

Roland Barthes & 'second-order signification'

One of the most expert and elegant practitioners of semiology was the French philosopher, Roland Barthes, whose style is immensely witty and incisive. His masterly works cover the semiotics of subjects as diverse as the classics of French Literature, pasta adverts, magazine photos, Citroen cars and wrestling. During the couse of the development of structuralism, the 'linguistic turn' in philosophy, anthropology, sociology and so on became so dominant that Barthes was prepared to consider the reversal of 'Saussure's classification and consider that semiology is a part of linguistics. Though Barthes did not take this as far as later post-structuralists were to develop the primacy of language, his underlying idea is that semiology itself is implicated within the significances with which language is laden. Thus, there cannot be 'method' (semiological, scientific, sociological, linguistic, whatever), which can claim to be outside of the values, ironies and aporias of language.

3.27 Connotation

Barthes draws an important distinction between what he refers to as different *orders of signification*. The first order is, for example, the iconic sign where the

photograph of the car means the car. In the *second order of signification* there is a whole range of *connotations*. Barthes, in the 'Rhetoric of the Image' (1977) argues that in photography the denoted (first-order) meaning is conveyed through the mechanical process of reproduction. Connotative (second-order) meanings are introduced by human intervention–lighting, pose, camera angle etc.

We immediately know that these fonts are 'wrong' :

Son of Dracula

GONE WITH THE WIND

Ye Olde Tea Shoppe

Computers Unlimited

But in what sense are they 'wrong'? They are wrong because in our culture those fonts are not used in that way. When we look at connotations we are looking at the activation of meanings deeply rooted in our culture.

The connotations of signs become particularly important when we look at the use ofsigns in advertising. A photograph of a car certainly refers to the signified car in the real world, but it can also connote virility, freedom, wealth etc. An advert for an expensive whisky shows the bottle together with crystal glasses on a table in front of an open fire. At the back of the room, the shelves are full of leather-bound books. These books do not simply signify books, they also connote a high level of education and wealth. They are therefore signifiers of membership of a certain social class. This is what is referred to as *second-order signification.*

Myth

Second-order signification, then, is what we have elsewhere referred to as *connotation.* But it is also what Barthes refers to as *myth.* Barthes quotes in *Mythologies* (1975) the example of a photograph on the cover of the magazine *Paris Match.* It is of a black soldier wearing a French uniform. He is giving a military salute and his eyes are gazing intently upward, no doubt at the French tricolore flag. That, as Barthes says, is the meaning of the photo. That is the meaning in terms of the first order of signification, that is what the photo *denotes.* But

Barthes goes on to explain the further meaning of the photo. The further meaning, the second order signification *(connotation)* must arise from the experiences we have had and the associations (connotations) we have learnt to couple with signs.

However, such connotations cannot be independent of the culture we live in and within which our sign-systems operate. The *sign* of this particular soldier becomes the *signifier* of the cultural values that he represents in the photograph. That takes us into what Barthes refers to as *myth*. Under the eration of this myth, the sign becomes a second-order signifier. The signified is: 'France has a great empire; all her sons, without distinction of colour, serve faithfully under the French flag and that there is no better answer to the critics of colonialism than this black's zeal in serving his supposed oppressors.'

Third-order signification

Third-order signification is a matter of the cultural meanings of signs. These cultural meanings derive not from the sign itself, but from the way that society uses and values the signifier and the signified.

We draw meanings from the stock of images, notions, concepts and myths which are already available in the culture in a particular context and at a particular time: that

Clearly, Barthes sees the photo as being much more than a signifier signifying merely its signified, the black soldier saluting. He is concerned here with the *ideological* import of the photograph. By ideology we mean more or less what Barthes

himself prefers to refer to as a *mythology:* the *sets* of *myths* which operate as organising structures within a culture, organising the meanings which we attach to the signs. (1957)

In Barthes's view the function of myth is to legitimise bourgeois ideology. Its function is to present to us a 'reality' which serves the interests of the bourgeoisie in such a way that the values incorporated in that 'reality' appear to be quite natural, taken for granted, common sense *(allant de soi).*

Practical work

In your practical work, semiotics should playa major role, particularly at the stage where you are analysing existing artifacts. Don't simply take them at face value; try to use semiotic analysis to explore below the surface of the signs. Say many individuals in your society regularly read a particular magazine: take what appears to be a typical double page spread-what are the signs in it? Linguistic, photographic, layout-look at them in terms of signifiers' and 'signifieds'. What is denoted, what connoted? What myths are activated-myths of the subject under discussion, myths of this readership?

3.28 Criticism of semiotics

Semiotics has been enormously influential in cultural studies. In holding out the prospect of a scientific analysis of the full range of codes used in 'mass' culture, 'popular' culture, 'consumer' culture, 'subcultures' (depending on the commentator's emphasis) semiotics was bound to appeal to cultural critics and anthropologists. It is easy to see why a method which promised to explain language, film, TV, radio, newspapers should have become so appealing. Certainly, in the masterly analysis of a Roland Barthes, the sense that one is witnessing a series of revelations cannot be avoided. But there are criticisms to be made of the semiotic method, however enjoyable Barthes's (and however apparently profoundly impenetrable others') writings may be.

Perhaps the most serious objection, is that made by Don Slater, namely that the project undertaken by Saussure is to.

[describe] the internal structure of systems of meaning, and in answer to a rather new kind of question, not *'Why* did she say that?', *'Why* are BMWs (a very expensive car) a status symbol'? *'Why* in our society does technology connote masculinity?', but rather *'How* does the structure of a sign system make possible,

offer certain resources for, certain statements, meanings and associations, and in reliable ways?', *How* is orderly and intelligible meaning sustained?' (1997 : 141)

As Slater points out, however interesting such a project may be, it is not a project of social explanation. Referring to an analysis by Judith Williamson (1970) of a perfume advertisement, he points out that although the connection between a certain kind of femininity represented by Catherine Deneuve and Chanel No. 5 (a famous perfume) may be ontologically arbitrary (i.e. there is no necessary or natural connection between them), the connection is certainly not socially arbitrary and we cannot discern the 'complex history of social actions and motivations through which they have been connected (patriarchy, commerce etc.)' simply by examining the connections of the formal elements within a text. As a result of semioticians' attempts to do just that, 'the structure is [...] treated as a cause, an answer to a social why question rather than a structural how question'.

Out of such attempts grows what Slater terms 'theoretical arrogance', though it remains unclear, as Slater points out, why the semioticians' accounts of the deep structure of texts should be any better, more reliable, more accurate or more scientific than anyone else's. Indeed, I do not myself note in Barthes's readings of popular cultural forms or in his reading of the French novelist Balzac anything which strikes us as qualitatively different from, say, the conventional literary criticism we were familiarized with at school. We have dealt with this 'theoretical arrogance' elsewhere, for example in the Marxist approach to the media or in the sections on the New Audience Research and it strikes one as a serious and fundamental criticism.

More serious, though perhaps more academic, is the charge that semiotics was on a hiding to nothing in the first place, since structuralism and post-structuralism derive from a fundamental misunderstanding of the relationship between the specialized study of linguistics and the more general philosophical conclusions which could (or could not) legitimately be drawn from it. Infact, if one accepts Chomsky's view of structuralist linguistics, then the insights which it provides are essentially very limited. According to Chomsky, Saussure's insistence that the only proper methods of linguistic analysis are segmentation and classification means that his method is inappropriate for discovering the deep structure of language. In Chomsky's view, 'the careful and serious attempt to construct "discovery procedures", those techniques of segmentation and classification to which Saussure referred ... was a failure–I think that is now generally understood.' (1968). Chomsky also challenges the assumption underlying semiotics that all social actions are 'structured like a language', as is so often claimed. Commenting on the work of Levi-Strauss, the French anthropologist and major figure in the development of structuralism, he

observes that in the study of kinship systems 'nothing has been discovered that is even roughly comparable to language in these domains'. Whilst recognizing the seriousness and thoughtfulness of Le´vi-Strauss's endeavour, Chomsky does not 'see what conclusions can be reached from the study of his materials beyond the fact that the savage mind attempts to impose some organization on the physical world– that humans classify, if they perform any mental acts at all. Specifically, Le´vi-Strauss's well-known critique of totemism seems to reduce to little more than this conclusion.'

For a thorough critique of structuralist thought, please refer to Thomas Pavel's masterly *The Feud of Language* which analyzes the structuralist and post-structuralist enterprise in meticulous detail, though his contempt is often quite evident for a method that 'offered just that dash of formalism necessary to create the impression of scientific rigour; moreover its simplicity permitted easy universal application and freedom to modify the details at will' (1989 : 132). He criticizes Le´vi-Strauss for the 'levity' with which he undertook to apply structural linguistics to the analysis of myth and Barthes for basing his narrative syntax on the work of Hjelmslev who had never developed a syntax in the first place.

According to Pavel the obscurity of much writing in structuralism and post-structuralism is simply due to the discomfort the authors felt at being so ill-prepared to confront the philosophical problems of language: 'stylistic obscurity became the mark of a scientific status that noboby had either the competence or the courage to doubt.'

Finally, there is the question of the underlying assumption of linguistic determinism which underpins much cultural studies research (see for example the quotations in the section on codes and ideology). As we have seen above, it is argued (oversimplifying somewhat) that we are prisoners of our language and other signifying systems. Whether this argument can reasonable be sustained may be questionable. (See the section on the Sapir-Whorf hypothesis.) Steven Pinker, building on Noam Chomsky's idea of 'Cartesian linguistics' (i.e. that the brain has language acquisition device with an understanding of 'universal grammar' built into it at birth) proposes that the acquisition of language is an instinct. This has far-reaching consequence : "Thinking of language as an instinct inverts the popular wisdom, especially as it has been passed down in the canon of the humanities and social sciences. Language is no more a cultural invention that is upright posture. It is not a manifestation of a general capacity to use symbols: a three-year-old ... is a grammatical genius, but is quite incompetent at the visual arts, religious iconography, traffic signs and the other staples of the semiotics curriculum...

... Once you begin to look at language not as the ineffable essence of human uniqueness but as a biological adaptation of communicate information, it is no longer tempting to see language as an insidious shaper of thought, and, we shall see, it is not." Pinker 1994 : 18-19

Like Chomsky, Pinker argues that other, non-linguistic, signifying practices cannot be considered to be 'structured like a language' and he does indeed produce compelling evidence that some learning mechanisms appear to be developed for language itself and not for the more general manipulation of symbols. If we accept that, then the whole semiotic project seems to be dead in the water. Further, if we accept that language is an instinct, then, as Pinker argues, we must largely reject the notion that language shapes our thought. Since much of cultural studies depends on an acceptance of both of the propositions which Pinker rejects, then much of cultural studies must surely be as dead. As Pinker puts it :

"Chomsky attacks what is still one of the foundations of twentieth-century intellectual life–the 'Standard Social Science Model,' according to which the human psyche is moulded by the surrounding culture." Pinker) 994 : 23.

It may be possible to extend the argument from Cartesian linguistics to other a pects of the human mind as well. As Chomsky points out, a moment's reflection suggests that is rather curious that we don't suppose for a moment that the human organism learns, as a result of experience, to sprout arms rather than wings so it's not immediately evident why we should suppose that mental capacities are not also largely genetically determined. Although rejected by some, Chomsky's arguments in favour of an innate universal grammar are widely accepted. So why should we not suppose that the development of personality, behaviour patterns and cognitive structure are similarly genetically determined? Chomsky refers back to Plato's argument that we can't possibly know everything we know simply as the result of experience. We must have some innate knowledge.

"To question that is about as sensible as to suppose that the growth of an embryo to a chicken rather than a giraffe is determined by nutritional inputs." Chomsky (1996 : 10).

Plato's argument that much of what we know be remembered from a 'prior existence' seems quiant (to must of us anyway), but Chomsky suggests, replace 'prior existence' by 'genetic endowment' and you have an explanation of innate knowledge which is consonant with modern biology's explanations. For example, Pinker demonstrates convincingly that human beings are born with an instinct to interpret space and spatial relationships, including the notion of the self-identity of

an object. That is not, of course, to suggest that the environment and our experience play no role. A child born with cataracts will remain blind if not operated on early in life, even though the physical equipment to see remains intact; a child deprived of language during her formative years will not acquire anything more communicative than a kind of pidgin; a child born with perfect limbs will develop rickets if malnourished. And there appears to be' convincing evidence that a child who is abused stands a good chance of becoming an abuser when an adult, a child deprived of love will find it difficult to reciprocate affection etc. Nevertheless, if we accept the proportion that the Chomskyian view of language acquisition may be extended to other mental capacities such as personality and cognition, the radically relativist rejection of any such notion as an essential human nature (a rejection generally associated with postmodernist claims about alterity and the Other), than much of postmodernism must also appear questionable. Referring to psycholinguist Jerry Fodor's attack on relativism, Pinker states :

"For Fodor, a sentence perception module that delivers the speaker's message verbatim, undistorted by the listener's biases and expectations, emblematic of a universally structured human mind, the same in all places and times, that would allow people to agree on what is just and true as a matter of objective reality rather than of taste, custom and self-interest." Pinker 1994 : 405).

As pinker readily confesses, its 'a bit of a stretch to proceed from the identification of language acquisitions device and universal grammar to such a far-reaching proportion, but it looks to me as if cognitive and evolutionary psychology and linguistics are heading in that direction, at worst no more speculatively that the cultural theorists and a best a great deal more comprehensibly.

Pinker's evaluation of the seriousness of the challenge posed to the "Standard Social Science Model's is strongly conveyed in the following passage on essentialism:

' ...in modern academic life 'essentialist" is just about the worst thing you can call someone. In the sciences, essentialism is tantamount to creationism. In the humanities, the label implies that the person subscribes to insane beliefs such as that the sexes are not socially constructed, there are universal emotions, a real world exists, and so on. And in the social sciences, "essentialism' has joined 'redutionism', 'determinism' and 'reifiction' as a term of abuse hurled at anyone who tries to explain human thought and behaviour rather than redescribe it." Pinker 1998:325-6

3.29 Conclusion : Viewed through the notion of Structuralism and Post-structuralism

Semiotics or semiology is an example of the school of social philosophy known as *structuralism,* Indeed semiology may be seen as the paradigmatic form of structuralism. The basic permise of structuralism is that societies and sociological f o cultural practices can be analysed, along the lines of a language, as signifying systems. Thus we find structuralist methods applied not only in Saussure's linguistics, but also in Brathes' broader cultural critique, the anthropology of Claude Le´vi-Strauss and the psychoanalysis of Jacques Lacan. In structuralism, the subject is decentred, in other words the central focus on the individual in much social analysis is replaced by focus on the srtructures, of which the individual is just another element (see the section on the decentred self).

In post-structuralism, of which the later works of Barthes are already a indication, the decentring of the subject is taken further, to such an extent thart post-structuralism may be seen as anti-humanist, and thus–at least potentially–opposed to the great metanarratives of modernity. Ultimately, since in structuralism subject and structure are closely interwined, an attack on structure must also entail an attack on the notion of the subject.

I have written above that you should, in your practical work, 'try to delve beneath the surface of the signs'. That is in fact a modernist position, a belief that there is something behind signs and that if the media production of signs was used responsibly and 'truthfully', then it could be used for the benefit of society. The Marxist critique of the media, for example, in analysing .the ideological framework within which media messages are situated, presupposes that it is somehow possible to see through distorted representation to a reality beyond representation. The Glasgow Media Group's work, for example, in comparing TV representation of industrial disputes with other, supposedly more objective reports, assumes that it is possible to go beyond the televisual representation to some sort of truth about the reality of those industrial disputes, Jürgen Habermas, in his theory of communicative action, or in his presentation of his understanding of the public sphere, presumes the possibility of undistorted communication. Barthes, however, in his later, postructuralist phase, argued that language is not transparent. We can't look through it to a reality behind the language. Though post-structuralism is, as the term implies, in many ways a rejection of structuralism, it may also be seen as the logical development of it. Remember that Saussure insisted that meaning resides, not in

a relationship between a signifier and its referent in the sense of some 'thing out there' but between the signifier and its signified in the sense of a metal concept and also through the relationship of arbitrary signs to one another. Thus, the Saussurean system already has within it a view of codes as self-referential systems.

Where the notion of the sign is concerned, the significant difference between structuralism and post-structuralism is the privileging of the signifier in post-structuralism. There is no simple correspondence between signifier and signified (or referent). Lacan speaks of signifiers slipping and sliding and Derrida coined the term 'floating signifiers' to refer to signifiers which have a no better than uncertain. indeterminate relation to any possible extralinguistic reality. Oversimplifying, *structuralism* tends to assume a 'depth model'–in other words we can probe behind a text to find the truth and in doing so somehow stand outside language, for example using the 'metalanguages' of linguistic, sociological or philosophical analysis. In contrast, *post-structuralism* tends to place the emphasis on the activity of the reader in a productive process of engaging with texts and the subject him/herself who does this engaging does not have any kind of stable identity and unified consciousness, but is him/herself structured by language (see the ection on decentred self). We can't stand outside language, there can be no metalanguage, or, in Derrida's terms, 'there is no outside of the text'. No signifier is ever free of any other signifier, all linked together in infinite semiosis. Thus no signification is ever closed. (In this connection, see also the section on postmodemism)

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3.31 Question Bank

1. What is language? Describe the functional aspects of language at the levels of Syntax, Semantics, and Pragmatics.
2. Elaborate Saussure's notion of *Signifier and Signified* and illustrate your answer with suitable examples of arbitrariness of signs.
3. What are the important roles of *Signs* in language as a system of human communication?
4. Write shortly about the 'Second-Order Signification'. How are connotations of Signs interpreted from the social perspective?
5. What is the relationship between semiotics and culture?
6. **Write short notes on the following :**
   (a) Denotation and Connotation
   (b) Syntagmatic and Paradigmatic
   (c) Symbol-Index-Icon
   (d) Myth
   (e) Structuralism and Post-structuralism.

Milinda : Reverend Sir, will you debate with me again?

Nagasena : If your majesty will debate as a scholar, yes, but if you will debate as a king, no.

Milinda : How is it then that scholars debate?

Nagasena : When the scholar debate one with the other, your majesty, there is summing up and unraveling, there is also defeat, and yet the scholars do not get angry at it. Thus do the scholars debate, your majesty.

Milinda : And how do the kings debate?

Nagasena : When the kings debate, your majesty, they state a proposition, and if anyone differs from them, they order his punishment saying "Inflict punishment upon him." Thus, your majesty, do the kings debate.

–Milind Panho

This excerpt from Milind Panho reveals even a crucial fact of today's communication system–how do we communicate with each other without any Manipulation or domination? In this connection, we will discuss Nyaya theory and Habermas's Philosophy of communication.

3.32 Objective

The main source is obviously the productive force of our technocratic society. Keeping in mind this technical control of this productive force in a capitalist society through media, let us scrutinize the related sources which jeopardize rational intersubjectivity :

1. In an intersubjective (relationship between two subjects) position, if the dialogue is controlled by the dominant "other", the dialogue ends.

2. If the intersubjectivity is controlled by the dominant, repressive or coercive institutions, the communication ends. Furthermore, if the institutions obviously have a behavioural set up, the creative dialogue also ends.

In this state of affairs, the obvious question is, how to restore communication without manipulation. To describe the process of restoration of dialogue, I will cite here suggestions made by Indian Nyaya Theory, Habermas's theory of emancipatory dialogues.

3.33 Nyaya Theory of Debating

In this connection, one can compare this theory of CC with Nyaya theory on modes of debating or "Katha" (speech, discussion). Matilal (1985 : 9-22) had already discussed in detail the family resemblance between Greek and Indian method of "Dialectic" or method of disputation. I attempt to set it within the Habermasian critical theory.

In the Nyaya theory, 'Katha', instead of monologue is, rather a dialogue between vadi (propagator) and prativadi (refutor). There are three types of 'Katha' according to Nyaya Philosophy, viz. 'Vada', 'jalpa', 'vitanda'.

"When two opposite parties dispute over their respective theses, in which each of them tries to prove his (sic) own thesis with reasons, each of the thesis is called vada." (Dasgupta, S. 1922/1975 : 360). Vada from the perspective of Critical Theory of Habermas, is a "rational problem solving discourse" based on *praman* (proof) and *tarka* (evidence and argument) with no interest of winning the dispute. The only purpose of this rational conversation (ukti-pratyukti) is 'tattvanirnaya' or "Determination of 'truth' with no humiliation of the opponent". Thus, it depends on the mutual understanding between vadi-prativadi (the two debators), that triggers the decision-making policy. "Vada" is also related to Caraka's concept of "sandhya sambhasa" (friendly and congenial debate). Only the seekers after truth *(tattvabubhutsu)* can participate in this type of debating.

On the otherhand, "Jalpa means a dispute in which disputants give wrangling rejoinders in order to defeat their respective opponents." (ibid) In this case, one of the debaters must win and the winner may be determined by the judge or panel of judges. Uddotkara mentioned that this type of debate needs the providing and rebuttal "based upon equivocation (Chala) and parity of reasoning (jati) and censure of all kinds." (Matilal, 1985 : 13) "Chala means the intentional misinterpretation of the opponents' argument for the purpose of defeating him (sic). Jati consist in the drawing of contradictory conclusions, the raising of false issues or the like with deliberate intention of defeating an opponent." It leads to a manipulative discourse generally found in popular interviews and chat shows.

Thirdly, "A Jalpa is called vitanda when it is only a destructive criticism which seeks to refute opponents' doctrine without seeking to establish or formulate any new doctrine." (Ibid) It is, from the standpoint of critical theory, a latent or non-latent strategic systematically distorted communication to manipulate others' argument by using *chala, jati* etc. and there is no question of proving the counter-

thesis. The Vitanda pervades today's political discourse or language of competitive advertisement.

3.34 Habermas's Philosophy of Language

Chomsky and Habermas–two exponents of modern linguistic philosophy, are altogether polarized in their philosophy as Chomsky is solely focussing on human essence and Habermas is concentrating on the sociological issues related to language. A bridge may be built to connect the positions of these two scholars with a view to develop emancipatory theory of communicative praxis, where one can bring together psycholinguistic theory of Chomsky and the social theory of praxis mainly developed by Habermas.

Both Chomsky and Habermas showed that the productive forces are the same in both Industrial Capitalism and State Socialism. Habermas showed that, it is only the realm of productive relation (interaction), one must turn to establish emancipatory practice by transforming/re-naturalizing social code. As the representation by external nature is limited by the development of forces of production, the repression by internal nature continues to exist without any scope of cultural/superstructural change. This is what is done by Friere, Illich, Boal in the field of education.

When speech is reduced to labour in a technocratic society, determined by the forces of Production, linguistic practice, is concealed or fixed/closed. We then have a distorted communication. Habermas critically opposed and attacked this "systematically distorted communication" in both scientific (as in the case of vocabulary C of Orwellian Newspeak. Please see Orwell's novel "1984") and everyday discourse (as in the case of vocabulary A and B or Orwellian Newspeak). This distortion reveals the relation of non-discursive formation of power with Externalized Language or Speech act as well as Internalized Language.

The negation of this distorted communication leads to the establishment of a social version of "ideal speaker-hearer relation", free from all constraints of behavioural manipulation and domination arising out of ideologies and neuroses and thus this critical theory proposes "Communicative Competence" (dialogue without domination or manipulation; henceforth CC), supplementing linguistic competence of Chomsky. This emancipatory practice is related to enlightened discourse free from domination which is proposed as "communicative Competence" by Habermas in his critical theory.

In this ideal speech situation, only the force of better argument would decide the issue. It is only achievable if all members of society would have equal chance of participating in discussion. According to Habermas, "Communicative Competence" is defined by the ideal speaker/hearer's mastering of the 'Dialogue Constitutive Universals' (DCU) irrespective of the actual restrictions under empirical conditions." Pure cognitive-instrumental thought is revealed in DCU, which presupposes "Mutuality of understanding" between non-privileged non-onesided horizontal existences of ideal speaker-hearer. Thus rationalization of discourse leads to emancipation from distorted communication. This mutuality is to be understood as "horizontal mutual aid" in the anarchist sense of the term.

Through this practice negated Chomsky's asocial linguistic competence, Chomsky's later work approved the necessity of (Habermasian?) "interaction free from domination" as Chomsky argued, "The nature of Western systems of indoctrination was not perceived by Orwell and it is typically not understood by dictators, who fail to comprehend the utility for propaganda of a critical stance that incorporates the basic assumptions of official doctrine and thereby marginalizes authentic and rational critical discussion, which must be blocked". (Chomsky, 1987 : 281).

Though Chomsky's emphasis here is on the manipulation and distortions of discourse created by authoritarian manipulation, the last line of the above mentioned quotation foregrounds the necessity of rational and critical discussion, which is, as I understand, related to Habermasian concept of emancipatory discourse, which is blocked both by the forces of production as well as relation of production. Emancipation is only possible when the constraints of both external (forces of production related to instrumental action or labour, rational purposive action), internal (social codes, communicative action, or norms or relation of production) nature can be combated. Thus Habermas wrote : "Emancipation from the compulsion of internal nature succeeds to the degree that institutions based on force are replaced by an organization of social relations that is bound only to communication free from domination. This does not occur directly through productive activity of struggling class (including the critical activity of reflective sciences)" (1972 : 53).

Habermas, suggested a 'transcendental place' where 'ideal speaker-hearers' meet together by negating the social space of symbolic order of behavioural manipulation. Habermas named this transcendental space as "life-world". The agreement made between these speaker-hearer on the basis of intersubjective interaction free from all types of coercive or ideological manipulation. Though Chomsky's speaking subject are transcendental subjects and devoid of the social space or life-world or habitat,

Habermas may also be accused of being transcendental as Foucault pointed out that every intersubjective discourse is subservient to the politics of power. Wellmer also argued that "The concept of an ideal community of communication cancels the constitutive plurality of sign-users in favour of a transcendental subject. (Dews, 1987 : 223).

However, in an interview, Mitchal Fouccoult (1984) emphasized the importance of discussion or the 'game' of reciprocal interaction or 'serious play of questions and answers'. By discarding the polemics, Foucopult foregrounded the serious game of question-answers. This game is at a time "pleasant and difficult-in which each of the two partners takes pains to use only the rights given him by the other and by the accepted form of dialogue. "Whereas in polemic there is no such interrogations and the polemicist tells the truth in the form of judgment and by virtue of the authority she has conferred on her/himself. The polemic, in the present technical society is pervaded by 'Culture of critical discourse', a context/situation-free language used by technical intelligensia, the servants of power (Gouldner, 1979) "Speech becomes impersonal. Speakers hide behind their speech. Speech seems to be disembodied. de-contexualized and self grounded." One may also think of deploying deconstructing technology in the realm of dialogue. In an intersubjective position, as deconstructive technology reveals, x does not only reveal x's points only or y is only y's points, but y's points may be immanent in x's point of view and vice versa. This reciprocal inversion of perspectives give birth to a new paradigm of dialogue.

One may argue that critical theory of universal pragmatism (a la Habermas) (a) ignores then lurality of sign-users and (b) constitutes an institutional framework from transcendental or ideal speech situation (c) chooses technical means (Like Nyaya Theory) which may lead to philosopher–King's subordination in decision-making (i.e. does not evoke plural participation).

From these perspectives, one may introduce heteroglossic (Bakhtin) Polylogue that try to break at a time the repression by internal nature and power relation in interaction. Instead of metaphoric two participants we must have many participants involving in many polylogues. The Jaina philosophers may refer to this plurality of truth-seeking logic as 'anekanta'. This anekantavada (philosophy of many perspectives or standpoints) evolves out of the revolt against the monistic absolutism of Brahministic authoritarianism. According to this anekanta-Theory, the validation of truth can be sorted out by different ways (nyaya) or standpoints. They introduced the polylectics of syadvada which is synthesizes the different partial standpoints by denying the metanarrative of absolute. Jaina affixed 'may be' (Syad) to mere

affirmation or negation or inexplicable phenomena. Thus it opens up a non-predeterministic open-ended project to solve the problem of validity of argumentation.

This poly logical endeavour makes end of both monologue and dialogue and opens up an arena for equal participation of many truth seekers in a platform of free and just society. Here no repression can block the innate Language-faculty and here infinite sets of sentences can be produced without interruption. In this theory, only the Vada, no jalpa, nor vitanda, exists in the interaction. Other manipulative strategies are abandoned to achieve polylogue through "anti-grammar = grammar", which will establish the "Linguistic Human Rights". In this way, Vada is not only limited to the technical discussion of Naiyayiks, but Vada is open to all the social human beings struggling against any form of manipulation.

This new grammar of tolerant rationality (opposed to violent technical rationality) is in opposition with the model of prescriptive grammar and hence it is an Anti-grammar, which is within the biology of speaking subjects and is not obstructed by outside sociality or institutionalized prescription of grammar. As bowlers like Kapil Dev or Walsh do not need to know the rules of Aerodynamics to swing the ball, so also language-learners do not need to know the fragmented rules of grammar to distort the gestalt (whole-ness) effect of language as a whole.

Anti-grammar, which is equivalent to "grammar" or byakaran (as it is misspelt by most speakers of Bangla and this misspelling of byakaran is due to the actual pronunciation: "bEkaron"). The purpose of choosing these misspellings is to attest the perception of educants and to represent their consciousness, which is antithetical to the existing form of grammar-education. This "anti-grammar = grammar" comes out from the deschooling, third/fourth theatre etc. The prefix (anti-) in "Anti-grammar =-grammar" is borrowed from several anti-words like Anti-poetry, Anti-drama, Anti-novel etc. which are frequently used in Post-Modern context of anti-establishment. It is also worth mentioning that anti-grammar is not new in the context of Bengal as we have been fortunate enough to get non-sense writer like Sukumar Roy, who established the notion of "I do not obey grammar" in his several writings.

3.35 Summary

Instead of summarization, the following excerpts from Ray's "Agantuk" is quoted to make out the notion of "Philosophy of Communication". One can analyze the following discourse to understand the above discussion :

Ranjan : You must know that football is Bengalees' lifeblood! Football, and one more thing–that you must miss in foreign.

Monomohan : What sort of thing that is?

Ranjan : That's Bengali's monopoly–you may say that it is Bengalee's invention.

Manomohan : (After thinking for sometime) rasogolla?

Ranjan : Adda! adda by sitting in the park, by the side of the lake or in coffeehouse–Bengalees cannot digest properly the daily rice without this! adda-made in Bengall!–

Monomohan : Allow me to contradict you Mr. Rakshit–(standing up from sofa)–you know, some 250 years ago there was Gymnasium in Greece?

Ranjan : That means there was lot of physical exercise?

Manomohan : No, not only physical–perhaps you know Juvenal's statement–we read that in our school days–"Mens Sana in corpore Sano"–

Sudhindra : A sound mind in a sound body!

Monomohan : Right–there was exercise of both the mind and body in Gymnasium. In Athens' Gymnasium, all the contemporary scholars Socrates, Plato, and Alchebidies, of those days gathered together and seminars on Philosophy, Politics, and Mathematics–all these are subjects for discussions-dialogue–you can read it still today. What do you call this stuff ?

Ranjan : It's also a type of adda–

Monomohan : But at the highest level–no question of maligning or blaming others–no question of lip service! Of course I do not reject Bengalee's adda–there are examples of productive adda also–but what happens in many cases–i.e. what happens in our time–now a day everything is nothing but a downtrodden twaddle! If Bengalee's adda has some level Rabindranath should also have participated in adda–

Excerupts from Satyajit Ray's 'Agantuk' (The Stranger)

3.36. Key Words

Intersubjectivity, Katha, Vada, jalpa, vitanda, forces of production, relation of production, Communicative Competence, Dialogue constitutive Universals, polylogues, anekanta–Theory, anti-grammar = grammer.

3.37. Question Bank

Long Questions

1. What are, according to Habermas, the causes of authoritarian approximation of interaction?
2. What is the solution, proposed by Habermas, for transcendending distorted communication? Do you subscribe his views?
3. Describe the Nyaya Theory of deb.·ting?

Short Questions

1. What is Communicative Competence?
2. Write a short note on "Katha".
3. What is Anti-Grammar?

CHOMSKYAN PERSPECTIVE AND SOCIOLOGY OF COMMUNICATION

3.38 Chomskyan Perspective

According to Chomsky, a normal human being can generate and interpret infinite sets of sentences out of a finite set of words. A hypothetical physical organ, Chomsky termed it as Language Acquisition Device (LAD), is responsible for this creative speaking. It is the genetic endowment of every human being. For Chomsky, the faculty of language is not at all a result of learning from the outside sociality–from our society, we only learn finite set of arbitrary signs.

Chomsky introduced a dichotomy of internalized and externalized language (henceforth IL and EL respectively). IL approach considers language as an innate system represented in the mind/brain of a particular individual, whereas EL approach concentrates on the arbitrary manifestation and social use of language. The IL approach presumes the existence of universal human nature. Chomsky mainly concentrates on the IL to find out the formal structure of LAD, which is part of our cognitive domain. For Chomsky, thus, Linguistics means only "Biolinguistics". What is missing in this enterprise is the "outside sociality", which may be investigated through EL-approach. To understand sociology of communication, we will start with the cue given by Chomsky himself, i.e., we will switch over from Biolinguistics to Sociolinguistics taking help from Chomsky himself :

> "Of course one can design a restricted environment in which such control and such patterns ... can be demonstrated, but there is no reason to suppose that any more is learned about the range of human potentialities by such methods than would be learned by observing humans in prison or an army–or in many a schoolroom". (1972 : 114)

On the basis of these statements we may now ask some crucial questions :

1. What is restricted environment?
2. What happens in this restricted environment?

From the above quotation, it is clear that Chomsky talks about some institutes: prison, army and schoolroom. These are restricted environments. Althusser, a renowned French Sociologist, called prison and army as Repressive State Apparatuses

(RSA) and school as Ideological State Apparatuses (ISA). To Answer the question No.2 and to understand the condition of Creative Speakers' condition, we will depend on different social theories. Thus, context free creative speaker will be treated as context-sensitive speaker in the next section to meet our goal to understand sociology of communication.

3.39 Sociology of Communication

What is noticeable in the present day Linguistics-scenario that the Psycholinguistics is completely devoid so Sociolinguistics and Sociolinguistics is completely out of touch with Sociology proper. On the other hand Syntax in the name of autonomy of Core or Micro-Linguistics ignores the Philosophy of Psycholinguistics, which has a distinct goal to attain human cognitive domain.

Consider first the metanarrative of creative speaking subject endowed with universal grammar a la Noam Chomsky. The algorithmic mind of the creative speaking subject is explored via syntactic analysis. The crucial question arises here is : *Do we really have human-object in such a raw state without being constrained or manipulated by the outside sociality* ?

To answer such an odd question, let me begin with the formalization proposed by Dasgupta (1988, 1993) to depict vividly the state of affairs evolving out of the explosion of Generative Grammar, Sociolinguistics and Literary Criticism:

> "[l]inguistics becomes a social science when we face the fact that speaker S of a language L has in S's brain-Constructed-as-a-mind not only I, an internal representation of L that enables S to use L, but also something amounting to E, an external representation which embodies S's awareness of the community's joint possession of L as represented in I. My 1988 paper proposes that for formal reasons S cannot construct or store a viable 'society function' capable of mapping I onto an imagined set of parallel I-representations, and that instead S allows a non-formal image of L, an external representation of discourse embodying L, to serve E. Thus E is the site where a psycho-socially real image of L is posited and imagined." (Dasgupta, 1993 : 51)

Thus our problems begin. It is clear from the quoted portion of the paragraph that (I) is an untouched site where no question of psycho-social constraints can penetrate. (I) is such an area of ideal transcendental ego or Cartesian cogito, where there is no hyphenated element like "psycho-social" properties (rather than "form") which can be posited or imagined as per modern science of enlightenment.

Phenomenologically speaking, we found a divided self in the S : one essence as represented by (I) and another one is psycho-social existence.

In this state of present post-industrial technological society, speaker-hearer are reduced to consumer-producer or buyer-seller relation. Language is commoditized. There is no question of institutionalized consumer-producer to be "ideal." Instead of "ideal" creative relationship between speakers-hearer, the producers-consumer relation has become "real" due to the institutionalized masterly intervention of ideology. The "ideal" situation inverses: the 'ideal' has become 'real' and 'real' has become 'apparent'. Thus the interplay between 'ideal' and 'real' creates a myth. The position of L produced by the S is at a time 'True and unreal' and at a time 'perceptible and imperceptible'. In this myth of "ideal speaker-hearer" (which is an inverted reality) the essential character of human being is missing, and on the contrary the dehumanized existence of them is prevailed. The Theory, the metanarrative of creative speaking subject collapses in the mastery of ideological practices inauthentic falling existence of *Dasein* (the supposed authentic human being) foregrounds veiling the authenticity. The power of creating infinite sets of sentences ends, thus ends the opportunity of free dialogues.

The (I) in S is, as Barthes pointed out, thus devoid of his/her history, childhood configuration and neurotic element. But if anyone tries to find the *locus standi* of such S in the behavioural manipulatative world, she may find that the subjectification of S's body is under the control of *dispotifs*. (I) or LAD, a physical organ cannot be imagined without accomodating a social interpretation of psyche, and that is missing in the above formalization of watertight essence of (I) as such. According to this proposed interpretation (I) of S, being contaminated by the outside sociality or unweilt, is not something transcendental or something outside psychosocial E and it is equally viable to psycho-social properties, which may be abbreviated as ψ (psi)-P. These ψ-P reasserts that the being is always in the being-in-the-(social) world as well as being-for-others.

Now the ontlogical problem of speaking subjects begins. Problems of learning Theory (LT) for the organisam 0 in the Cognitive domain (D) is LT (O, D) (Chomsky, 1976 : 18). This Theory can be regarded as function which has certain "input" (a cognitive structure of some sort) (ibid : 14). One may specifically reformulate LT (O, D) by considering O as Humans (H) and D as Language(L). They one may investigate LT(H, L) as L is strikingly different from non-humans.

But LT shows certain discrepancies as there is no place for outside sociality and its influence to the biological body of H. Therefore we need to reformulate LT by

putting Social Constraints S within this theory. Thus, natural organism H is to be reinterpreted as SH, which is a natural H bound by social constrains. This reformulation, thus, is now represented as LT (SH, L). The output, then is not infinite L, but finite L with repetitions, cliches, stereotypes and phatic communes (conventions for communication: good morning, hallo, namaskar etc.).

A serious reader of this exposition may find the affinity of these conjectures to the Post-structuralist enterprise and may want to take a cue from Frankfurt Marxists. And they may like to compare with the texts of Barthes, Foucault, Lacan or Kristeva.

Let me begin my discussion with Nietzsche. It is well known fact that Post-structuralism in general is much influenced by Nietzschean doctrines. For Nietzsche, due to the coercieve disciplinary technology of control and *"normalization"* (reader may notice the Foucaldian rephrasing!) of the instincts are blocked: " ...all instincts that do not discharge themselves outwardly turn inward–this is what I call *internalization* of man rst developed what was later called his 'soul" (1956 : 220, emphasis added). Nietzsche's argument is that this gives birth to a masochist interpretation of self that is resulted in the moral consciousness. My argument is not only confined to the moral question of reflexive self, but the *internalization* (or one may, if wishes, rephrase it in Freudian term as "repression") of threat and violence which disrupt the authenticated "soul" or innateness. Nietzsche also mentioned the "repression" of the instincts which was later on explored by Freud as Freud remarked.

> "suffering comes from three quarters: from our own body....from the outer world, which can rage against us with the most powerful and pitiless forces of destruction; and finally from our own relations with other men." (1930 : 28)

This suffering is "obvious" "common knowledge" to us (Freud, ibid: 94) and it is not an illusion which supposed be eradicated by technical intervention or inducing medicine. The different domains of state apparatures, school, prison, army, bureaucracy use behavioural technique to manipulate body-object.

From the critical Marxist standpoint the "ideal speaker-hearer" as proposed by Chomsky may be interpreted by deploying Language-labour nexus in the capitalist society. The obvious reason for mentioning Frankfurt Marxists' views here is to rethink the link between two initiators of discourse, Freud and Marx's contribution in this area. Both of them emphasized on the government of subject in and through a series of social codes.

From this perspective, the free labour of creating infinite sets of sentences is absent from the speaking subject as the non-ideal speaker-hearer speaks and hear in alienation due to the pre-established linguistic functions controlled by stimulus-response. That is, the speaking subjects are within the black box of behaviouristic management which negates the ecstasy of creation. These speaker-hearer do not speak for themselves, but they speak for the dominant other. The other control them by means of state apparatus or *dispotif* or manipulate them by using behavioural management. This institutional pressure blocks the physical organ for linguistic creativity and without wiping off this pressure, scientist could not have the opportunity to understand the structure of human mind via linguistic data. In the behavioural universe, words and concepts tend to coincide, or rather the concept tends to be absorbed by the words. The word become cliche and cliche governs the speech and writing. Interaction is deprived of the mediation, which are the stages of the process of cognition and cognitive evaluation. Language is telescoped, condensed and abridged (Marcuse, 1964). Intersubjectivity has become authoritatively ritualized by repetitive use of language. These all are the result of technological rationality translated in social behaviour which is a result of technological control and manipulation. The position of subject that is necessary for prediction is constructed in the interaction of somatic drives in unconscious by the contradictory outside sociality.

Barthes thinks it as a "scandal" as he brilliantly put it :

> "When I myself was a public square, a sook ; through me passed words, tiny syntagms. bits of formulae, and no sentence forned, as though at were the law of such a language. This language at once very cultural and very savage, was above all lexical, sporadic; .... This non-sentence was in no way something that could not have acceded to the sentence, that might have been before the sentence; it was ; what is eternally, splendidly outside the sentence. Then potentially all linguistics fell, linguistics which believes only in the sentence and always attributed an exorbitant dignity to predicative syntax (as the for of logic, of a rationality) ; I recalled this scientific scandal..." Theory (Chomsky) says that the sentence is potentially infinite (infinitely catalyzable), but practice always obliges the sentence to end.
>
> Theory did not consider like science, subjects body as a historical subject; for it is at end of a very complex process combining biographical, historical, sociological and neurotic elements (education, social class, childhood configuration, etc.)" (Barthes, 1975)

What is haunting to us is the proliferation of non-sentences in the L of present day discourse, that is named by Barthes as *Encritic language* that which is produced and spread under the protection of power, institutionally distorted discourse :

> "All the official institutions of language are recapturing mechanism: school, sports, advertising, pulp novels pop songs, news, always repeat the same structure, the same sense, often the same words. Stereotypes are a political fact, the principal aspects of ideology."

In connection with this, one can compare Foucault's position regarding the approximation of discourse by the coercive institutions. Quite contrary to the Chomskian interest in the essence of human species, Foucault is more concerned with the question : "how has the concept of human nature functioned in our society?" Foucault is suspicious about the universal claims regarding the speaking subjects' essential characters. Not only he is concerned with the discourse on the concept of essence or species character, but he is also concerned with the essence itself in question regarding the function it plays in the society. For Foucault, human body and human essence are polarized. The one pole of bio-power is the docile human body and human essence are polarized. The one pole of bio-power is the docile human body and the other pole is human species. The problem of language as well as the docile body is subject to different types of disciplinary technology which establish rhythms, impose particular occupations, regulate cycles of repetitions. Different institutions like workshops, school, prisons and hospitals, which manipulate and control the body-object in the form of "disciplinary Technology" by conjoining power and knowledge *(dispotif)*. For Foucault, every education system is political means of maintaining and modifying the appropriation of discourse. He is, therefore concerned with the *assujetissement,* the subjection of individuals in society to some suprapersonal disciplines and authority. In Foucault's term, it is "living by way of killing" by deploying the institutionalized disciplinary technology of anatomo/bio-politics that controls the docile human body for this violent purpose.

Let us now turn to psychoanalytic point of view or Kristeva's semanalysis, where meaning is conceived as a signifying process rather than a sign system. Kristeva remarked :

> "Within this process one might see the release and subsequent articulation of the drives as constrained by the social code yet not reducible to the language system as a *genotext* and as the signifying system as it presents itself to phenomenological intuition as a *phenotext,* describle in terms of structure, or

of competence/performance ... The presence of *genotext* within the *phenotext* is indicated by ...a *semiotic disposition.*"

It is clear that Kristeva as a Psycholinguist, moving away from the notion of stable subject as master of system introduced the notion of unstable subject who is disrupted by the symbolic order of language as well as institutional order, splitting out of the continuum of semiotic chora. This splitting or dividing points between semiotic continuum any symbolic order, according to Kristeva, there is a thetic or static or structuring stage of language. For Kristeva, handling only such thetic structuring period of the speaking subject by deploying analytical grammatical procedures that only handles the phenotext (rule-governed phenomenon) is inadequate. Kristeva encompassed this lack in her proposed semanalysis, where she dealt with language as a both drive-governed fact and something within the social space. Thus Kristeva opened up an arena that is not confined to the "ideal speaker-hearer" in a laboratory state, but she proposed the presence of genotext (deviations) within the phenotext.

3.40 Summary

To summarize, let us look at the Diagram-1 as given in Saussure's posthumous book. Let us first interpret these two speaking subjects following Chomsky. According to Chomsky, these two ideal speaker-hearer are engaged here in creating and comprehending infinite sets of sentences out of finite sets of words. Chomsky told us that there is a "physical organ" responsible for this creative activity, i.e. Language Acquisition Device (LAD). Now I want to set these speaker-hearer in the social world of behavioral manipulation. Diagram-2 shows the creator of Skinnerian black box is himself within the black box full of uneasiness and discomfort. This is not a "normal" position with enough space to stretch or be in an erect position. The spinal cord has bent more than can be tolerated. This abnormality of positioning in a space of stimulus-response shows the defeat of the physique. This delimiting of physique bars the subject.

3.41 Key Words

Behaviourism, IL and EL, LAD, Phatic Commune, Phenotext, Genotext, Ideal Speaking Subject, Psi-properties, Semiotic chora.

3.42 Question Bank

Long Questions

1. What is the condition of creative speaking subject in the context of restricted environment? Discuss it with reference to different social theories.
2. What do you mean by Chomskian perspective of Language learning?

Short Questions

1. Distinguish between IL and EL.
2. What is LAD ?
3. What is Phenotext and Genotext?
4. What is Behaviourism ?

Unit 4 ❐ Philosophy & Sociology of Communication

4.0. Objectives

In this Unit, we introduce you to the basic concepts in sociolinguistics, as they apply to language-teaching. We would provide examples and situations to illustrate the purposes of language in a society, and from these examples we would help you to derive the underlying principles.

By the end of this Unit, you will be able to–

- ★ Explain the relationship between language and society .
- ★ Apply the basic concepts in sociolinguistics in the analysis and evaluation of language.
- ★ Define the concept linguistics and cultural relativity, and explain why it is relevant in sociolinguistics.
- ★ Explain what is meant by "ethnography of communication", and carry out a small survey.

4.1 Section I : Elementary Concepts in Sociolinguistics

Introduction

Let us consider the following facts :

- ★ The Eskimo language has several words for **snow**, but we have few.
- ★ Female speakers of Mongolian may have different vowels from men.
- ★ A German living near Dutch frontier may understand a visitor from Amsterdam more readily than one from Munich.
- ★ 'Posh' Englishmen drop the "r" in "car" and "car", but posh New Yorkers pronounce it.
- ★ An American visiting India, is startled by the way Bengalis greet each other or open conversations–"Where are you going"? (Kothay Jachhen?)

- **Can you explain these differences?**

- ★ Well, such items are the raw materials of Sociolinguistics, the branch of Linguistics which studies the links between language and society.

We can make a broad but fair generalization in stating that much of linguistics

in the past completely ignored the relationship between language and society. In most cases this has been for very good reasons. Concentration on the "idiolect" the speech of one person at one time in one style – was a necessary implication that led to several theoretical advances. However, language is very much a social phenomenon.

A study of language totally without reference to its social context inevitably leads to the omission of some of the more complex and interesting aspects of language and to the loss of opportunities for further theoretical progress.

One of the main factors that has led to the growth of sociolinguistic research has been the recognition of the importance of the fact that language is a very changeable phenomenon, and that this variability may have as much to do with society as with language. A language is not a simple, single code used in the same manner by all people in all situations, and linguistics has now arrived at a stage where it is both possible and beneficial to begin to tackle this complexity.

In an introductory survey (Trudgill, 1983), Peter Trudgill has shown how class, race, sex, religion, environment and region are among the factors which further differences in and between languages, and how language may sometimes condition "thought" and so, indirectly, "society". He has defined sociolinguistics in the following words :

> Sociolinguistics is that part of linguistics which is concerned with language as a social and cultural phenomenon. It investigates the field of language and society and has close connections with the social sciences, especially social psychology, anthropology, human geography and sociology.

The study of **attitudes** to forms of language, that of 'posh' Englishmen dropping the or' in 'car', and 'posh' New Yorkers pronouncing it, is an example of the sort of work carried out under the heading of the **social psychology of language**. The study of Njamal Kinship terms and comparing them to those of Bengali, for instance, is a good example of **Anthropological linguistics** while the study of the way in which dialects vary from one region to another, as from the Netherlands to Germany, comes under **geolinguistics**.

Sociolinguistics also has close connection with the **sociology of language**, which deals with the study of who speaks which language to whom, and how far these findings could be applied to social, political and educational problems. This unit introduces the study of language in its social context – language as spoken by ordinary people in their everyday lives which are mainly concerned with answering question of interest to linguistics, such as how and why language changes and how we can improve our theories about the nature of language or language learning.

If any abstract diagram can be drawn in order to illustrate where the sociolinguistics of Non-Native language learning and using lies within the web of academic interests, it might look something like Fig (1).

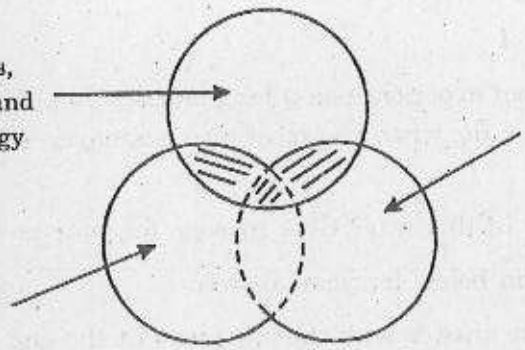
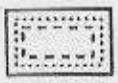
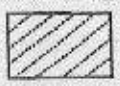


Fig. 1 : The Sociolinguistics of Non-Native language Learning in relation to academic fields.

Can you label the dotted area, and the shaded space within the dotted area? Before you read on, give your own labels in those areas. Write them down on a piece of paper, and then compare your labels with the ones given below.



The dotted area marks our fields of focus – **Sociolinguistics**. It establishes the relationship between language and social structure, language and culture, the organisation of linguistics interaction, language-planning, bi- and multilingualism.



The shaded area, which emerges where the circles of the disciplines linguistics, sociology, ethnomethodology, social anthropology, and foreign language teaching converge, marks our emphasis in this course – "the sociolinguistics of non-native language learning in relation to academic fields."

Among the themes of the shaded area are the social dynamics of speaking two languages, as yet underestimated classroom implications of the connections between culture and language, the much quoted but not fully explained notion of communicative competence in non-native language and the growing legitimization of social and regional non-native varieties of a language.

4.1.1. Language and Social, Interaction

All societies, everywhere in the world, have rules about the way in which language should be used in social interaction. Have you ever observed, however, that these rules may vary between one society and another?

Check your progress 1

(i) Think about your own experience on a long journey. Imagine you are travelling by train. What do you do, when you meet a co-passenger, whom you have never met before?

(ii) Why do you behave in this way? Give reasons for your answer.

Notes : (a) Space is given below for your answer.

(b) Compare your answer with the one given at the end of this Unit (p.56)?

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Railway compartment conversation are good examples of the sort of social function that is often fulfilled by **language.** Language is not simply a means of communicating information – about the weather or any other subject. It is also a very important means of **establishing and maintaining relationships** with other people. Probably the most important thing about the conversation between ourselves is not the words we are using, but the fact we are talking at all.

In other countries, particularly is southern parts of England, Englishmen never talk to each other in a train. They read newspapers or journals throughout the journey. Of course, there are exceptions to this rule. I remember how an old lady from Preston started a conversation and talked to me throughout my journey, from Preston to London. She kept asking various questions about India, how we respect

our elders and take care of them, whether I was staying with my parents, how long I had planned to stay in U.K. etc. We had "established" a relationship, and we are "maintaining" it through letters.

Language also plays an important role in conveying **information about the speaker**. Whenever we speak, we cannot avoid giving our listeners clues about our origins and the sort of persons we are. Our accent and our speech generally reflect our attitude, our background, and what part of the country we come from.

In India, when we meet others from different states we can make out if he's from south, or north, or east, or west, by his accent. In U.K. as soon as we speak, even by telephone, our listeners would mark our English as "Indian English". If a speaker says "lift", he is using British-English, if he says "elevator", he is using American English. British can distinguish themselves from other L1 variations of English – eg Canadian English, Australian English or American English, by certain clues.

According to Peter Trudgill. "These two aspects of language behaviour are very important from a social point of view : first, the function of language in establishing social relationship; and second, the role played by language in conveying information about; the speaker. Both these aspects of linguistics behaviour are reflections of the fact that there is a close inter-relationship between language and society" (Trudgill, 1983).

We shall concentrate for the moment on the second – the "clue bearing" role. In seeking clues about our co-passengers, we make use of the way in which people from different social and geographical backgrounds use different kinds of language. If the second passenger comes from Chittagong, let us say, he would probably use the kind of language spoken by the people of that part of Bangladesh. If he is a middle-class businessman from Dhatrigram (business in Bengal Handloom), he will use the kind of language associated with men of that type.

Check Your Progress 2

Fill in the blanks

(a) "Kinds of language" of this sort are referred to as .....

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(b) The first type, that of Chittagong, is referred to as an example of .....

.....dialect.

(c) The second type, that of a businessman in Dhatrigram, is an example of.....

.....dialect.

Note : (a) Compare your answer with the one given at the end of this Unit

4.1.2. Language and Social Class

Let us think of this question for a moment – "What is the difference between a dialect and an accent?"

Peter Trudgill has explained the distinction in the following manner –

"The term dialect refers, strictly speaking, to difference between kinds of language which are differences of vocabulary and grammar as well as pronunciation. The term accent, on the other hand, refers solely to differences of pronunciation, and it is often important to distinguish clearly between the two" (Trudgill, 1983).

This is particularly true in the context of English, in the case of a dialect known as **Standard English**. In many important respect this dialect is different from other English dialects, and some people may find it surprising to see it referred to as a dialect at all. However, in so far as it differs grammatically and lexically from other varieties of English, it is legitimate to consider it as a dialect.

Check Your Progress 3

1. "The term dialect can be used to apply to all varieties, not just to non-standard varieties", (Trudgill). Do you agree?

   Give reasons for your answer.

   Notes : (a) Space is given below for your answer.

   (b) For this question, we haven't grven any model answer, as it depends purely on your views.

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Social-class dialects :

If you are an English-speaker you will be able to estimate the relative social studies of the following speakers solely on the basis of the linguistic evidence given here :

Speaker A	Speaker B
I done it yesterday.	I did it yesterday.
He ain't got it.	He hasn't got it.
It was here what said it.	It was here that said it.

If you heard these speakers say these things you would guess that B was of a higher social status than A. and you would almost certainly be right. How is it that we are able to do this sort of thing?

The answer lies in the existence of varieties of language which have come to be called **social class dialects**. There are grammatical differences between the speech of these two speakers which give us clues about their social backgrounds. It is also probable, although this is not indicated on the referend page, that these difference will be accompanied by phonetic and where logical difference-that is to say, there are else different **social class accents.**

The variety and diversity of language released to the social framework of its speakers constitute a central domain of sociolinguistics. "Linguistic diversity", as an area of investigation is one of the primary objectives in sociolinguistics. The most notable contemporary British research here has been that of Trudgill (1974) in his **Social Differentiation of English in Norwich** and more recently Nilroy's (1980) study of social networks reflected in Belfast English. Investigations in this sphere are necessary to the non-native language learners since they should be able to recognize the social and regional forms of the language to be acquired as well as possess an awareness of the beliefs and prejudices attached to the various forms if he wishes to probably understand and use the non-native language. For instance, if we go to Karnataka, and stay there for some years, we may learn a language, like Kanarese, in Dharwar. Then we have to know these norms :

Syntactic Features/	Brahmin		Non-Brahmin	
Morphemes	Dharwar	Bangalore	Dharwar	Bangalore
"it is"	rdj	ide	ayti	ayti
"inside"	olage	alli	aga	aga
"infinitive affix"	likke	ok	ak	ak
"participate affix"	o	o	a	A
sit	kut	kut	kunt	kunt
reflective	ko	ko	kont	kont

(Table 1 : Regional and Caste Difference in) **Kanarese**

Check Your Progress 4

1. What can you deduce from this example?

Notes : (a) Write your answer in the space given below.

(b) Compare your answer with the one given at the end of the unit.

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Socio-class stratification is not universal, however. In the class-societies of the English speaking world the social situation is much more fluid, and the linguistic situation is therefore rather more complex, at least in certain respects. Social classes are not clearly defined labeled entities, but simply groups of people with similar economic characteristics. Movement up and down the social hierarchy is perfectly possible. This made things much more difficult for the dialectologists. They concentrated on the speech of rural informants and in particular on that of elderly people of little education or travel experience.

Barriers and distance appear to be relevant in both in social varieties and the development of regional varieties. Dialectologists have found that regional dialect boundaries often coincide with **geographical** barriers, such as mountains swamps or rivers; for example, local dialect speakers in the areas of Britain north of the river Humber (between Lincolnshire and Yorkshire) still have a monopthong in words like **house** ['hoose' (hu's)], whereas speakers south of the river have had some kind of (hɔʊs] type dipthong for several hundred years.

4.1.3. Language and Geography

As far as English is concerned, linguistics have known for a long time that differences in dialects and accents are related to differences of social-class backgrounds. In Britain, we can describe the situation today in the following, some what simplified way. Dialects change gradually as one moves across the country side. There exists a whole series of different dialects which gradually merge into one another. This series is referred to as a **geographical dialect continuum**—a large number of different but not usually distinct non-standard dialects connected by a chain of similarity, but with the dialects at the either end of the chain being very dissimilar. The figure below illustrates this situation as it effects the pronunciation of one word, **home**. There are seven variants in the most localized variety.

Most Localized	Edinburgh	New Castel	Liverpool	Broad-Ford	Dulbey	Norwich	London
	/he:m/	/hlem/	/o:m/	/ɔ :m?	/wʊm/	/ʊm/	/xʊm

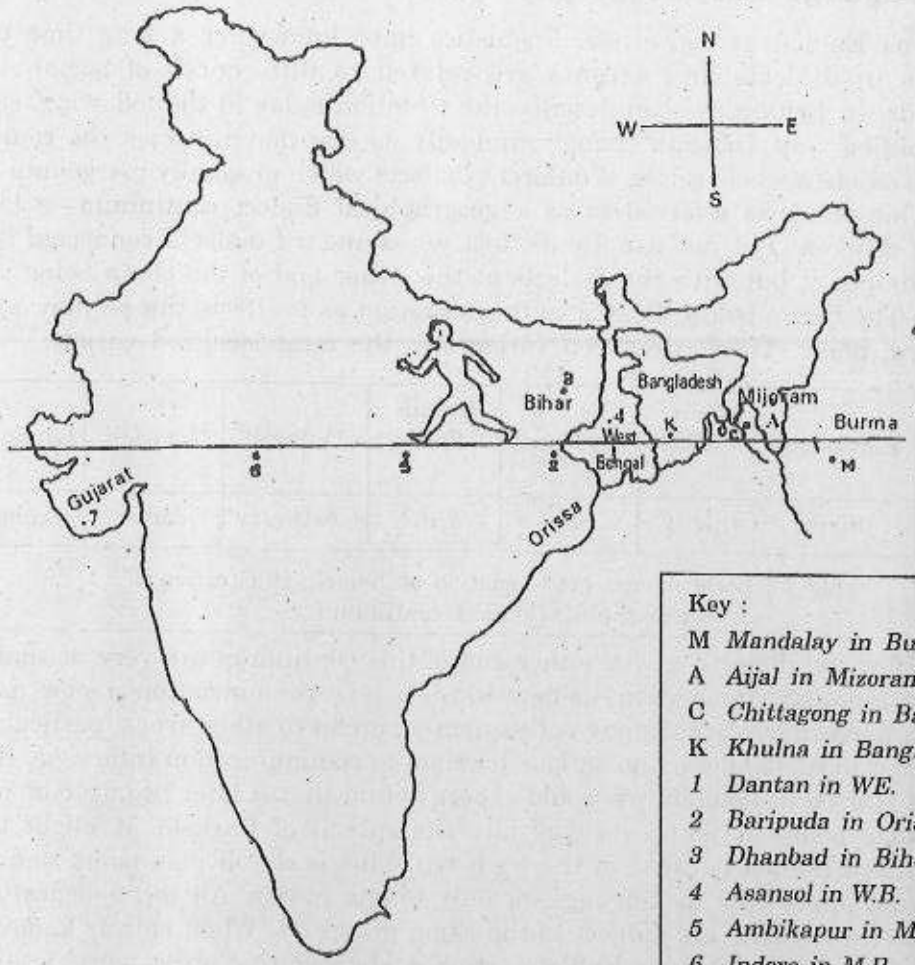
Table 2 : Local Accent pronunciation of 'home' : illustration of geographical dialect continuum.

Note : How the dialects on the either end of this continuum are very dissimilar.

When a linguistic innovation—a new word, a new pronunciation a new usage occurs at a particular place, it may subsequently spread to other areas, particularly those nearest to it, so long as no serious barriers to communication intervene. If an innovation started in London, we would expect to find that it later began to be used in Cambridge before it found its way into the speech of Carlisle. It might take longer to reach Belfast because of the Irish sea. This is an obvious point, and one that does not apply only to language, or only to one nation. All technological and behavioural innovations are subject to the same processes. When salwar kameezes were becoming fashionable in Kolkata, studies showed that girls were' wearing their kameezes shorter in Kolkata that they were in Kalna, where in turn, they were shorter than those worn in Sahebganj.

Our Indian subcontinent is a good example, where one can explore these facts and discover how linguistic innovations spread from one dialect into another adjacent dialect on the geographical dialect continuum. Look at this map of India (p-19) and imagine you are travelling from West Bengal right across the country towards Gujarat.

As you travel across the country, you will discover the gradual differences in dialects. But the dialects in the district of Midnapore in West Bengal, particularly around Dantan (1) merge with the dialects on the border of Orissa near Baripada (2), in the Mayurbhanj District. If you listen to the language of the people on the border of these two districts, you would not be able to distinguish Oriya from Bengali. You would hear a "mixed variety". Similarly, the area around Dhanbad (3), in Bihar, and the area around Asansol, (4) in West Bengal, merge into each other.



Key :
M *Mandalay in Burma*
A *Aijal in Mizoram*
C *Chittagong in Bangladesh*
K *Khulna in Bangladesh*
1 *Dantan in WE.*
2 *Baripuda in Orissa*
3 *Dhanbad in Bihar*
4 *Asansol in W.B.*
5 *Ambikapur in MP.*
6 *Indore in M.P*
7 *Porbondar in Gujarat*
8 *Gulf of Kutch*

It is like a chain :

(5)(4)(3)(2)(1)

A dialect continuum

An Imaginatine Experience : Travelling A Geographical Dialect continuum

This is a guide map and it has no connection or correctness of states or International Boundaries.

But as you travel westwards, you would find difficulty in understanding the dialects. In the State of Madhya Pradesh itself, you will be able to understand people at Ambikapur (5). in the district of Sarguja, better than those in Indore (6). But you will have considerable difficulty in understanding the dialects at Porbandar (7), or any of the dialects around the Gulf of Kutch (8), in Gujarat.

Similarly, if you travel Eastwards, you will be able to understand the people of Khulna (K) in Bangladesh better than those at Chittagong *(C)*. But you will face difficulty in understanding the people at Aijal (A) in Mizoram or those at Mandalay (M), in Mayanmar.

Therefore this continuum illustrates a chain of interlinked intelligibility, and it is called the **"geographical dialect continuum"**.

Consider the dialects in your state. Is it true that the dialects spoken on either side of the district boundaries are extremely similar? In your next holiday, you could make a trip to a district boundary and explore this phenomenon. Is it true that this phenomenon works only in the case of rural dialects? Particular features of a dialect can mix with another dialect and spread from person to person, group to group, and eventually "travel" over very long distances. One of the most striking phonetic similarities in both Indo-European languages and Dravidian languages, for instance is presence in both families of retroflex consonants, illustrated below.

Note : The numbers are alphabets indicate the positions of these places, as shown approximately in the map on page 43.

Dravidian languages : Tamil:/kodai/'umbrella'

Coorg :/kadi/'Bite'

Indo-European languages : Bengali and Marathi/ghoa/'horse'

Bengali and Hindi/ga:d l/cart

Table 3 : Phonetic similarities in pronouncing Retroflex consonants

Another equally important consequence of travelling is the creation of new mixed languages, which are used as lingua franca. A **lingua franca** is a language which is used as a means of communication among people who have no native language

in common. In India we have alternative lingua francas—Hindi and English, Hindi is used as a lingua franca in the Northern part of the country. It has the advantage of being an indigenous language, but it has the disadvantage of benefiting only the native speakers to the detriment of others, who have to learn it as a second language. English is used mainly by educated speakers. An educated Bengali speaker would communicate in English to an educated Tamil speaker, if neither knew the other's language. But if one knows the other's language, or they have a common indigenous language they try to use that. I have heard an Assamese lady talking to an Oriya lady in Bengali. Did you have any similar experience?

Problems of competing lingua francas in Malaysia have led the creation of a new pidgin language—"Bazaar Malay" which is widely used as a trading lingua franca, and in informal situation. Malaysians, studying at the University of Essex, speak in "Bazar Malay", which has a mixture of Tamil, for example :

1. Bazaar Malay :	Semalam	Saya	Ada	Juga
(Yesterday)	(I) ⟶	(have) ⟶	(also) ⟶	
	mari	belankang	dia	tada
	(here)	(behind)	(he/she)	(no/not)

Meaning : Yesterday I had come, but he was not at home.

2. Bazaar Malay :	Ada	wang	kalu	semua
	(have)	(money)	(if)	(all)
	boleh	bill		
	(can)	(brought)		

Meaning : If you have money, you can buy anything.

3. Bazaar Malay :	Saya	punya	anak	juga
	(I)	(own)	(person)	(also)
	ada	Santul	sana	kerja
	(have)	name of place)	(there)	(working)

Meaning : I have a son, who is working at Santul.

We can note the words borrowed from Tamil. The word **juga**, meaning 'also', is incorporated in sentences (1) and (3). The word **belakang**, meaning 'behind', is incorporated in sentence (1). Instead of Standard Malay **jika**, Tamilians have introduced **kalu** in sentence (2). The word **sana**, meaning 'there' is incorporated in sentence (3). **Punya** is borrowed from Sikh or Punjabi speakers in sentence (3).

In other sentences, you can note the borrowings from Chinese. Even the Chinese structure and intonation patterns are borrowed in some sentences.

A "Pidgin" is usually formed out of a "need" to communicate, specially when people from different language backgrounds are thrown together, and have to communicate with each other, in order "to survive". But concomitant with an extension in functions, for instance if a need is felt to write in that language as well, there would be an obvious complication and expansion of language structure. When this occurs, with an expanded vocabulary a wider range of synthetic possibilities, and an increased stylistic repertoire, **Creolization begins to take place**. For example, Sranan is an English-creole spoken by several ten thousands of native speakers in coastal areas of Surinam (Dutch Guiana) and is also widely used by others in the area as a lingua franca.

Studies of Pidgins and Creoles (Hall,1966 ; Hancock 1971, Hymes, 1971, Todd, 1974 Minhausler, 1986, Valkhoff, 1966) provide a particularly fascinating example of the linguistic consequences that can follow from the social interaction in particular social contexts of different social, ethnic and language groups.

Check Your Progress 5

(i) What is the difference between a **pidgin** and a creole?

(ii) What do you understand by a **Geographical Dialect Continuum?**

Notes : (a) Write your answers in the space given below.

(b) Compare your answers with the one given at the end of the Unit.

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4.2 Section II : The Cultural Dimension of Non-Native Language and its Study

Introduction

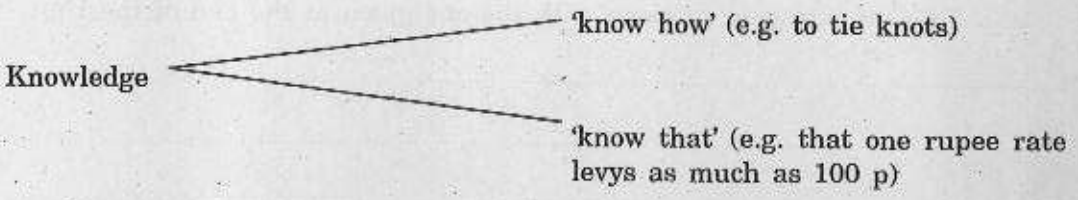
What is culture?

Write your own definition of culture, and then compare it with what is to follow.

In this section, the word **culture** is taken in the sense in which it is used by Cultural Anthropologists, according to whom "Culture is something, that everybody has", in contrast with the "Culture", which is found only in' "Cultured Circles"—in theatre, universities, and the like. The terms is used differently by different anthropologists, but always refers to some "property" of a community especially those which might distinguish it from their communities. We shall follow Ward Goodenough in taking Culture as "Socially acquired knowledge" :

As I see it, a society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members culture being what people have to learn as distinct from their biological heritage, must consist of the end product of learning : knowledge, in a most generai....sense of the term (Goodenough, 1957 : 167)

As Goodenough points out, we must take knowledge here in a very broad sense, to include both :



One attraction of taking this' view, widely accepted by anthropologists, is that it will allow us to compare **culture** with **language.**

Before you continue, try to answer the following questions :

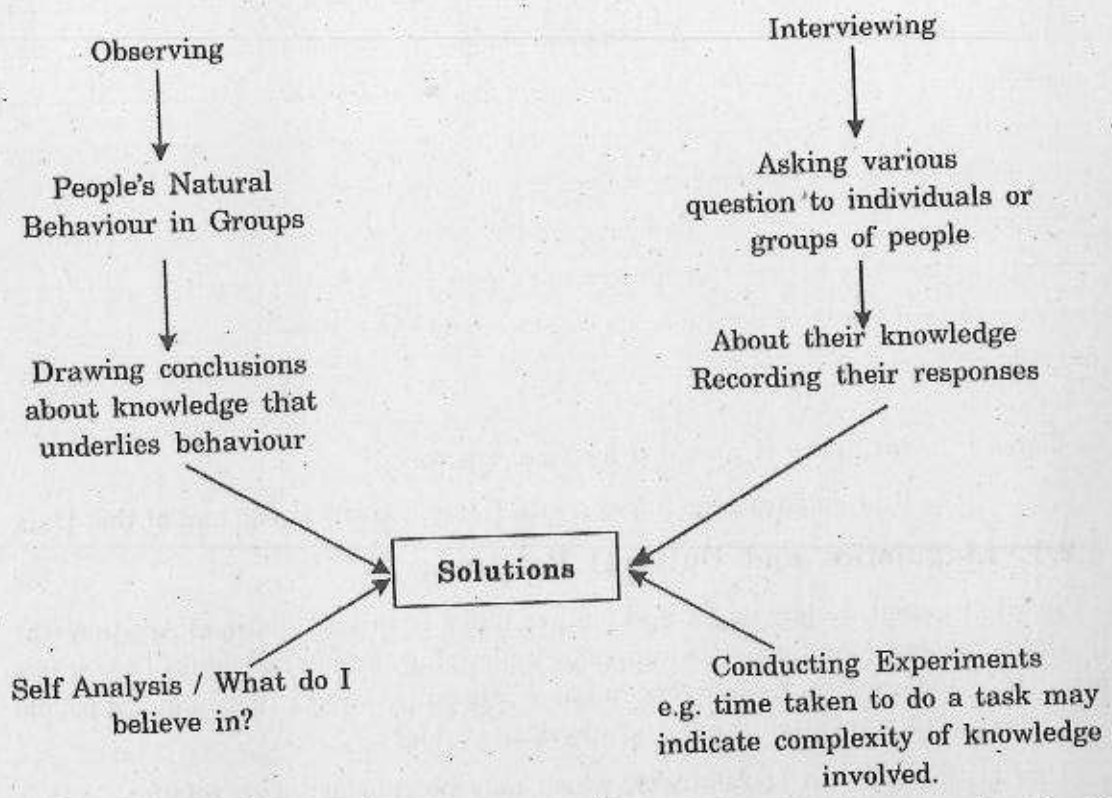
(a) If culture is knowledge, it can exist only inside people's heads, so there is a problem of studying it ; how can one know what the cultural knowledge of Mr. X is?

(b) How can one know what the culture of the community X is?

(c) Does one need to examine the cultural knowledge of every member of the community?

Problems like these are familiar to the students of linguistics, of course, and the solutions are much the same whether one is interested in Culture or in language. Compare your answers to the above questions to the following flow charts :

Flow-Chart 1 : Processes to study Cultural Knowledge



Problems in generalizations, that exist in the study of language are also found in the study of culture.

Check Your Progress 5

(i) Knowledge included in a culture need not be factually or objectively correct in order to count. Justify, with examples.

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(ii) Define "anthropological linguistics."

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Notes : (a) Space is provided for your answers.

(b) Compare your answer with the one given at the end of this Unit.

4.2.1. Linguistics and Cultural Relativity

To what extent do languages and culture differ from one another? Are they cut in the same mould reflecting a common. underlying 'humanity' or do they differ arbitrarily and unrestrictly from one another, reflecting the fact that different people live in very differen intellectual and physical worlds?

This is the question of **relativity,** which may be considered in relation—either to language, or to non-linguistic aspects of culture or to the area of contact between language and non-language in culture. The last of these relations is considered in this form variety to variety, and whether there are any connections between differences in meaning and in culture.

The relationship between language and culture has long been an area of study within Anthropology, one of the parent disciplines of sociology. To understand this discipline, we have to tackle with this concept of **Cultural Relativism** which gained currency at the beginning of this century in the discipline. According to this concept each culture presented a unique, coherent system that shaped and moulded individuality in its own special way. It proved very influential, and over the years was applied to language, which was seen as playing a central role in cultural life.

4.2.2. The Sapir—Whorf Hypothesis

This hypothesis is named after the American linguistics Edward Sapir (1884-1939) and Benjamin Leo Whorf (one of Sapir's pupils; 1897-1941). Both Sapir and Whorf worked extensively on American Indian languages and made important

contributions to our knowledge of these languages and also to linguistic theory. This theory states that a native speaker's language sets up a series of categories which act as a kind of grid through which he perceives the world, and which constrains the way in which he categorizes and conceptualizes different phenomena.

An example will clarify the situation

Let us consider the following sentences in English :

1. I see that it is new.
2. I see that it is red.
3. I hear that it is new.
4. I hear that it is red.

In a Red-Indian Language, Hopi, three different words for that are used because three different types of "presentation by consciousness" are involved. In sentence 1, the newness of the question is inferred by the speaker from a number of different visual clues and from his past experience. In sentence 2, the redness of the object is received in the speaker's consciousness as the direct sense of a visual sense stimulus. The processes are different and these differences are reflected in the language.

Can you find similar examples from your own language or any other language that you know of ?

Spair often alluded to the close relationship between the vocabulary or lexicon of a language and the cultural environment in which it evolves and in which it is embedded :

The understanding of a simple poem for instance, involves not merely an understanding of the single words in their average significance, but a full comprehension of the whole life of the community as it is mirrored in the words, or as it is suggested by their overtones. Even comparatively simple acts of perception are very much more at the mercy of the social patterns called words than we might suppose. We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.(Sapir, 1949 : 162).

Sapir's comments can be illustrated by the following experiments :

Activity I

Which association are provoked by these words in your mind? Write words or phrases in the columns given bellow :-

Fig 3 Your Responses to Stimulus Words :

Moon	New Year's Day	Marriage

Note : Please don't proceed till you have answered the question. Give your immediate response. Spend only two minutes in thinking.

Activity II

Find out from you friends (specially those from the different states of India) their responses to the same stimulus words. Compare them with yours. You could write to your friends abroad, if any.

If there is difficulty in corresponding with friends from different states or countries immediately, don't worry. Compare your responses to those of Japanese—American Bilinguals from the study of Ervin-Tripp (1968 : 203), below (Fig. 2). They are the responses of ten year olds'; you could ask ten year olds in your locality too.

Fig 4 : Japanese English Bi-linguals' Responses to stimulus words.

Moon		New Years' Day	
Japanese	English	Japanese	English
1. Moon viewing	1. Sky	1. Pine decoration	1. New clothes
2. zebra grass	2. rocket	2. rice cake	2. party
3. full moon	3. cloud	3. feast	3. holiday
4. cloud		4. kimono	
		5. seven spring herbs	
		6. shuttle cock	
		7. foot-warmer	
		8. friends	

L2 learners have to imbibe, as the L1 speakers above have done, the individual tang of the words from the customary situations in which they occur. They have to assimilate possibly varying cultural connotations of linguistic items. It is interesting to note how different age-groups have different connotations. When a similar question as Activity I above was put to a twelve year old girl and a sixty nine year old lady (both Bengalees) the following responses emerged :

Fig. 5 : Comparative Study of Two Indians' Responses to Stimulus words

"Moon" : 12 year old	"Moon" : 69 year old	"New year's Day" 12 yr. old	"New year's day: 69 year old
Tin - Tin[1]	-Lullaby song[4]	-New clothes	-Hal-khata[8]
Load shedding[2]	-Tagore's song[5]	-Picnic	-Puja[9]
Terrace[3]	-Pumima[6]	-Card	-Greetings
Moon-lit dinner	-Jyotsna[7]		-Payesh[10]
			- Tagore's birth day[11]
			-New year's Resolutions[12]
			-Blessings

Foot Notes :

(1) The Adventures of Tin-Tin often have references to the moon, that has appealed to this child.

(2) This refers to the frequent power-cuts in Kolkata, when one goes for a moon-lit walk, sits in the varandah or goes up on the terrace.

(3) A view of the full-moon from the terrace.

(4) In Bengali lullaby songs, there are references to the moon.

(5) This lady is fond of a particular Tagore's song, that glorifies the full moon "Chander hasi bandh bhengeche".

(6) Full Moon's Day is observed by this lady. She performs some rituals, has a special course of vegetarian meal etc.

(7 This is the Bengali word for the glow and radiance in Nature all around created by a Full-moon.

(8) New Accounts are opened in various shops on the New Year's Day.

(9) Special prayers are arranged in temples. shops and houses.

(10) Special sweet dish is prepared with rice. milk. sugar or jaggery.

(11) Tagore's Birthday also is celebrated in the same month "Baisakh" often the celebration being on the 1st of Baisakh (usually 14th of April.)

(12) As in English New Year's day, on Bengali New Year's Day too "Resolutions" are made.

As far as the word "Marriage" is concerned an American lady gave the following responses. You could compare them with yours and with that of another Indian lady.

Marriage	
Americal Lady	(Indian. Bengali)
1. Bride in a special dress	1. Bride in a special dress (Banarasi)
2. Bride's Maid	2. Groom in a special dress (Dhoti)
3. Best Man with groom	3. "Ful-Sajja" (a bed made of flowers)
4. Wedding-cake	4. "Sat-Panke Bandha"
5. Church	5. "Bashor Ghar"
6. Bride entering the church father	6. Exchange of garlands
	7. Shuvo-Distri

Fig 6 : Comparative Study of Responses to stimulus word—"MARRIAGE"

The Indian view of marriage is very different from that of the American lady's. It will not be possible to explain all the rituals in our wedding ceremonies, in English. even if full explanation and circumlocutions are allowed. Do you feel in the same way? For instance. the scene that emerges from just one word "Sampradan" would not be evoked if we say "The ritual. when the father hands over his daughter to the bride-groom". It is very moving scene. and the guests who watch this ritual cannot resist their tears either!

It would be rather incredible to imagine that speakers are unable to perceive phenomena that have not been formalized in their language. But what should have emerged from the above discussion is how language and culture are interdependent and how language can express and reflect a particular "reality".

4.2.3. Classificatory System

The Sapir-Whorf hypothesis is concerned with the possibility that man's view of his environment may be conditioned by his language. Less controversial is the one-way relationship that operates in the opposite direction—the effect of society on language, and the way in which environment is reflected in language.

For example, the classificatory systems existing in the **physical** environment can often have an effect on the structure of the vocabulary. Whereas English has only one word for **snow** (or two if we include sleet) Eskimo has several. The reason for this is obvious. It is essential for Eskimo to be able to distinguish between **fine snow, dry snow, soft snow** etc. English has to have an adjective to make these distinctions, but in an Eskimo's language these distinctions are lexicalized—made of individual words. In the same way the Sami (Lapp) language of northern Scandinavia have many words associated with **rein-deer,** and Bedouin Arabic has a large camel vocabulary.

Check your Progress 7

(1) The **Physical environment** in which you live is surely reflected in your language, normally in the structure of your words. Can you give two examples? The landscapes around you may provide you with some clues. Study the landscape in your own region.

Notes : (a) Space is given below for your answer.

(b) I have provided a few examples from the languages that I know.

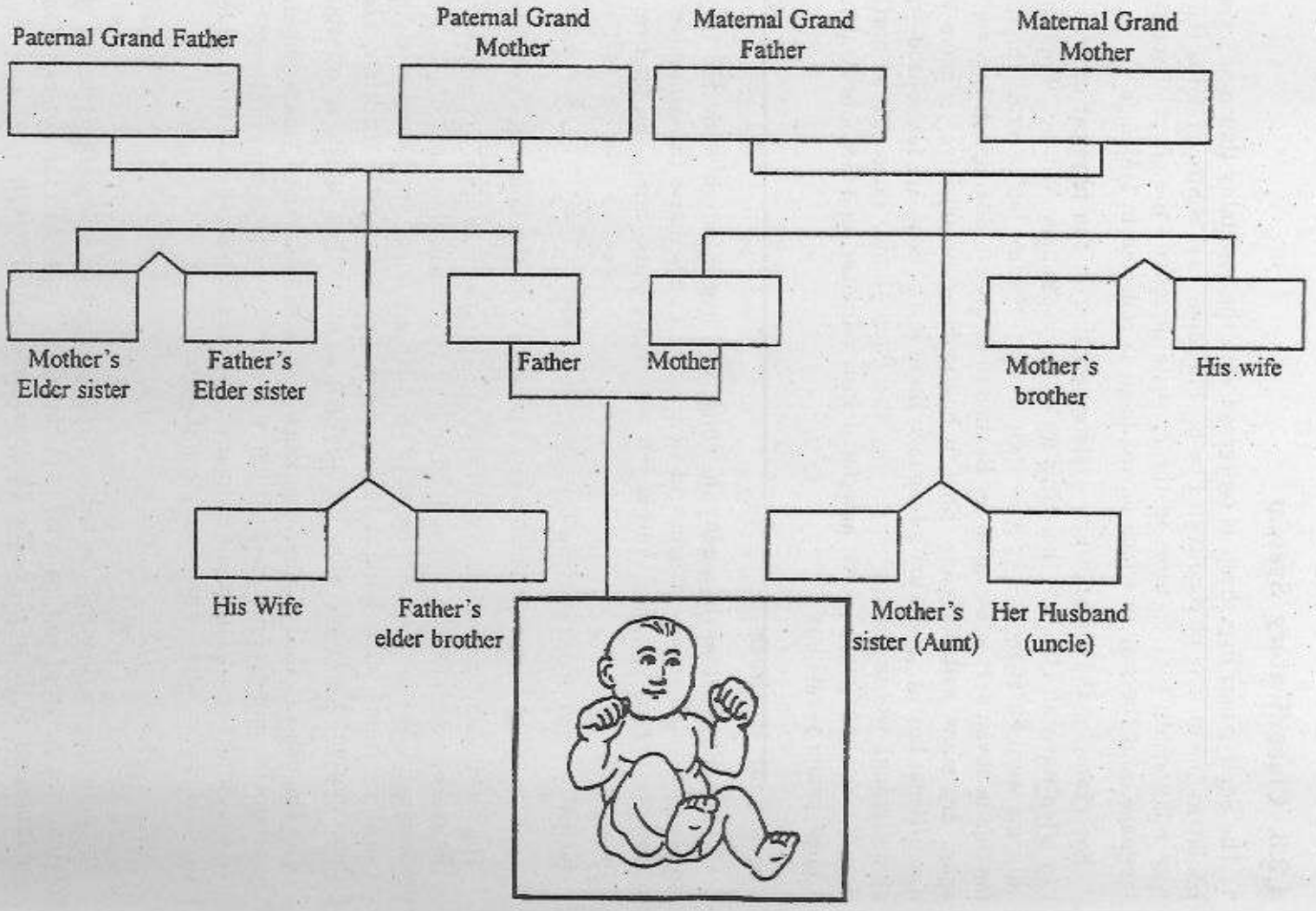
The social environment also has an effect on the structure of the vocabulary. This is the reason why anthropologists tend to be interested in this particular aspect of the language. We can assume, for example, that the important kin-relationship in vocabulary items, **son, daughter, grandson, grand-daughter, brother, sister, father, mother, husband, wife, grandfather, grandmother, uncle, aunt, cousin.**

The English can talk of other relationship such as "elder son", "maternal aunt", "great uncle" and "second cousin", but the distinction between "maternal" and "paternal aunt" is not important in their society, and is not reflected in the English lexicon. Compare these with your kinship system.

Activity III

Imagine the six months old baby in the family tree below. Describe all other relationship, paternal and material from his point of view. Use the kinship terms of your language, to fill in the boxes. Compare them with English.

Activity III : Comparative Study of Kinship Term



Sometimes, you might come across similarities existmg between your kinship terms with those of another. In the Australian aboriginal language, Njamal, for example, mama signifies a single kinship relationship but which has to be translated into English in different ways according to context : **father, uncle, male cousin of parent,** etc.

In other words, the term is used for all males of the same generation as the "father". For me, the most striking fact is that a number of Bengali words—**Baba, Mama, Kaka, Jathamosai, Pishemosai, Meshomosai** can all be translated by one Njamal term "Mama". Clearly the distinction between father and father's brother cannot have the same importance in Njamal society as in our own or in West Bengal today, in the small nuclear families.

But compare the Njamal term with joint-families in West Bengal, where all the senior members including parents are addressed by all their children as "Babu" as **Barobabu, Mejobabu, Sejobabu,** (Father) (Father's brother) (Father's next younger brother) etc., and their wives are addressed as "Ma" Baroma, Mejoma, Sejoma respectively i.e. **Babu** and **Ma** are used as common terms address all **males** and **females** of the same generation as **father** and **mother** respectively. Barobabu's son makes no distinction between his father and his uncles in the joint-family system. We can read about such Kinship system in Sarat Chandra's novels.

At the moment, in our families, **social change has produced a corresponding linguistic change.** Can you find examples?

This has happened in the case of the Russian language. If we compare the Russian language, used in the middle of the last century with that used now, we can make the following changes :

Table : 4

Revolution in Russian Kinship system

1850	1999
1. Shurin (Wife's brother)	"brat zheny" (brother of wife)
2. nevestka (brother's wife)	"zhena barta" (wife of brother)
3. Yatrov (husband's brother's wife)	disappeared / (by name only)

Compare Bengali **Shala, Boudi,** and **Didi** respectively for (1) (2) and (3). Do we all use these address forms today?

In the Russian language, distinctions that were formally lexicalized, because they were important, are now referred to by means of phrases. The loss of importance of these particular relationships, and the corresponding linguistic changes, are due

to the fact that social changes in Russian have led to the rise of small nuclear families. In 1850, Russians lived in large patriarchal extended family households (like our joint families). Brother's wife, at that time part of the family, now normally live in different households. As the significance of this status has been lost, so has the relevant vocabulary items. If an elders brother's wife is younger to his sister, she is called by her name and not "boudi" today, but in 1850 even I would call her "Boudi" and give her the same status as someone elder. Today, the significance of this status is not the same as it was in 1850. Have **you** experienced any such change in **addressing** your close relatives in your life?

Activity-IV

Your Address—Forms in the Past	Changes in your Address—Forms today

Activity V

Could you summarise the main-points of section 1 and 2? Compare with our "round-up" on the next page.

Round Up

The main purpose of the two previous sections was to clarify the terminology relating to language and society, and the relations between culture and thought.

In the first section, we tried to identify the purpose of language in social interaction. There is no simple answer, nor even a single complicated one, as speech plays many different roles on different occasions. One source of complexity is due to geographical mobility, and another source of complexity is social class.

As for the relation between language and culture, we have introduced certain terms like "Cultural Relativity" and "Sapir-Whrof Hypothesis". Most of language is contained within culture, so it would not be far from the truth to say that a society's

language is an aspect of its culture. The relation of language to culture is that of part to whole. The area of overlap between language and culture consists of all these parts of language which are learned by other people. However, we must allow some aspects not be learned in this way, just as some concepts are clearly not learned from others. For instance, a baby learns the concept "vertical" before he learns the name of it. Therefore language is not wholly contained within culture.

The figure below may help to clarify these relations :

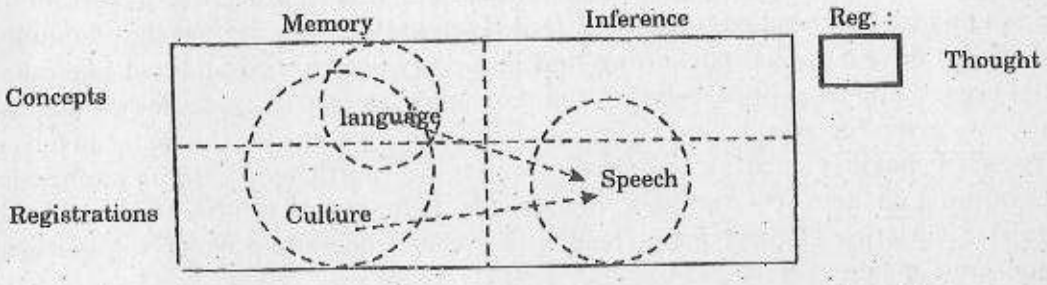


Fig 8 : The relation between thought, culture, language and speech

The study of speech as part of social interaction has involved many different disciplines, particularly sociolinguistics and anthropology. Each of these disciplines brings in different range of questions and methods to bear on the study, and all can learn a lot from others. The main methods are :

- ★ introspection
- ★ participant observation
- ★ experimentation

One of the most important contributions has been by anthropologists who are engaged in ethnographic research and enthnography of communication, which is described in the next section.

4.3. Section III : The Ethnography of Communication

What is ethnography ?

It is the study of the life and culture of a society or ethnic group, especially by personal observations. The related field of **ethnology** studies the comparison of the culture of different societies of ethnic groups.

In studies of language learning or in descriptions of how a language is used, the term **ethnographic research** is sometimes used to refer to the observation and description of naturally occurring language (e.g. between mother and child, between teacher and student, etc.)

Therefore in **ethnography of communication** language in not studied is isolation but within a social or cultural seeting. It is the study of the **place of language in culture and society.** "Ethnography of communication" studies, for example, how people in a particular group of community communicate with each other and how the social relationship between these people affect the type of language they use.

The concept of an enthnography of communication was advocated by the American social anthropologist and linguist Dell Hymes and this approach is important in sociolinguistics and Applied linguistics. Dell Hymes (1962) has argued that language and speech have a special patterning that is socially determined and just like other social organizations, politics, religion and economics, cannot be taken for granted as somehow "given" or everywhere the same. The scientific focus on the factor involved in speech behaviour such as the circumstances, the participants, their intentions, the planning of their acts and how they deliver them, norms of interaction and the linguistic varieties employed will lead to a richer understanding of the cultural dimensions of language.

4.3.1. The norms governing speech

Skill in speaking depends on a variety of factors, including a knowledge of the relevant rules governing speech. Such rules are of various types, dealing with different aspects of speech, but all we can do here is to mention a few examples. The rules chosen vary from one society to another, which makes it easier to see that there are rules, but this should not be taken to imply that all rules are similarly variable. We shall call such rules **NORMS** because they define normal behaviour for the society concerned, without being associated with any specific sanctions against those who do not follow them. Brown and Levinson (1978)* contains an excellent discussion of the complex interaction between norms and rationality as determinants of speech.

First, there are norms governing the sheer quantity of speech that people produce, varying from little to very much. Peter Gardner (1966)* did some field work in south India, among a tribal people called the Puliya, describing their socialization patterns. There is no agriculture and no industry, and the society is neither particularly cooperative nor particularly competitive. So children are led neither to be particularly inter-dependent nor to be aggressively competitive with each other, but simply to busy themselves with their own concerns in reasonable spatial proximity. He observed that, by the time a man was forty, he particularly stopped speaking altogether. He had no reason to speak. People there, infact, just didn't talk much and seldom seemed to find anything much to talk about and he saw this as a consequence of a particularly kind of socialization pattern.

We may contrast this society with one in Roti, a small island in Eastern Indonesia :

> For a Rotinese the pleasure of life is talk—not simply an idle chatter that passes time, but the more formal taking of sides in endless dispute, argument

and repartee or the rivaling of one another in eloquent and balanced phrases on ceremonial occasions....lack of talk is an indication of distress. Rotinese repeatedly explain that if their "hearts" are confused or dejected, they keep silent. Contrarily, to be involved with someone requires active verbal encounter (Fox, 1974)*

There may be problems when people from societies with different norms meet, as shown by the following anecdote by Coulthard (1977), where other instances of different norms relating to quantity of speech may also be found.

"An ethnographer describes staying with in-laws in Denmark and being joined by an American friend, who, despite warnings, insisted on talking with American intensity, until at 9 O'clock her in-laws retired to bed; they just couldn't stand it any more."

An Indian lady had a similar experience when she suddenly came across a school friend of her (after 20 years) in the London-Metro. They talked in an excited manner, not realizing the impact they had created on the excessively quiet copassengers. Suddenly, an old English Lady came up to them and asked them "Why are you quarrelling?"

In their excitement they might ghave talked "at once" at times, and talked very loudly which are **not** the **NORMS** in a British society. Did you ever face such problems?

Of course, we all are aware of the fact that conversations are structured. An obvious aspect of the structure of conversations is that they are based on the principle of **turn-taking**, and are organized in such a way so as to ensure (in principle) that only one speaker speaks at a time. There are also points in the structure of a conversation where it is possible, and others, where it is not possible, to interrupt a speaker. There are 'rules' too about how and when one is allowed to introduce a new topic of conversation. There are even 'rules' about silence. It has been said that in a conversation between two English speakers, a silence longer than about four seconds is not allowed; which means that people become embarrassed if nothing is said after that time-they feel obliged to say something, even if it is a remark about the weather. Many of these "rules" can in fact be broken, but notice how English usually acknowledge the fact if they do break them-

- "I'm sorry to interrupt"
- On a completely different topic"
- "To go back to what we were talking about before".
- "Just let me think about that in a minute".

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* References quoted on are simply to highlight research evidences pertainmg to the **Ethnography of Communication**. You need not necessarily go through them. However they are included in the **Reeferences** at the end of this Unit.

Are we aware of all our rules in speech? Do we follow all these 'rules'? Or do we acknowledge it in this way, if we do break them? Pause for a while, and think.

Children usually do not know these rules at all. As we have mentioned neither are these norms universal. During a brief conversation with her teacher for about five minutes, a girl in Kalna, (a small sub-divisional town in West Bengal) called some one in the street, asked her brother to go to school, asked her sister to buy some bread, did household cores like swapping the floor, all the while continuing the thread of her conversation about her sick mother.

4.3.2. Sequencing

We can also observe that conversations consist of structured **sequences** of different types of utterances. Sequencing in conversational analysis, shows the relationship between utterances, that is which type of utterance may follow another one. Sequencing is governed by rules know as **sequencing rules**, which may be different for different languages or different varieties of the same language. In some cases, the sequence of utterances is quite strictly regulated, as in **greetings** and **leave-takings**, and other Adjacency Pairs. An Adjacency Pair is a sequence of two related utterances by two different speakers. The second utterance is always a response to the first. In the following example, speaker A makes a complaint, and speaker B replies with a denial :

A : You left the light on

B : It wasn't me

Question-Answer, Invitation-Acceptance/Refusal are other examples. There are exceptions to these rules as well, and skilled conversationalists usually understand the implication in :

A : What are you doing tonight?

B : Why do you want to know?

Often, there is a range of possibilities depending on the situation, the topic, the speakers and their intention at the moment.

Activity-VI

(a) State the structured sequence of greeting—greeting between you and your neighbour when you meet each other on the streets, on your way to work.

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(b) State the structured sequence of Leave-Taking between you and your mother when are leaving home for a long holiday

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While doing this exercise, you might have experienced that greetings and farewells offer the clearest examples of structure in speech

Compare your greetings and farewells, with the samples in Bengali :

(a)	A : (Neighbour)	কী খবর /Ki k^hɔbour /	(What's the news?)
		সব ভালো তো ? /ʃɔb bhalo to	(Hope everything is O.K.? everyone is fine?)
		কলেজ যাচ্ছো ? /kɔledʒ dʒ atʃtʃ^{ho}/	(Are you going to college?)
	B (I)	হ্যাঁ, আপনি ভালো তো ? /hæ apnɪ b^haloatʃen/	(Yes, Hope are well too?)
(b)	A(1)	মা আসি ? / ma aʃi	Ma (I'm going I'll return soon)
	B (mother)	এসো। দুর্গা ! দুর্গা ! /eʃo durga ðurga/	(Yes, come back fast! May goddess Durga be with you)

If we compare these again to similar situations in an English society they would be something like :

(a)	A : (Neighbour of X) Hi	or	A : Hello!
	B : (X) : Hi!		B : How nice to see you?
(b)	B : (X) Bye, Mom!		A : (A kiss)
	A : (mother of X) ; Bye		B : (A kiss)

Of course, even English greetings may vary enromously in their sincerity and creativity.

Taking sincerity first, there is an interesting distinction to be drawn between greetings which express a proposition-(e.g.— "How nice to see You") and those which do not (e.g.— "Hello!" Only prepositional greetings can be said to be insincere, though, the non-propositional greetings may imply feelings, through intonation, Non- propositional greetings tend to be fairly netural and short, simply recognizing that an encounter (i.e. a piece of interaction) has started. Compare these Hindi greetings–

(a)	A :	क्या हाल है? /kja hɑl hu əɪ/	(how are you)
	B :	बस, ठीक है। /bəs tʰlk hə ɪ/	(O.K. I'm allright)
(b)	A :	नमस्ते जी। (namaste ʤi)	(It's a greeting showing respect)
	B :	नमस्ते /namaste/	नमस्ते meaning salutation to you जी is the honorific suffix)

Check your Progress 8

(a) Compare your greetings with mine, and then mine with the examples of adjacency pairs in English and Hindi. Can you locate the similarities? What are the differences?

Note : (a) Space is given below for your answer.

(b) Check your answer with mine provided at the end of the Unit.

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Often the transference of rules and expectations from one language to another could create confusion for the learners. Closings, in English conversations, often pose special problems to those students who are non-fluent in the use of English. They may entirely miss the intention behind preclosing moves like "Well, I guess you have got lots of things to do", and may have difficulty themselves, in easing towards closings. "They may be too abrupt, as with a foreign student who ended a telephone conversation in the following way ; 'I have nothing more to say, so good bye. (Richards and Schmidt, 1983).

I have already illustrated how a "greeting" to a friend, last seen twenty years ago, was misunderstood by an English lady because of its intensity and verbosity. The norms for how loudly and how much one talks differ in these two countries. American and British often misunderstand Apache Indians, studied by K.H. Basso (1970). Instead of using speech, inthe form of greetings, to assure each other that relations are just as they were before the separation, they wait until they are sure that relations really are the same before they speak to each other at all, at least in situations where there is reason to think that relation may have changed, as when children return after a year in boarding school. Many British and American parents might chatter hard with their children as soon as they come off the bus, but Apache parents apparently wait and say nothing for up to fifty minutes while they assess the effect of a year's schooling on their children's behaviour. Of course, like others, Apaches claim that it is important for people to know how they stand in relation to others before they start to talk.

We can find similar situations in our society too, as illustrated in the sketches below. Youngsters often touch the feet of elders, or even wash their feet as a form of greeting. They talk only after the elders have settled down. Have you ever witnessed or experienced these ritualistic moves in your behaviour with others? Are you able to identify the relationships between the persons in the sketches? Once the respective roles have emerged, the rest follows. Write the captions for the following sketches. Both are examples of "greetings" through "Non-verbal behaviour".

Illustrations : Greetings by Non-Verbal Behaviour

4.4. Let us Sum up

In this unit we have described the elementary concepts in Sociolinguistics, here are the main points :

(i) In social interaction, one of the main goals of talking is to present a picture of oneself to others. Secondly our intention is to establish and maintain relationships.

(ii) The variety and diversity of language related to the social framework constitute a central domain in Sociolinguistics.

(iii) Each culture presents a unique, coherent system that shapes and moulds individuality in its own special way. Linguistic Relativity is a belief which was held by some schools that the way people view the world is determined wholly or partly by the structure of their native language. As this hypothesis was strongly put forward by Sapir and Whorf, it is called "Sapir-Whorf hypothesis".

(iv) The vocabulary employed to categorize phenomena such as Kinship, colour, animals etc., are taken as a guide to the "reality" of the community. In this respect, we have considered how social change brings about a language change.

(v) A new school of research has developed, led by Hymes, known as "the ethnography of communication", whose aim is the formulation of descriptive theories of speaking as a cultural system. We have illustrated with the help of "greetings" taken from various languages.

The discipline sociolinguistics enjoys a dual heritage, deriving from both Anthropology and sociology. Unlike the basic concept of the former, **culture**, the latter focuses on society or **social structures**. L2 speakers should be familiarized with these sociocultural determinants of language which will lead them to a deeper and more satisfying level of comprehension and communication in the target community. We would be introducing some of these sociocultural determinants of language in the next unit. Then we will turn to a few areas of sociological sociolinguistics which provide general insights for L2 learning and teaching.

Check your Progress : Model Answers

1. (i) You may have started talking about the weather, about the inconveniences of travelling by train (specially in summer), about the destination, about the delay in train's departure etc.)

   (You may have included others on your list, it depends purely on your experience. Ours is not exhaustive, but it is based on our experience).

(ii) We often behave in this way because—

(a) It is often quite embarrassing to be alone in company of someone we are not acquainted with, and yet not speak to him/her.

(b) Since we are all **social** beings, if no conversations take place the atmosphere becomes strained.

(c) By talking about a neutral topic, such as the weather, it is possible to strike up a relationship with the other person without having to say very much.

(d) Sometimes, subconsciously, we are **interested** about the other co-passenger we want to know about them.

(e) We like to introduce ourselves, and help them to formulate an opinion about us. (We hope this exercise made you think about the role of conversations between strangers).

2. (a) Dialect

(b) Regional

(c) Social

3. For this question, we haven't given any model answer, as it depends purely on your ideas and views.

4. Caste-dialect differences tend to be relatively clear-cut. The first three examples show that, although the Bangalore and Dharwar forms are the same for the lower castes, the Brahmin caste has form which are not only different from the other castes but are also different from each other in the two towns. The higher caste forms are more localized than the lower caste forms. The second three examples show that there is more similarity with social than geographical groups-social distance is more differentiating than geographical distance.

4.5 Check Your Progress : 5 Model Answers

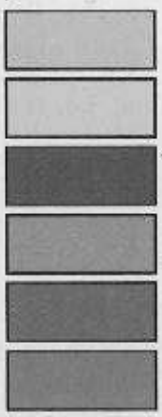
5. (i) A Pidgin is a language which develops as a contact language when groups of people who speak different languages come into contact with each other. It has a limited vocabulary and a very reduced grammatical structure. Both the vocabulary and the structures expand when the pidgin is used for a long period of time. This process of expansion is known as 'creolization', and the language thus formed becomes a 'Creole'. It becomes the native language of a group of speakers. Creoles are classified according to the language from which most of the vocabulary is derived e.g. English based Creole.

(ii) **A Geographical Dialect Continuum** is a chain of adjacent varieties, which are mutually intelligible, but pairs taken from opposite ends of the chain are not. One such continuum is said to stretch from Amsterdam through Germany to Vienna, and another from Pairs to the south of Italy. In India, one extends from Kashmir to Kanyakumari i.e. North to South and one from Kolkata to Ahmedabad-East to West.

6. (i) Some people think that strenuous exercise shortens life and others think the opposite, but so long as we can show that each view is learned socially, that is from other people, they both count as items of culture (You could give other examples).

(ii) Anthropological linguistics is a branch of linguistics which studies the relationship between language and culture in a community, e.g. its traditions, beliefs, and family structure. For example, anthropological linguistics have studied the ways in which relationship within the family are expressed in different cultures (kinship terminology), and they have studied how people communicate with one another at certain social and cultural events, e.g. ceremonies, rituals, meetings, and then related this to the overal structure of the particular community.

7. For example, the Bengali language has many shades of green. All these are lexicalized :



The English names of these are taken from the Crayons, manufactured by Binny & Smith Inc. Easton PA 18042 made in U.S.A.

The Bengali words of these shades often have references to plants, e.g. "Green-yellow" shades has a reference to banana—sapling (Please see the illustrations on the greenery of peaceful Santiniketan of various shades of green)

The Bengalis label fresh water, as one substance salt water as another, likewise, fresh water fish is categorized in one category, salt water fish. in another. They are fond of fishes—and have a variety of food-items made of fish.

The mica mina area of Andhra Pradesh has various words for the description of "rocks".

8. Similarities :

(1) It is reasonable to assume that every language includes a range of forms for use as greetings and another for farewells, in view of the importance of "entries" into pieces of interaction and "exit".

(2) A greeting is needed to show that the relation which existed at the end of the last encounter is still unchanged.

(3) A farewell is needed in order to sum up the effect of the encounter upon the relationship and show what the participants may expect of one another when they next meet.

(4) Relations between the participants in some pieces of interaction are of the greatest interest to the participants themselves. They establish "mutual relations" by greetings.

(5) Farewells give a mutual reassurance that relations are unchanged.

Differences :

(1) Greetings and Farewells may vary in their sincerity and creativity.

(2) English Greetings sound like "phatic communion" i.e. it is not intended to seek or convey information but has the social function of establishing or maintaining social contact. Such expressions provide further examples :

A : How are you?

B : Nice day, isn't it?

(3) Bengali greetings sound like conversation—openings, although they are phatic communion as well. When I was asked whether I was going to college, my neighbour was not curious about my activities. Foreigners often misunderstand these implications, and feel that one is interfering in one's privacy. For example, an American Lady was offended when an Indian lady asked her "what have you eaten for lunch?" Surely, the latter was not interested in her culinary habits.

(Perhaps, you have discovered some more similarities and differences?)

4.6 Assignments

You could choose any five of the following ten short questioris. Answer in about 200-250 words each :

1. Define "Sociolinguistics" in your own words. How is it related to Sociology and Anthropology?
2. Which two aspects of language behaviour are very important from a social point of view? Give examples from real life situations.
3. What is the difference between **dialect** and **accent**? Illustrate.
4. Give an account of social class dialects.
5. Explain Sapir-Whorf Hypothesis. Do you agree that L2 learners have to assimilate possibly varying cultural connotations of linguistic items?
6. Why is it important to know the linguistic and cultural classificatory systems?
7. "The ethnography of speaking" is interested in the different ways communities structure and organize their verbal activities. Illustrate your answer.
8. Examine this dialogue :

   A : There's a call for you?

   B : I'm busy in the kitchen

   Is this 'Sequence' coherent" How do you know? Who are the participants? What are their intentions? Describe the planning of their acts and how they deliver them. What does this example reveal about "sequencing"?
9. A German living near Dutch frontier may understand a visitor from Amsterdam more readily than one from Munich, why? Explain in detail.
10. "It is normal among English speakers for the person giving the answer to speak first in telephone conversations. There is nothing inevitable about this, though. Justify why there is nothing inevitable about this.

4.7. Surveys/Projects

Please carry out anyone of the following surveys and write a report, not more than 40 pages.

1. Review (some of) the literature in the area of the ethnography of speaking and give an account of what you believe might be the relevance of this work in language teaching situations with which you are familiar.

2. One of the Goals of talking is to present a picture of oneself to others. Scollon and Scollon (1983) point out that English Speakers typically present a positive display of their own abilities and achievements. In contrast, in the Athabaskan system, it is considered inappropriate to display oneself in a positive light or to talk too directly about the future.

   Carry out a survey, listening to group-discussions, and give a report about the **norm** existing in your society.

3. Observe the different types of **greetings** and **leave-takings**. What decides the **form** of greeting or farewell. The answer clearly varies very much from language to language, and from society to society, but certain general patterns have emerged. You could take into consideration-

   (a) the sheer length of the greeting

   (It is generally proportional to the length of the time since the last meeting. Prove this statement).

   (b) the importance of the relationship

   (i.e. a friend will receive a longer greeting than a mere acquaintance)

   (c) the lack of greetings

   (i.e. when people approach strangers to ask for information)

   (d) verbal and non-verbal behaviour

   (e) Relation-markers

   (f) Structure-markers

   (g) Content-markers

4. Most people want to present to the world and image of considerateness, because this is most likely to make them popular, and this turns speech into a highly **co-operative** activity, where everyone tries hard to help everybody else maintain their personal images.

Observe group-discussions of your colleagues, or group activities of your students, and record the **different roles** that they seem to be adopting during the group process.

As the group task proceeds, you are asked to note down at regular intervals **the particular role a group member seems to be adopting** within a period of the group's work. You will be looking out for FOUR main types of role which any member may be taking within the group.

These four types of role are as follows :

LEADER	Trying to direct and control the group, making sure his/her ideas are followed, the main judge of other people's suggestions.
HARMONISER	Trying to keep things running **smoothly;** encouraging other's contributions; seeking **agreement** between members; reducing possible conflicts or confusions.
BLOCKER	Trying to resist other's suggestions; being important with what he/she sees as time wasting or fussing about, holding the group back from reaching discussions.
FOLLOWER	Trying to be non-commital and rarely participating; being carried along by the rest of the group; very rarely initiating and only occasionally responding to others' ideas.

Observation Procedure :

(i) Once your group has started their task, quietly attend to their discussion for a few minutes until you become familiar with the atmosphere within the group. During this time, listen carefully to each participant. Write the name of each group member on this chart :

Names				
Role				
Observed				
At 2-3				
minute				
intervals				
Primary role :				

Now **observe the person whose name is in the first column on your chart.** Observe all the members gradually and closely for not less than 2 minutes and upto around 3 minutes. Once you have a good idea of which of the four roles that person seems to be adopting, **write their role in the column beneath their name.**

(ii) Repeat this procedure with every member of your group.

(iii) Return to the first person you observed and repeat the whole procedure so that you observe and record roles of every person about four times during their work. If anyone has changed his role, be ready to note the different role.

(iv) After the discussion is over, or your group has completed their task, make your **deductions**. A person's **primary role** will be one which they were adopting **more than half of your observation**. For example, if you observed each person four times and one person was acting as leader in three out of four observations, his primary role was **LEADER**. If a person adopted different roles in different occasions you will write "DIVERSE" as his primary role.

(v) Write about your own reactions, problems, and views regarding this mini **ethnographic research** based on your **personal observation**. How would you analyse yourself as an observer?

4.8 Supplementary Reading

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4.9. Glossary

accent – a particular way of speaking which tells the listener something about the speaker's background e.g. an American accent.

adjacency pair – a sequence of two related utterances by two differnt speakers e.g. offer—Decline.

anthropology – science of man, especially of the beginnings, development, customs and beliefs of mankind.

anthropological linguistics – a branch of linguistics which studies the relationship between language and culture in a community e.g. its traditions, values, family structure.

bilingual – a person who knows and uses two languages.

communicative competence – the ability not only to apply the grammatical rules of a language in order to form grammatically correct sentences but also to know when and where to use these sentences and to whom.

Creole – a **Pidgin** language which has been expanded in vocabulary and structure, and has acquired native speakers.

Creolization – the process by which a Pidgin becomes a Creole. Creolization involves the expansion of the vocabulary and the grammatical system.

cultural relativism – the theory that a culture can only be understood on its own terms. This means that standards, attitudes and beliefs from one culture should not be used in the study or description of another culture. According to this theory there are no universal cultural beliefs or values, or these are not regarded as important.

culture – the total set of beliefs, attitudes, customs, behaviour, social habits, etc. of the members of a particular society.

dialect – a variety of a language, spoken in one part of a country (regional dialect), or by people belonging to a particular social class (social dialect) which is different in some words, grammar, or pronunciation from other forms of the same language.

dialectologist – person who studies dialectology

dialectology – the study of the regional variations of a language.

discipline – branch of knowledge, subject of instruction.

ethnography – the study of the life and culture of a society or ethnic group, especially by personal observation.

ethnography of communication – the study of the place of language in culture and society. Language is not studied in isolation but within a social and cultural setting.

ethnomethodology – a branch of sociology which studies how people organize and understand the activities of ordinary life. Ethnomethodologists have studied such things as relationships between children and adults, interviews, telephone conversation, and turn-taking in conversation.

foreign language teaching – teaching of a language which is not the native language in a country, which is not used as a medium of instruction, nor as a language of communication within the country.

geographical dialect continuum – a chain of adjacent varieties which are mutually intelligible but pairs taken from the opposite ends of the chain are not.

lexical word – word which refers to a thing, quality, state or action and which have meaning when the words are used alone.

lexis – the vocabulary of a language in contrast to its grammar.

lingua franca – a language that is used for communication between different groups of people, each speaking a different language. The lingua franca could be internationally used language of communication, (e.g. English), it could be a native language of one of the groups (e.g. Bengali, in India) or it could. be a mixture of two or more language (a **pidgin)**

linguistic relativity – a belief that the way people view the world is determined wholly or partly by the structure of their native language.

linguistics – the study of language as a system of human communication.

non-native varieties of English – term used for varieties of English used in countries. where English is a **second language** such as Indian English, Singapore English.

non-verbal communication – communication without the use of words, this could be done through gestures of signs.

Norm – that which is considered as appropriate in speech or writing for a particular situation or purpose within a particular group or community.

pidgin – a language which is linguistically simplified, mixed and restricted, used in limited contact situations between people who have no common language.

retroflex consonants – consonants formed by curling the tip of the tongue back and bringing it into contact with the back of the alveolar ridge (e.g.Hindi/ga;dl/)

second language – it is a language which is not a native language in a country, but it is widely used as a medium of instruction, in education and in communication, in Government. It is widely used by the people alongside another language or languages.

sequencing – relationship between one utterance and another.

sociolinguistics – the study of language in relation to social factors, that is, social class, educational level type of education, age, sex, ethnic origin, etc. **Micro-sociolinguistics** deals with inter personal communication such as speech acts, speech events, sequencing of utterances, and also investigations regarding varieties of language **Macro-Sociolinguistics** deals with the study of language choice in bilingual or multi-lingual communities, language planning, language attitudes etc. (In unit 1, we have discussed some aspects of micro sociolinguistics).

sociology – science of the nature and growth of society.

standard variety – a variety of a language which has the highest status in a community or nation and which is usually based on the speech and writing of educated native speakers of the language.

turn-taking in conversation – the roles of speakers and listeners change constantly. The person who speaks first becomes the listener as soon as the person addressed takes his turn in the conversation by beginning to speak.

Note : If you are looking for a particular word or term and it is not included in this list, you could look up a dictionary. If it is not included in the dictionary either, and is a technical term, then please consult this source :

Richards, Jack and John Platt and Heidi Weber, 1985. **Longman Dictionary of Applied Linguistics,** Essex, Longman, I have referred mostly to this book. (If you still have problems, please write to me!)

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MODULE - 3

Unit 5 ❐ Scope and Definition

Structure

5.0. Objectives

After going through this unit, you will become familiar with

- the scope and nature of psycholinguistics
- the main concerns of psycholinguistics
- some of the views and controversies in the discipline
- the way people understand and produce language

5.1. Introduction

The study and practice of psycholinguistics is the concern of both linguists and psychologists. Both come under the category of social scientists. As such they operate by forming and testing hypotheses about various aspects of language knowledge and language use. They do so on the basis and evidence of linguistic data which they collect. But there is an important difference between the two groups. Psychologists test their hypotheses through carefully controlled experiments while linguists check their hypothesis against spontaneous utterances.

There is another fundamental difference as well. This is one of approach and is related to the relationship, between language and cognition. Many linguists, including Chomsky, believe that linguistic ability in man is distinct from other congnitive systems. This belief is guided by two assumptions : (1) The structure oflanguage can be studied independently from how the structure is used for communication, and (2) sentence-level syntactic structure forms the core of the linguistic system. So it is believed that principles that control the system will also be the basis for models of language processing and language acquisition (as we shall see later, this claim is not tenable).

Psychologists on the other hand are reluctant to assign such a central role to the linguistic system or grammar. They believe that language processing and language acquisition can be understood within the same frame work as other cognitive processes.

5.1.1. Scope and Definition of Psycholinguistics

One way of defining psycholinguistics is to consider it, along with sociolinguistics, as a branch of applied linguistics. Even then, it is difficult to define it precisely, except indicating broadly that it is concerned with exploring the nature of the relationship between language and mind. This is so because of two reasons : (1) first of all, psycholinguistics deal with a large number of areas, and (2) secondly, it does not yet have a unified theory which can integrate the various activities it deals with. This diversity will become clearer if we study the diagram in Fig 1.1 below.

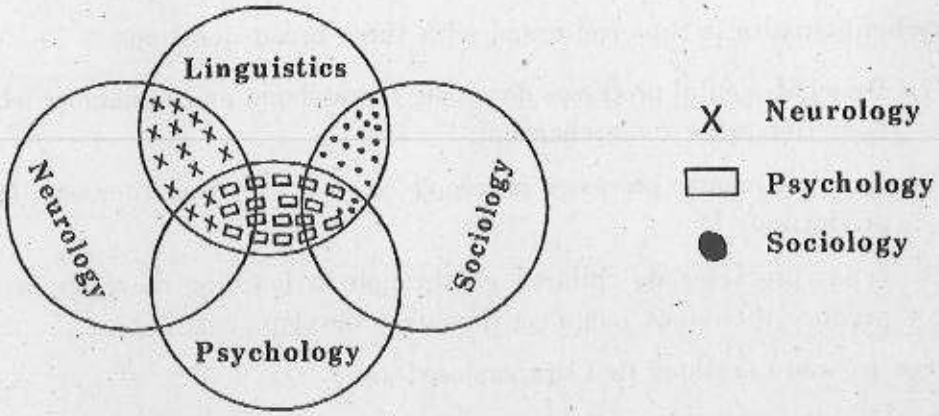

Fig 1.1 showing the relationship of psycholinguistics with other disciplines.

The scope of psycholinguistics thus extends over other disciplines as set out below

i) Related to psychology → language learning → First language learning; sign language → second language learning

ii) Related to Neurology → structure of the brain and language; animal and human language

iii) Related to Sociology → Bilingualism language and culture

In this unit we will deal briefly with the relationship between the brain and language ability, language development and second language learning. Bilingualism will be dealt with in unit 2.

5.1.2. The Main Concerns of Psycholinguistics

In order to understand the scope of psycholinguistics more fully, we need to consider how human beings utilise language. For communicating through language, human beings engage in two basic activities : speaking and listening. There are mental activities which hold clues to the very nature of the human mind. When people speak, they put ideas into words, "talking about perceptions, feelings and intentions they want other people to grasp." In listening, they turn words into ideas, "trying to reconstruct the perceptions, feelings and intentions they were meant to grasp." In this sense, speaking is encoding of messages or meanings which listening is decoding. However, speaking and listening are more than that. They are the tools people use for other activities : to convey facts, ask for favours, make promises, receive information and so on. So these common place activities are actually very complex ones.

Psycholinguistics is thus concerned with three broad questions :

1) By what mental processes do people comprehend and remember what they hear (language comprehension) ?
2) By what mental processes do people come to say what they say (language production) ?
3) What processes do children go through in learning to comprehend and produce their first language (language development) ?

Other related questions that are explored are :

4) how do people store and retrieve information relaing to words and meanings?
5) what path do second language learners follow to comprehend and produce the second language?
6) Is second language learning like the first language acquisition?
7) How does the 'process' of reading take place?
8) How do bilinguals function with their two languages?
9) How are thought and language related?
10) What is the structure of the mind?
11) Why does language have the structure it does?

Obviously, such questions have generated a lot of research and this in turn has led to attempts to formulate problems in researchable terms.

5.2. History and Development of Psycholinguistics

Psycholinguistics as a discipline is of a fairly recent origin, but it has shown a rapid growth and quite a vast body of research. Two summer seminars held in the U.S.A. in 1951 and 1953, brought together psychologists, structural linguists and proponents of information theory. The aim was to define a common field of research. As a consequence, the new discipline of psycholinguistics was named and defined.

5.2.1 The First Phase : Language as code

At this point of time, psychology was primarily represented by theories of learning. Learning was seen as the study of stimular-response (S-R) relationships; language learning was seen as verbal behaviour, a habit formation brought about by mimicry and memorization (refer to Audiolingual method in earlier units). Structural

linguistics was characterized by the distributionalist method of Bloomfield and Harris. But it was information theory which not only provided a large number of new concepts, but also provided a theoretical framework for the fusion of the two disciplines. Psycholinguistics was defined as dealing "directly with the processes of encoding and decoding as they relate states of messages to states of communication."

In this approach, language is seen as a "code", a set of possible signals and a particular sequence of signals constitutes a "message". Messages, coded in this way, are transmitted via a "channel". As you have seen in the unit on information theory, information can be quantified and measured. (There is a mathematical formula for this, but we will not burden you with it). Messages usually contain "redundancy", that is, they provide more information than is strictly necessary. An example will make this clear. Take the English sentence "Three books are on the table". In this sentence the concept of plurality occurs in three places: (1) use of the word "three" (more than one), (2) plural marker '–s' in books, (3) the verb 'are'. Redundancy reduces the likelihood of error in the reception of messages in case there is some loss of information during the transmission through a channel. Redundancy is related to the probability of the appearance of a signal.

Another important concept is the notion of *channel capacity* : how much information can be transmitted in a given unit of time.

In this early phase of psycholinguistics, research studies focussed on two main themes : (1) whether the units identified by linguists had psychological reality (specially in perception), and (2) the effects of the probabilistic structure of the linguistic code (frequency of units, redundancy, sequential dependence etc.) on the performance of subjects in task of identification, recall and anticipation.

5.2.2. The Second Phase : Language as Grammar

In the earlier section the first phase in the development of psychotinguistics has been described. Within a few years researchers encountered difficulties resulting from the position taken. First of all, though a language exhibits statistical properties (e.g. unequal frequency of units, differing probability of occurrence of units etc), it is quite likely that these properties result from regularities of a diffirent kind. Chomsky demonstrated that there are more satisfactory theoretical models.

Secondly, Shaunon's information theory is a theory of *transmission* of information. But by the mid-fifties, machines were developed which could *process* information.

From these two developments began the second phase of psycholinguistics. Chomsky's *syntuc structures* (1957) and J.A.Miller's work became so influential that during the 1960s generative and transformational grammar became the almost exclusive basis of works in psycholinguistics.

Psycholinguistic research initially tried to prove the psychological validity of Chomsky's descriptions. The formal rules for the generation of utterances were interpreted as psychological operations and research was undertaken to confirm this.

Chomsky's work influenced the study of language acquisition by children. Quite a lot of work was done to establish "grammars' of children's language, where various stages were identified and shown to progressively came to resemble adult grammar.

Other experimental work focussed on the psychological reality of transformations, specially in the form of deri vational theory of complexity. This holds that ease or difficulty of processing a sentence is related to its transformational complexity.

5.2.3 The Third Phase : Present Day Trends

From 1970 onwards, psycholinguistics started to react against the domination of generative linguistics. This reaction took two forms. First, some psycholinguists still accepted Chomsky's description of the structure of language as the most satisfactory one, but focussed on the study of psychological procedures for the discovery and implementation of this structure. Secondly, other researchers refused to consider linguistic theory as the basis of their enquiry and tried to establish a psychological model of the language user.

In this unit we shall try to show the dead-end that the second-phase research reached, and try to give you some idea of the kind of psychological models that have been proposed.

5.3 Some Issues in Psycholinguistics

We have already come across a number of issues which have influenced the perspective adopted for study and research in psycholinguistics. One of these is whether grammar is central in psycholinguistic investigations. Some of the others are : (1) does psycholinguistics deal with the knowledge of language or does it also consider language use as its domain? (2) does transformational generative grammar represent psychological reality, (3) is language ability innate ?

5.3.1. Is Language Ability Innate?

According to Chomsky, the linguistic competence of human beings is due to the existence of an innate language knowledge or language acquisition device LAD. This innate knowledge is not functional or operational till some experience from the world interacts with it. The experience is an essential element in the acquisition of knowledge. Its role is not to form or shape knowledge but to activate the innate but latent knowledge. Thus LAD provides a person with a particular grammar (lexis and sets of rules) when he is exposed to the data of a particulars language. LAD provides (a) the basic ideas for forming the particular rules and particular lexical items of any grammar and b) the operational means by which such outcomes are achieved.

Chomsky postulates three classes of innate ideas for LAd : *substantive ideas,formal* ideas and what D. Steinberg calls *constructive* ideas. Substantive ideas are those which appear in relations or are manipulated by operations, that is, phonetic, syntactic and semantic features. Formal ideas are those which express relations or manipulations, e.g. the Base rule and Transformational rule functions. In Base rules, a rule like S → NP + VP, S, NP and VP are substantive ideas while the relationship of .....→ .....+ ..... is the formal idea. The combination of substantive and formal ideas provide the basis for the construction of any grammar of a language.

The third class of innate ideas, the constructive, enable the mind to construct a particular grammar using the substantive and formal innate ideas, when provided with a particular language data.

Chomsky presents a number of arguments to support his LAD theory, also referred to as Universal Grammar (UG). However, there are counter arguments as well, and not everybody accepts the innateness oflanguage ability in human beings.

5.3.2. Does grammar represent psychological reality?

This really means whether models of grammar can also be models for the processing of language. It would appear that Chomsky claims this. This claim was explored in studies concerned with the derivational complexity of sentences and the time taken to process them, usually for understanding. However, it was found that the complexity of processing depends more on the meaning of the sentence and conditions of use than on its derivational history. In processing language, a listener certainly constructs an organized representation of a sentence. But there are indications that such organizations are semantic in nature rather than syntactic. In that case it is not possible to establish the psychological reality of syntactic and transformational rules.

[You will notice that we have not given any detailed account of the large body of experimental work done in psycholinguistics, but only referrred to some of the conclusions that have been reached].

5.4. Is there a biological basis for language ?

E. H. Lenneberg, in his book *Biological Foundations of Language* (1967) pointed out that the slightly unusual features shown by the human brain and the vocal tract can be viewed as a *partial* adaptation of the body to the production of language. Human teeth, lips, mouth, tongue and the larynx differ from the corresponding organs of other primates and seem to be geared to speech. The lungs of human beings and its breathing mechanism appear to be "biologically organized" for speech.

5.4.1. Language and the brain

Fig 1.2. below explains language processing by a sepaker and a listener. This is the 'speech chain' proposed by Denes and Pinsons (1963)

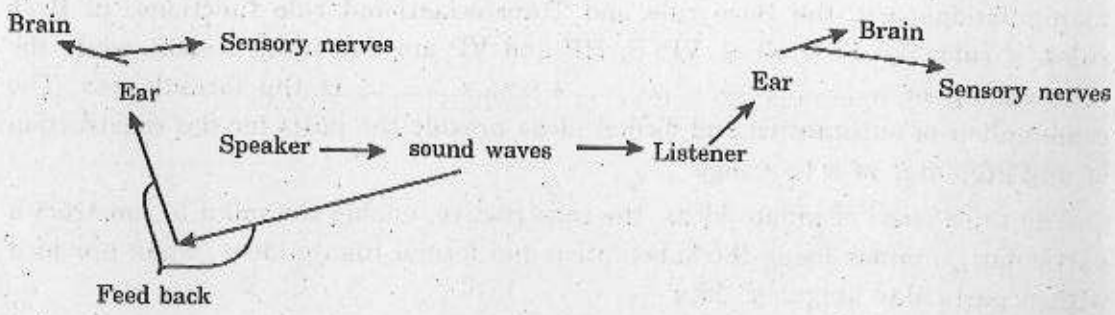

Fig. 1.2. Showing the speech chain.

Two human beings, one 'the speaker' and the other 'the listener', are involved in this act. The 'speaker' delivers sound waves and the 'listener' receives it. In this act three stages are involved–

1. Linguistic level : The formation of the message. The listener receives the message through the ear and sends it through sensory nerves to the brain. Then the message is encoded in the brain. This process recurs in the speaker's brain from the feedback of his /her own speech for maintaining good control of articulatory targets.
2. Physiological level : The brain monitors the vocal muscles to produce speech sounds through the motor nerves in the speaker. The message is sent to the brain for encoding via sensory nerves.
3. Acoustic level : The sound waves are the main linkage between the speaker and the listener. This is the only level which exists outside the speaker and the listener.

The human brain is divided into a lower section, the *brain stem* and a higher section, the *cerebrum*. The brain stem keeps the body alive by controlling breathing and other vital functions. The cerebrum, the higher section, is not essential for life : its purpose seems to be to integrate the human being with its environment. This is the part of the brain where language is likely to be organized.

The cerebrum is divided into two halves, the *cerebral hemispheres*, the left and the right, which are linked to one another. The left hemisphere controls the right side of the body and the right hemisphere the left side. Various methods for testing which hemisphere controls speech, have shown that the majority of normal human

beings, perhaps about 90 percent, have speech located primarily in the left hemisphere. A further interesting discovery is that the location of speech centres in the left hemisphere seems to be linked to right handedness.

This localization or lateralization of language in one half of the brain seems to be a definite biological characteristic of the human race. This brain asymmetry develops gradually. From about the age of 2 onwards, one hemisphere becomes progressively dominant. Lenneberg has suggested that the process may continue till adolescence, though other people like Krashen maintain that the process stabilizes much earlier. This issue is important because lateralization may be linked to what has been called a "critical period" for language acquisition. This is the time when children seem to be optimally equipped for acquiring language. If this is true, it has important implications for teaching languages in school.

5.4.2. Parts of the brain

Various methods of investigation, mainly observation and experiments, have provided certain clear outline of facts relating to language. First of all, it is possible to distinguish the area of the brain which is involved in the actual articulation of speech. This is located in the cerebrum, the front part of the brain, also known as the "primary somatic motor area." It controls all voluntary bodily movements, including hands and mouth. Fig. 1.3. shows the major components of the brains. The cerebrum is the front part while cerebellum is located at the back of the brain. In figs 1.4. and 1.5 you will see other portions of the cerebrum marked. In Fig. 1.4 you will also see that the primary somatic area is situated just in front of a crack or "fissure" running down from the top of the brain. The control for different parts of the body works upside down : control of the feet and legs is near the top of the head, and control of the face and mouth is further down.

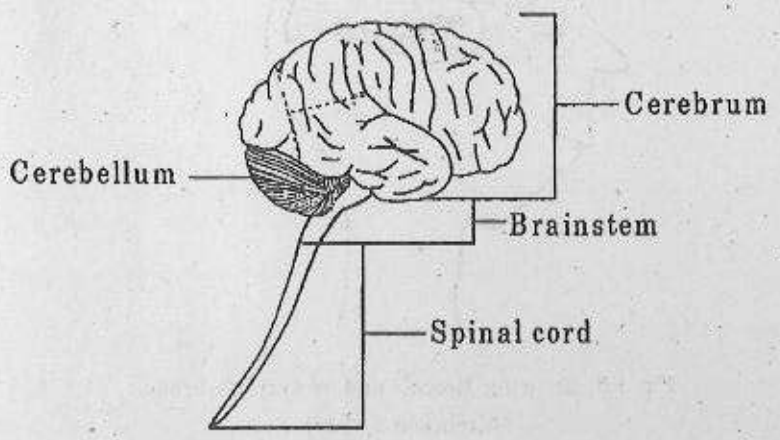

Fig. 1.3. The Brain and the components of the central nervous system.

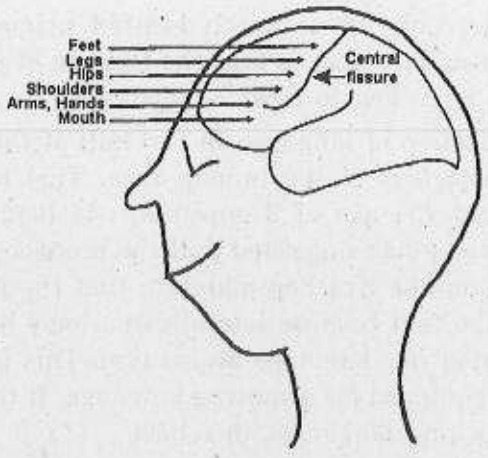

Fig 1.4. Showing areas of the brain controlling volantary movement (Aircheson : 1983)

But the section of the brain involved in the articulation of speech seem to be quite distinct from areas involved in its planning and comprehension. Where are these areas? This is where experts disagree. However, two areas seem to be particularly relevant : (1) the neighbourhood of *Brocas area* (in front of and just above the left ear) and (2) the area around and under the left ear, known as *Wernicke's area*. In Fig 1.5. below, the shaded area marked 1 shows the Broca's area and the shaded area marked 2 indicates Wernicke's area.

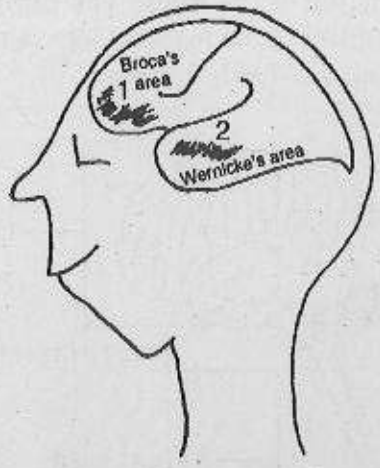

Fig 1.5. Showing Broca's and Wernicke's areas.
(Aitcheson : 1983)

These areas are important for speech comprehension and production. It has been found that damage to Broca's area often hinders speech production and damage to

Wernicke's are a frequently destroy speech comprehension. Fig. 1.6 below provides a schematic view of the language area of the left hemisphere.

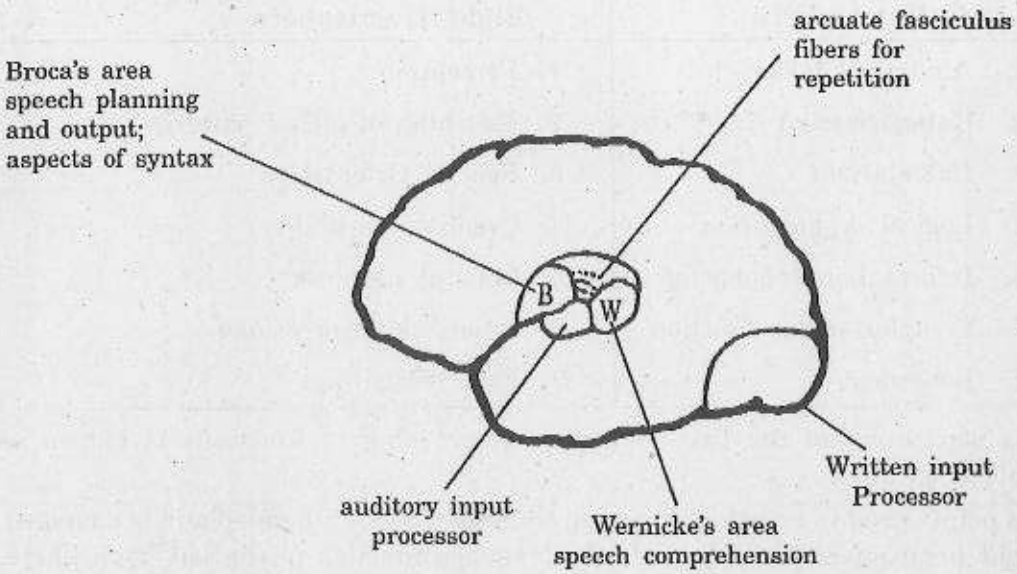

Fig. 1.6. A schematic, view of the language area of the left hemisphere.

In addition to these, there are probably deeper interconnections below the grey matter of the brain, about which little is known. Some neurologists believe that inter connections are as important as the areas themselves and claim that major speech defects occur when these interconnections are severed.

5.4.3. Speech impairments as evidence

Speech impairment of various kinds (different types of aphasia) due to head injuries, provide evidence of the link between speech and the brain. We have not enumerated the various speech problems that occur in speech impaired subjects. So we will mention just a few of these : stuttering, pauses, repetition of one word only, grammatical words left out, lack of naming ability, creating non-words, phonemic substitution, associated lexical item replacement, nonfluent spontaneous speech etc–all related to speech production; failing to understand simple syntactic relationships, inability to understand meaning, inability to comprehend abstract words etc,– all related to the comprehension of speech.

5.4.4. Lateralization of the brain

In this subsection you will be told about some of the functions of the left and the

right hemispheres of the brain. The left hemisphere is known as "analytic" while the right hemisphere is "creative". The list below will tell you how the two hemispheres share different functions.

Left Hemisphere	Right Hemisphere
1. Analytical tasks	1. Perception
2. Categorization	2. Matching of global patterns
3. Calculations	3. Spacial Orientation
4. Logical organization	4. Creative sensibility
5. Information sequencing	5. Musical patterns
6. Complex motor function	6. Emotional expressions
7. Language	7. Face recognition

This separation of the two hemispheres according to functions is known as "lateralization".

Two points need to be noted. In young children if the left hemisphere is damaged, the right hemisphere can take over the language function of the left hemisphere. Secondly, though syntactic and semantic correlations are processed in the left hemisphere, single lexical items seem to be processed in the right. Further, interpretation of metaphors, understanding of discourse, telling a story, understanding of ambiguous sentences and production of intonation patterns in sentences –all seem to be controlled by the right hemisphere.

5.5. Language Processing

Language processing refers to the way people understand and produce language for use. Psycholinguistics is interested in finding out exactly what people do when they understand, produce and use language in real life. This means building up a model of the processes and units through which the processes operate. So far, the attempts have been tentative and exploratory. General indications are available, but details of the processes as yet have not been definitively established. In the following sections an overall view of such findings will be provided.

5.5.1 Comprehension

In earlier sections you have seen that syntactic and transformational rules do not represent psychological reality and hence cannot be used for a model of languages processing. As a consequence, psycholinguists turned to pragmatics for a characterization of what language is. The advantage is that within this approach language can be seen to be linked to the context and situation of its use and hence language utilization can also be accounted for.

- **Language as Pragmatics**

From the pragmatic point of view, language is seen to consist of *speech acts* or functions, *propositional content* and *thematic structure*. These are all units of meaning, and are expressed through syntactic structures of one kind or another.

Speech acts refer to the function of sentences in use. Examples of speech functions are promising, apologising, thanking, asserting, commanding etc. To understand what somebody says, the listener should be able to recognize these functions. Propositional content refers to the ideas around which a speech act is built. A sentence is a combination of the various propositions it expresses. A proposition typically consists of a verbal unit plus one or more nouns. For example, the sentence *John is a bachelor* can be represented as the proposition Bachelor (x). Fig 1.7 below shows some basic types of propositions.

SIMPLE SENTENCES	SENTENCES WITH VARIABLES	PROPOSITIONAL FUNCTIONS
1. John walks	x walks	Walk (x)
2. John is handsome	x is handsome	Handsome (x)
3. John is a bachelor	x is a bachelor	Bachelor (x)
4. John hit Bill	x hit y	Hit (x, y)
5. John is in Paris	x Is in y	In (x, y)
6. John gave Fido to Many	x gave y to z	Give (x, y, z)

Fig 1.7. Showing six simple sentences and their corresponding propositional functions.

Of the six propositional functions, walk (x), Handsome (x) and Bachelor (x) are all one- place functions. Hit (x, y) and In (x, y) are both two place functions and Give (x, y, z) is a three- place function. In English some functions are expressed as verbs, some as adjectives, some as prepositions and some as nouns.

Thematic structure of messages refer to what the listener does and does not know, so that speakers can supply what listeners do not know. And this is the reason why listeners listen. In English thematic structure has three main functions; (1) to convey given (= known) and new information; (2) provide subject and predicate, and (3) supply a frame and insert. Some examples will make this clear. Take the sentence.

It was the rain that destroyed the crops.

Here it is *known* that crops have been destroyed. But *what* destroyed the crops? The new information is *the rain.* Sentences signal the new information by the use of stress, with the greatest emphasis and the highest pitch.

When people talk, they have something they want to talk about and something they want to say about it. These functions are conveyed by the subject and the predicate.

Take the sentences

a) The police caught the thief

b) The thief was caught by the police

When speakers use a), they are talking about the police and what they did. When they use b), they are talking about the thief and what happened to him. Subject and predicate are thus important for carrying out the purposes of a conversation. They allow the participants to keep track of what each other is talking about at all times. These have another purpose too. It is quite conceivable that listeners would store the fact in one way given sentence a) and another way given b). In most sentences, the subject is the given information while the predicate provides the new.

When speakers place a particular phrase at the beginning of a sentence, they are deliberately trying to orient their listeners toward a particular area of knowledge. Speakers then use the nest of the sentence to narrow down what they are trying to say. For this reason the first phrase is called *a frame* and the rest of the sentence an insert for that frame, e.g.

On the film set, Mrs Fields was delightful.

Hardly ever did Mr Fields crack a smile.

In the simpliest sentences the frame coincides with the subject and is part of the given information.

So far we have talked about sentences. However day to day use of language continues after one sentence. People engage in conversations, stories, gossip and jokes which consist of a succession of sentences in a highly organized social activity. Stories, jokes and essays have structure, so does even the most trivial conversation. In fact, speech acts and thematic structure make sense only within the larger framework of *discourse.* It is the nature of discourse which determines which speech acts are appropriate, and what should be given information, subject and frame in each utterance.

- **Processes of Comprehension**

If this is the nature of language use, how does one make sense of it ? Clark and Clark (1977) propose the use of two processes for comprehension : (1) the constructive

process and (2) the utilizations process. In general terms, with the help of the construction process, listeners construct a hierarchical arrangement of propositions and interpret the message, perhaps utilizing clues from the syntactic approach.

The utilization process refers to the listener's mental processes in utilizing a sentence as the speaker intended. Inference and problem solving are central to the utilization process. Behind this lies the *Co-operative principle,* the fact that speakers and listeners co-operate with each other. For a start, listeners have to infer what speech act is being performed. Is the speaker asserting something, making a request, asking a question, making a promise or what? The answer can often be inferred directly but some times have to be inferred indirectly. There are then other problems to be solved : what does the given information refer to? What are the pre-suppositions? Do I know the answer the questioner wants? How should I express the answer ? How can I accomplish the goal bei ng requested?

- **Some Problems**

Doing all these bring in several problems. The first one is of memory. Since there is a limit to the capacity ofthe memory, too much information (e.g. a very long or a complicated sentence) makes language processing difficult. The content and accuracy of what we remember is influenced by the type of language used, the way we listened to it and the way we are trying to produce it, e.g. verbatim or not.

5.5.2. Language Processing : Production

Speaking is fundamentally an instrumental act. Speakers talk in order to have some effect on their listeners. They assent things to change their state of knowledge. They ask questions to get them to provide information. They request things to get them to do things for them. They promise, bet, warn, exclaim, joke in order to affect them in other ways. Speakers begin with the intention of affecting their listeners in a particular way and select the appropriate speech act to bring about the desired effect or outcome.

Language production or speaking thus appears to involve two types of activity: planning and execution. Speakers first plan what they want to say based on what they want their listeners to do. Then they put their plan into action. How do they plan? Briefly speaking, the process seems to be a top-to-bottom one; beginning with the most general aspect and then proliferating down to the most specific one. The process may look like this :

(1) Discourse plans : Speakers have to decide what kind of discourse they are participating in : a conversation, telling a story, giving instructions, making a promise on what? As each kind of discourse has a different structure, utterances have to fit in order to contribute to the discourse.

(2) Sentence plans : Selecting the discourse along with the intention to send the right message, speakers must decide on the speech act, organize the message and decide on the given and new information.

(3) Constituent plans : Once the global characteristics of a sentence has been decided upon, speakers can begin to plan the constituents. For this the right words, phrases or idioms have to be selected and put in the right order.

(4) Articulatory programme : As specific words are chosen, they must be integrated into a programme which will assign the appropriate stress and intonation patterns.

(5) Articulation : This is done through step no 4, resulting in audible sounds, the speech the speaker intended to produce, while doing all these, the speakers also need to select the level of familiarity and formality based on judgements of social factors.

In this section you have seen how language is processed both for comprehension and production. One question arises here : are comprehension and production totally different? It would appear that the two processes are partially the same and partially different.

5.6. Language Development

Psycholinguistics is interested in two kinds of language development : (1) the acquisition of the first language by children and (2) the acquisition of a second language by children, adolescents and adults.

5.6.1. How do Children Learn their First Languages?

Two types of explanation have been put forward to account for the nature of language acquisition. Aitcheson calls them the *content* approach and the *process* approach, Chomsky's proposal is the content approach. He believes that children some how know that all sentences have a deep and a surface structure. This knowledge enables them to infer abstract deep structures which are not visible on the surface.

However, subsequent research has demonstrated that children have relatively little advance knowledge about their first language. The alternative is a "process approach which suggests that children have in built puzzle-solving equipment which enables them to process the linguistic data they come across. Whichever approach is taken by a child, the result would be more or less the same. However, some studies have found that Chomsky's claims can not be supported.

The fact remains that we do know what kind of stages a child passes through in his language acquisition, but we still do not know how the child makes a transition from one stage to the other.

A number of ways have been suggested in which people think children learn language. One of these is imitation or mimicking. Others are overt connection of form by adults. It has also been suggested that "motherese" or the way mothers talk to their children help them to learn.

Research suggests that imitation and overt connection of form does not have much effect on children's learning. However parents' talk seems to be important

since it provides a rich environment. Parent talk is highly grammatical and simplified and relates to what is happening in the immediate environment and concrete referents. Adults also tend to use higher pitch, slower speech, repeats or paraphrases, more pauses and more distructive stress. Such exaggerations highlight and focus on important constituents, helping the child to remember these more easily. Expansions also help the child in the same way.

Initially children seem to use words and phrases holophrastically, then use them in known environments and then try them out in new contexts. They also seem to use some kind of rule or regularization in handling grammatical forms. (e.g. gold, sheeps etc).

Prior to uttering speech sounds infants make a variety of sounds like cooing, crying and gurgling, later children begin to babble, that is repeat consonant-vowel combinations. From babbling infants move on to utter their first word. At this point some of the sounds used in his language have to be learnt. Such sounds are acquired in a front to back order, with / p / / b / / t / / d / / m / preceding / k / , / g /

At the speech phase, one-word utterances occur first. Naming of objects is one of the first uses to which children put-words. However children also use there same words to express complex thoughts involving these objects.

Next comes two or three-word utterances, around two years of age, when children become aware that adding more words improve their communication. At this point of time a child uses his utterances for a variety of purposes, displaying a whole set of complexity of semantic relations. Function words such as articles, propositions and conjunctions show a low incidence of occurrence. Nouns, verbs, and adjectives mainly appear in the utterances. This is known as the telegraphic stage. The word-order in the child's utterance is close to that of the speech of the mature speaker e.g. *my cup* rather than cup my.

When the child begins to produce larger utterances, function words, inflections and complex syntactic structures begin to appear. With the production of longer utterances, simple structures are manipulated to produce more complex ones. Pronominalization, question and negation begin to be acquired.

By five years of age, most children are able to produce most of the essential structures of their language. Passives and other complex structures are acquired later.

5.6.2. Second Language Acquisition

How do second language learners learn a second language? You will learn about this in Module 4. In this section it will be pointed out that second languages can be learnt outside the classroom or inside a classroom. This difference in the learning context may lead to a significant difference in *how much* has been learnt and *what* has been learnt.

There is also the question whether children are better in learning a second language or do adults learn better? There is no doubt that children are better in pronunciation, but adults may do better in grammar and vocabulary acquisition. Also, there are good and bad learners of a second language.

5.7. Let's Sum up

In this unit we have dealt with the scope and definition of psycholinguistics, its concerns, issues within the discipline, the relationship between language and the brain, processes of language comprehension and production and language development in the child.

5.8. Glossary

Aphasia : a type of language disorder resulting from brain damage

Dyslexia : problems with reading

5.9. Questions for Comprehension

1. What does psycholinguistics deal with?
2. How will you define psycholinguistics ?
3. What is the relationship between the brain and language use?
4. Which areas of the brain are responsible for language? In what way?
5. Briefly describe the various phases in the development of psycholinguistics as a discipline.
6. What do you understand by "language processing" ?
7. How is language comprehended?
8. How is language produced?
9. What is pragmatics?
10. What does language impairment tell us about language?
11. What are speech acts?
12. What is thematic organization?
13. What do you understand by "propositional content" ?
14. What part does memory play in language comprehension?
15. What characteristics does the two and three-word phases of child language have?
16. What processes do children use for learning the first language?

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Unit 6 ❐ Bilingualism

Structure

6.0 Objectives

The aim of this unit is to give you some idea of

- What bilingualism is
- In what contexts bi- or multi-lingualism occurs
- Various types of bilingualism
- Some theoretical issues related to the conceptualization and analysis of bilingualism.
- What the implications are for the teaching and learning English as a second language in India.

6.1. Introduction

6.1.1 Basic concepts

Bilingualism or the ability to use more than one language, has been in fact a part of human history ever since it began to be recorded. With the tremendous increase in population coupled with an increasing inter -cultural and international intercourse, bilingualism is more apparent today than ever before. According to Mackey (1968 : 555) bilingualism is not a phenomenon of language; it is a characteristics of its use. It is not a phenomenon of the code but of the message. It does not belong to the domain of "language" but of "Parole".

If language can be identified with the group which uses it then bilingualism can be identified with the individual. His functional use of two languages presupposes the existence of two different language communities but it should not be mistaken as the prevalence of a bilingual community. The bilingual community can be identified as a mutually dependant collection of individuals who have reasons for being bilingual. According to Miller (1984) bilingual communities can be defined along several dimensions. It should be borne in mind that the dimensions are not mere labels for innumerable opposites, for example stable at one pole and unstable at the other pole, but are continua where any given community might be characterized by its relative position on the continuum between two extremes. Another point for consideration is that these dimensions do not operate independently, but typically form a complex of interacting variables.

Different monolingual communities, which may be prone to contact can also contribute to the emergence of bilingualism. For example, most societies have at least some contact with other communities for the purpose of trade, conquest, consultation and so forth, and as a result they must communicate their desires and needs to one another. Such communication is usually carried out by the group of individuals conversant in the languages of both the communities. Bilinguals thus, share the linguistic systems of both the speech communities and can be considered members of two cultural communities according to the degree of participation in the two separate spheres of activity.

6.1.2. The origins of Bilingualism

Bilingualism has always been associated with the notion of contact. Contact between two communities, especially if the two communities speak two distinctly different languages or even two different dialects, requires a suitable medium for subsequent interaction and eventually the situation is just appropriate for the development of bilingualism. We are all familiar with the periods of bilingualism as a result of the movements of peoples during the great invasions which helped bring about the fall of the Roman Empire; the mass European migrations to the Americas between the 1880's and the 1920's and the resultant bilingual immigrant communities. In recent times we have seen, thousands of displaced persons, refugees and prisoners of war, who had to become biolinguals to survive. In prison camps and in the subsequent post-war refugee areas set up in Europe by the United Nations and the International Refugee Organizations, people speaking many different tongues found themselves grouped together and soon realized that they were unable to communicate among themselves or with the authorities without a rudimentary knowledge of German in addition to their own language. Later, may of these people had to learn still another language in order to be able to work in the country to which they had migrated.

The events of history can modify the facts of geography, as far as bilingualism is concerned. Historical events result in the changing of national frontiers and political groupings. Political federalism has encouraged the bilingualism of Malaysia. Yugoslavia and the USSR by accepting the permanence of minorities within its boundaries. In turn the State assumes the responsibility of maintaining a stable bilingualism for these groups. It may not be efficient and economical under these conditions, to sustain a language; but national and political values may nevertheless require its preservation. This has been the case for Eire in Ireland and Hebrew in Israel. Bilingualism has been an important fact of life for a large cross section of the population throughout the history of the British Isles. Successive movements of European peoples have seen the emergence and also the development of British culture through out the centuries, each ethnic group interacting with the group which went before and contributing to the process of cultural and linguistic change. The English language today is a living testimony to this process. The Angles, the Saxons, the Vikings and the Normans all helped to shape its development and continue to exert an influence on its present form (Alladina Edwards 1991).

6.1.3. Bilingualism in the Indian Context

In the Indian context mainly due to active bilingualism of Indian languages and English among educated classes during the past few decades, various styles and expressions have been supplemented in the stock of Indian languages, to qualify them for new roles introducing the concept of a saleable commodity (Bandyopadhyay 1991). This has also had its influence on various important reference works like grammars, dictionaries, translations, glossaries, and other teaching materials that have been published. Bayers (1986) states that "India is one of the world's oldest multilingual societies which is made more complex due to ethnic, socio-political, economic and religious diversity". In India we have huge cross sections of ethnic

groups ranging from the most backward to the most modern civilized groups with unlimited opportunities for interactions between the most diverse of cultures. Bayers (1986) adds that "in modern technological societies circumstances necessitate larger extensive group interaction at various levels of behaviour. India is no exception to this". Ramakrishna Reddy (1987) states that bi/multilingualism is a predominant characteristic in the Indian situation, and it is obvious that there are numerous cases of inter influences between the large number of major and minor languages belonging to the three major language families in India, namely Indo-Aryan, Dravidian and Munda. Not only is there interaction between the various major languages like Bengali, Hindi, Oriya, Telugu and Tamil but also interaction between one or more of the major languages in question with some of remote, lesser known or even unknown minor tribal languages such as Kuvi, Konda, Pengo, Parengi, Savara, Gutob-Gadaba and Manda. It is also because of the diffusion of systems over centuries of cohabitation that the three linguistic families have developed the structural iso-morphism which is manifest in various spheres of linguistic interaction in India even today.

Pandit (1972) emphasizes that one of the significant features of multilingualism is the existence of stable bilingual or multilingual communities. According to him people in large metropolitan centers or district towns maintain their language identity for generations despite their 'minority' status. In their domestic settings they speak their own language and also during such other dealings where the speakers of 'minority' languages come in contact with each other. They speak the majority language in other contexts.

To reiterate what Pandit (1972) said, Rangila (1986) adds that bi/multilingual communities are stable in Indian situations because people in general get accepted since there is a cultural identity and homogeneity among them in spite of language and other differences. Pattanayak in an editorial comment in Lal (1986) refutes the notion of India, especially agricultural India, being a static society saying that, "contrary to the belief that pre-dominantly agricultural India was a static society before modem times, India has always been in ferment because of dynamic encounters of people speaking different languages belonging to different ethnicities and practising different religions. Respect for the 'different' permitted each group to retain its cultural distinctiveness and yet establish linkages either by being bilingual, developing a pidgin or adopting a language of wider communication. In all cases languages in contact had to give up some of their angularities and adopt features of the other, leading to convergence which has resulted in India being considered a single linguistic area.

6.2. Bilingualism : Some Theoretical Considerations

Bilingualism is an important practical and theoretical problem. According to Paivio and Begg (1981) its practical importance stems from the fact that many of the world citizens speak more than one language. They do so because they live in countries that are made of diverse linguistic groups or that border on countries

with different languages. They add that whatever its origins, bilingualism possesses important social problems, ranging from language based social conflicts to the practical problem of providing educational opportunities in one or more languages. The social problems in turn raise theoretical questions about second language acquisition and the social psychology of bilingualism. In addition, the mere fact of possessing two or more language repertoires poses interesting puzzles regarding the nature of the underlying memory system, thought processes, productive efficiency and the like.

From the view point of linguistics, bilingualism is of considerable interest because of its important role in the determination of historical changes in language systems. When speakers of different languages come into contact for extended periods of time, significant changes in one or both of the language systems involved, invariably result. The emergence of middle English as a result of the Norman invasion of England is a well known example.

Gumperz (1971) explores the multilingual setting in a village called Kupwar where the languages of a Dravidian family [Kannada and Telugu] and the members of the Indo-Aryan branch of the Indo-European family [Marathi and Urdu] are in constant contact. He is of the opinion that the Kupwar varieties have processes of reduction and convergence suggestive of pidginisation and creolisation. Because of the interference that normally occurs between first and second languages within the individual, the bilingual speaker plays a significant role in this regard.

Bilingualism affects much more than the languages involved, however, and social scientists the world over are exploring may facets of its effects on the individual and the society. At the psychological level there are several key issues; [a] relative proficiency in two languages and its effects on one's intellectual functioning, [b] belonging to two language communities and the resultant effect on one's personality and sense of identity and, [c] the effects of bilingualism on one's perception in determining one's social interaction with others. Sociolinguistics concentrates on the linguistic organization of a society and language variation interposed by the presence of more than one language in a society and the resultant interactive discourse, the social, cultural, psychological and economic values that determine the norms of such interaction, falls clearly within this domain.

Before an adequate theory of bilingualism can evolve, an ever widening scope of sociological factors must be included to explain bilingual speech and language behaviour. A more promising approach is the study of functional language development, i.e., the use of language for new roles. Such analysis is best carried out by examining language samples for various categories, their occurrences within or across groups, and their generalisability to other populations.

6.3. Some Definitions of Bilingualism

The concept of bilingual classification :

The term bi/multilingualism owns open-ended-semantics. The different definitions to explain the term bilingualism will clearly show the diverged conceptualization.

Some of the thoughts put forward by different scholars through time can help us understand the phenomenon of bil multilingualism.

The dilemma of whether [a] relative proficiency or [b] native-like control of two or more languages is to be considered bilingualism makes it difficult for the linguist to decide which of the two concepts would be more appropriate in offering a definition of bilingualism. Bloomfield (1933) seems to contradict his own concepts. Initially for him a specialist bilingual is one who displays a native–like control of his two languages and he concludes his statement in a tentative fashion by terming it as a relative degree of ability. Bloomfield (1933 : 56) wrote : "in....cases...where .... perfect foreign language learning is not accompanied by loss of the native language it results in bilingualism, native-like control of two languages. After early childhood few people have enough muscular and nervous freedom or enough opportunity and leisure to reach perfection in a foreign language; yet bilingualism of this kind is commoner than one might suppose, both incases of those of our immigrants and as result of travel, foreign study or similar association. Of course one cannot define a degree of perfection at which a good foreign speaker becomes a bilingual : the distinction is relative". Mackey (1968) on the other hand seems to emphasize two factors, (a) degree of bilingualism as being relative and (b) the existence of two or more languages qualify one as a bilingual. Stressing the concept of relativity Mackey (1968 : 555) states, "it seems obvious that if we are to study the phenomenon of bilingualism we are forced to consider it as something entirely relative. We must more over include the use of not only two languages but also of a number of languages. We shall therefore consider bilingualism as the alternate use of two or more languages, by the same individual". In a more cautious approach Mackey (1968 : 555) adds, "the point at which a speaker of a second language becomes bilingual is either arbitrary or impossible to determine. Secondly not all native speakers are equally perceptive and not all have the same richness of vocabulary or versatility or structure. Thirdly, absolute mastery of two languages is very rare".

This cautious view expressed by Mackey is justified in the sense that with the available quantification techniques, determining the degree of bilingualism or language dominance is very difficult. To categorically and factually state the actual status of the bilingual also keeping in mind the constraints of such evaluatory techniques is well nigh impossible. Mackey (1956) had also expressed the opinion that bilingual language use must first be studied in an attempt to stabilize the theoretical basis defining bilingualism. He also hoped that such studies would perhaps help one to approach the problem of the degree of bilingual proficiency more realistically and with greater accuracy. Oksaar (1972) in his earlier works also approached the aspect of bilingual competence with a note of caution. He was in favour of combining qualitative methods with quantitative ones if research on the competence of bilinguals was to justifiably manifest how natural languages actually function. Mackey (1968) was in favour of a bilingual classification system which includes the following features :

1. Number of languages involved : in specifying the number of languages involved or used, Mackey further extends the study of bilingualism to encompass multilingualism or plurilingualism.

2. Type of language use : This division includes languages used and the relationship between them. These may be dialects of the same language, languages of the same family or genetically unrelated languages.
3. Influence of one language over another : This includes phonetic and phonemic influences, lexical influences determined with compatibility, structural function, class size and frequency.
4. Vacillation : Bilingual proficiency is not static and a speaker may change his proficiency of either language. Speakers sometimes prefer to speak one language rather than the other at certain times in their lives.
5. Degree of proficiency : Proficiency may fall anywhere on a continuum from native-like mastery of two languages to incomplete mastery of two languages. Most scales existing today measure only certain types of linguistic skills in specific areas of language.

Kachru (1965) conceptualises bilingualism as existing on a cline or continuum with a zero point at one end of the cline representing competence in one language or monolingualism, and the other extreme representing ambilingualism or native like control of two languages. Like Mackey, Kachru feels that the theoretical basis of bilingualism needs to be stabilized. But what would be difficult to decide is how one would award the points and what would be the criteria on which this rating justification would be sought to place an individual on a particular point on the scale of continuum. Most of the definitions discussed so far are rather generally conceptualized with very little information on the functional aspect. The gradations in the communicative elements in bilingual usage are also not known through them. Mac Namara (1967) takes a much more lenient view of bilingualism. According to him the possession of at least one of the language skills, listening, speaking, reading or writing in a second language even to a minimal degree, is enough to term one as a bilingual. He argues that bilingualism must be viewed as existing on a continuum or a series of continua, which vary amongst individuals along a variety of dimensions. This view is shared to some extent by Fishman (1966) who terms the concept of ideal mastery of the languages concerned as unrealistic. He is of the opinion that if bilingualism is to be defined as equal and advanced mastery as being analogous with the categorization of 'genius' with 'intelligence' or for that matter if one were to define health as equivalent to a complete absence of any dysfunction then such classification would exclude most of the natural bilingual population of the world, leaving only a few teachers and translators to qualify as bilinguals. Fishman suggests an alternative set of parameters to examine bilingual qualification which will be discussed later in the same section.

One of the important distinctions in the area of bilingualism is Fishman's (1966) distinction between societal and individual bilingualism. In the study of societal bilingualism, the linguistic forces present in a community, their inter-relationships, the synchronization between political, economic, social, educative and cultural forces and languages are accounted for. The basic assumption for this field of enquiry is that in complex stratified societies many social differences are language linked.

Kijolseth (1978) states that. "...language plays an important role in the differential social distribution of positive and negative social values both of a material and symbolic nature". Fasold (1984 : 8) adds, 'at the individual level multilingualism serves as an interactional resource for the multilingual speaker. Typically, multilingual societies tend to assign different tasks to different languages or language varieties'. Here the question of domain comes in and especially in a multilingual society like India the role of the domain is very complex and here it is actually the individual who from his multilingual experience backed by his command over two or more languages is in a position to decide 'which' language in his linguistic repertoire would be strategically advantageous to use in 'what' situation. As Southworth (1976: 224) says, "bilinguals develop functions of linguistic heterogeneity which [potentially at least] go beyond the expressive possibilities available in a single code".

Fishman (1967) argues bilinguals be examined in terms of dominance configurations which are derived from the measurement of bilingual performance in terms of simultaneous interaction of (a) media-speaking, reading and writing; (b) role comprehension, production of an inner speech; (c) formality levels–intimate, casual and formal levels, and (d) the domains of bilingual interaction, work, home, school, church, government, and other settings. It is also important to mention here that any research aimed at establishing a matrix of this nature should also think in terms of building up a network in terms of the respondents reference to authenticate his claimed language behaviour. It should be noted that bilingual performance in the aforementioned areas is rarely, if ever, equal, due to a person's personal history and place within the social hierarchy, but dominance configurations serve as a scheme for the analysis of bilingual language use. In the Indian context Fasold (1984) talks about the lack of clear lines of demarcation among some of the Indo-Aryan languages and Khubchandani (1977 : 40) calls it 'fluidity' "A speaker may control a verbal repertoire which makes him a native speaker of a range of speech that is labeled with more than one dialect name. Much of what is called 'bilingualism' in India is more of a matter of inherent variability than of codeswitching". [Fasold 1984:23] Pandit [1979) has provided an interesting insight into the stable bi/multilingualism so common in India; he emphasizes that linguistic competence is often restricted to the minimum usage required in specific settings. Milroy [1987 : 185] from the point of view of researchers says that, "The enhanced consciousness which bilinguals have of competence in two separate codes makes it feasible for researchers to ask speakers to report actual behaviour, in addition to observing it themselves. The choice then seems to be between questionnaires which attempt to discover situational factors controlling language choice, and the 'language diary' which is a record of a speaker's choices over a given period. Milroy [1987 : 187] adds, "As a consequence of.....difficulties of direct access to the speaker's knowledge of language use, much self report by bilinguals is contradicted by observation of actual behaviour". A small example of such a situation arose when I was 'asking one of my respondents as to what language he used, to converse with his brother, to which he replied without hesitation that it was obviously Bengali. Immediately we were interrupted by a phone call and my respondent spoke to the

caller for more than five minutes in a mixture of Dakhini and English. At the end of the call he quipped almost spontaneously, "that was my brother". Therefore the difficulty associated with any self-report method of data collection, quite distinct from the effect of stereotyping, is that people generally do not have a clear awareness of which aspects of their language use are of interest to the linguist, or for that matter bilinguals do not usually seem to remember which language was used in a particular exchange. Sometimes they feel that projecting themselves as parochial and as language preservationists, would be more in line with the researcher's expectations.

Mackey [1979 : 458] has the following suggestion if we are to evolve a general and unified theory of bilingualism. "If we are to succeed in our objectives of effectively describing and measuring bilingualism we must attempt to elaborate common categories and common or related types of representation of the same phenomena to describe such inherent differences as may exist between the unilingual, the differences among the bilinguals themselves, the inter-personal and inter-group relations among and between bilinguals and unilinguals".

In conclusion, description of bilingualism are varied and extend along a continuum from the strong Bloornfieldian version of ideal mastery of two languages to that of Halliday (Halliday and Stevens [1964]) who considers monolingual speakers as bilinguals since their 'language behaviours' are very similar. As one proceeds from the strong version to the weak version of bilingualism, there is an ever widening scope of sociolinguistic factors that are seen as crucial to the evolution of an adequate description of bilingualism. Current sociolinguistic thinking is that an adequate description of bilingualism must take into account the sociological context in which bilingualism exists arid also the speech communities' norms for language use in various domains in contrast to the norms of actual usage, by the bilingual respondents in any given situation.

In India there is always a need to study the ever fermenting situation because of the linguistic heterogeneity which in turn creates a dynamic situation where people speaking different languages, not to mention the numerous dialects, belonging to different ethnicities and practicing different religions come into contact with each other. Secularism and respect for the 'different', created an environment whereby each group was allowed to retain its cultural distincti veness and yet establish a linkage either by being innovative in their bilingual pursuits or adopting a language of wider communication.

6.4. Kinds of bilingualism : with reference to their applicability in certain situations in the Indian context

Introduction

According to Bell [1983 : 118] "Multi-code usage is normal linguistic behaviour whether it be intra-or inter-language switching and, in rather simplistic terms, it

might be better to think of the bilingual, not as an oddity but as an ordinary individual, whose repertoire happens to contain codes which, in others would be labeled as separate languages. However, put in this way, the notion of bilingualism vanishes in the triviality of recognising that all speakers adopt varying styles to suit varying purposes–a truism which is hardly calculated, in itself, to advance our understanding of language use". The monitoring of bilingual activity is not always dependent on the individual but could also be doctored by the society in question, sometimes out of necessity and sometimes accidentally. There can never be universal factors to try and view bilingualism as just a uniform one-to-one correspondence, either in the ability to speak two or more languages with equal dexterity, or 'looking at it just as varying degrees of linguistic proficiency in the two or more languages of the bilingual. I have made an attempt here to describe the various kinds of bi lingualism and also looked for corresponding examples from Indian languages wherever applicable. Phol [1965 : 343-79] did a systematic classification of different kinds of bilingualism.

Some of his widely recognised types of bilingualism are as follows :

6.4.1. Horizontal Bilingualism

This is found in situations where two distinct languages have an equivalent status in the official, cultural and family life of groups of speakers. Ex. Fleming in Brussels [using Dutch and French] the Catalans [using Catalan and Spanish] and Que'be'equois in certain areas [using French and English]

An important example in the Indian context is the relationship between Hindi and Urdu. Both share substantially the same phonological and grammatical system. However their writing systems are different. Their historical and cultural statuses are different and to a large extent they have a partially distinctive prose style. Though they have distinctive scripts and Hindi has a Sanskrit based vocabulary while the Urdu vocabulary is Perso-Arabic based, in many societies in India where the two languages are spoken side by side they share a more or less equivalent status in official and socio-cultural spheres of linguistic activity. Many writers dealing with the sociolinguistics of India tend to emphasize the similarities between Hindi and Urdu and refer to Hindi-Urdu [for example Kachru and Bhatia 1978; Khubchandani 1977, 1978]. On the other hand when we refer to the English-Hindi situation we see that like most newly independent states, India was left with a colonial language, as a language of the government. The English elitist dominant groups were firm about continuing with English as the language of the govemment but nationalists on the other hand were in favour of an indigenous Indian language being adopted as the national language. Though Hindi qualified as the most likely candidate by virtue of it being spoken by a vast majority in India, there were a lot of problems in trying to phase out English. Opposition was mainly from Tamil Nadu in the south of India and Bengal in the east. Both claimed that they had literary traditions as rich as Hindi's and in the minds of their speakers, had as much right to be 'national' languages as Hindi did. The distribution of Hindi is also uneven in India; from over 95% in the Hindi speaking states in the north to less than 1% in

places like Tamil Nadu in the south. The technical vocabulary of Hindi had to be further developed and upgraded before it was in a position to totally take command for all official purposes. A fifteen year deadline. which was set for the complete replacement of English with Hindi, expired in 1965. Among other reasons due to the continued opposition to Hindi in the south, it was politically not possible to make the changeover. A law was passed in 1967 allowing the use of both Hindi and English for all official purposes and the situation still exists. Besides in official circles, English along with Hindi is also the language of not only the elitist but also the language of the educated urban middle class, as (Gouldner [1979] terms them, the 'technical intelligentia') in all sociocultural spheres of linguistic activity. The hosts on the 'morning show' of 'Doordarshan' the official television broadcast, systematically alternate between Hindi and English in popular fashion but the strong undercurrents of official protocol are well manifest.

6.4.2. Vertical Bilingualism

In this type of bilingualism, a standard language with a distinct but related dialect is used by the same speaker. The most accepted term for this type of situation is diglossia. Walloon Belgium [Walloon and French], Germanic Switzerland [Sohwyzertutsch and German] and Bali [Balinese and Indonesian] are cited as some examples for this type of language situation. [Baetens, Beardsmore, 1982].

In India we have Tamil, which aptly suits the definition of diglossia as given by Ferguson [1959], has two varieties viz, the spoken [low] variety and the literary [high] variety. Karunakaran [1983] says that if one goes deeply into the Tamil language one could easily identify the use of a third variety. This variety is represented as a modern literary variety or standard spoken variety with functional significance like the other two. He also goes to the extent of referring to the Tamil situation as of today as being triglossic. A case of double-nested diglossia in Khalapur has been reported by Gumperz [1964]. The Khalapur diglossic community can be placed on a continuum from the super [high] oratorical style of village Hindi to the super [low] 'moti boli' variety of the Khalapur vernacular. According to Fasold [1990] within the high and the low varieties can be distinguished a higher and lower low and a higher and lower high, which appear in form and function, to be microcosms of the larger diglossic contrast. The situation as Fasold [1990] terms as 'two little diglossias' within the 'big diglossia' is illustrated below: [incorporated *from* Fasold 1990: 47]

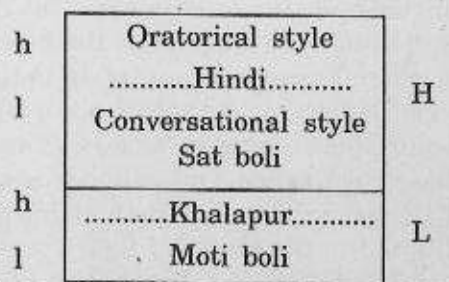

Fig. 2. Double-nested diglossia in Khalapur, India

As Ferguson [1972 : 232] (cited in Fasold 1990 : 43) himself points out, speakers of regional dialects of some languages frequently use their local dialect and the standard language in ways that parallel the diglossic distribution. What is crucial for Ferguson is that no segment of the community uses H in ordinary conversation. In the standard-with dialects situation, the standard is often similar to the variety of a certain region or social group [e.g. Tehran Person Kolkata Bengali, chalit bhasha and sadhu bhasha] which is used in ordinary conversation more or less naturally by members of the group and as a super-posed variety by others'. (Ferguson 1972 : 245)

6.4.3. Non-fluent bilingualism

Segalowltz and Gatbonton (1977) conducted studies on non-fluent bilinguals on Francophone and Anglophone second language users in Quebec. They defined a Non-fluent bilingual as a second language user who possess sufficient skill with a language for successful basic communication but who is perceived by others and by himself as not possessing native like control of the language. They claim that in many if not most regions of the world where second language users are found, non-fluent speakers outnumber the fluent bilinguals.

6.4.4. Diagonal bilingualism

When a group of speakers who adopt a genetically unrelated standard language within their dialect or non-standard language they are called as diagonal bilinguals and the practice is called diagonal bilingualism. A part of the minority Bengali community, especially the isolated pockets of early Bengali settlers in Secunderabad, contribute to this form of bilingualism through their third generation speakers whose language resembles the Standard Colloquial Bengali spoken in Calcutta and therefore can be said to speak in actuality, a dialect of Bengali, have incorporated to a large extent the regional language i.e. Telugu into their language. I have to stress here that this does not hold good for the majority of the Bengalis in Hyderabad and Secunderabad. Other examples are German Belgiun (low German and French) and Maori communities in New Zealand (Maori and English).

6.4.5. Functional bilingualism

This can be viewed in two ways; that is the minimalist and the maximalist interpretation. Under the first interpretation, a person can be called bilingual if he carries out a restricted set of activities in a second language with perhaps only a small variety of grammatical rules and a limited lexis. E.g. Airline pilots in conversation with airport control lower personnel, and the French of 'haute cuisin' for people in the catering industry. Beardsmore [1982] The cost effectiveness of achieving this limited goal arouses interest among scholars in the promotion of languages for special purposes and the creation of specialised working groups and journals to investigate this field (Gorosch 1978). The maximalist interpretation is widely recognised and it covers a wide range of activities and capacities in two languages. Here the bilingual is able to conduct all of his activities in a given dual linguistic environment satisfactorily; there is no reference to norms prescribed in

this interpretation. The bilingual speaker may use a deviant pattern [in the level of phonology, morphology and in some cases syntax] different to the monoglot reference group. Interference in phonology, morphology, lexis and syntax may be a common phenomenon in the speech of the bilinguals. Adult bilinguals who have learnt a second language may fall under this functional category.

6.4.6. Reoceptive bilingualism

This is a kind of functional bilingualism in which the bilingual person understands a second language in either its spoken or written form or both but does not necessarily speak or write it. Alternatively this is called Passive bilingualism. But this is not more apt since in any language, decoding activity implies active neurological processes where the mind is filtering and organising the stimuli it receives into meaningful patterns. This type of receptive bilingualism gains its strength in teaching programmes because of its manifest advantages in time investment. In certain circumstances receptive abilities in reading and comprehension are even used to foster cross- lingual communication among people who speak and write only in theirfrrst language, Beardsmore [1981].

6.4.7. Productive bilingualism

In this type of bilingualism the speakers not only understand but also speak and possibly write in two or more languages. Most of the foreign language teaching programmes are aimed at productive bilingualism. Some productive bilinguals are able to speak and understand two languages with almost equal dexterity but are unable to write in the two languages. This is true of the Bengali minority in Hyderabad. They have no opportunity for formal education in Bengali, and formal education in Telugu is not compulsory especially if the Bengali children in particular go to English medium schools. Therefore there is practically no scope outside the formal education system for these children to develop either Bengali or Telugu writing skill. In isolated cases parents of such children teach them to write in Bengali during the summer vacations, but once the pressures of normal schooling get underway the newly acquired writing skills are almost forgotten before the next summer vacation comes along. On the other hand receptive bilingualism may also be restricted to oral/aural skills. In many parts of the world productive bilingualism is a common practice. But it need not imply biliteracy.

PRODUCTIVE BILINGUALISM

Language skills		
Listening Comprehension	L1 L2L1 L2L1 L2 L1 L2 L1	
Reading	L1 L2Li L2 L1 L2	L2
Oral production	L1 L2 L1 L2 L1 L2 L1 L2	L2
Written production	L1 L2 L1	

RECEPTIVE BILINGUALISM

Language skills						
Listening Comprehension	Ll L2 Ll L2	Ll	Ll L2	L1		
Reading	Ll L2 Ll	Ll	L1		L2	
Oral production	L1 L1	L1	L1	L1		
Written production	L1 Ll					

Fig: 3 Bilingual ability patterns across the four language skills

6.4.8. Symmetrical bilingualism

This denotes the equal competence in both the languages of the bilingual. Asymmetrical bilingualism coincides with the different types of receptive bilingualism. This is essential to describe the ability of the foreign language learner who has obtained the language via a standardized model. But these speakers may find it difficult to understand the native speakers. This is a temporary situation and adjustments can be made.

So far the definitions cover only the relative nature of bilingualism. What is not explained is to what extent need an individual have command over one of the four skills to be able to qualify as a bilingual. Diebold (1961) clarified this aspect by describing the pre-bilingual state by incipient bilingualism. It is observed that receptive bilingualism precedes productive ability in the basic language skills. The pre-bilingual state can lead to receptive or productive skills that depend on learning opportunities, amount of exposure to the second language and motivation to progress in its acquisition. On the other hand the bilingual whose ability to function in a second language increases with its use is in a position of Ascendant bilingualism. At the same time if for some reason he no longer uses one of his two languages for a period of time and begins to feel some difficulty in comprehension or expression he is in a state of Recessive bilingualism Beardsmore [1982].

A typical example of the latter type is the school learner of a foreign language who initially attains considerable skill but may gradually lose the ability in later years, due to the lack of learning exposure.

Lambert in his bilingual studies of 1974 added a new dimension in additive bilingualism. In addition to first language, the second language brings to the speaker a set of cognitive and social abilities which do not negatively affect those that have been acquired in the first language. Lewis (1976) recorded this kind of bilingualism right down the ages from the time of the ancient Romans who considered the knowledge of Greek and Latin as an essential feature of the civi lised citizen, to contemporary Singapore where Mandarin and English are given complementary status.

6.4.9. Subtractive bilingualism

This is the opposite of the above kind in which the second language is acquired at the expense of the first language, which has a more prestigious and socio economically higher status. This type of bilingualism is common among ethnolinguistic minority

communities in many regions in India. The early settlers among the Bengali minority in Secunderabad who live in areas dominated by Telugu speaking inhabitants have compromised with the situation where the dominant language i.e. Telugu forms an acvtive part of their linguistic repertoire at the cost of their own mother tongue i.e. Bengali. In the Tamil- Kuraba situation Karunakaran [1983] has identified fifteen grammatical categories in which there is convergence towards the majority language, Tamil. At the lexical level one could find a number of items of the majority language finding place in the nonnal linguistic behaviour of the minority speakers Karunakaran [1983] adds that in the Tamil situation minority language groups heavily make use of Tamil features. There are some minority language groups like the Telugus who migrated to Tamil Nadu centuries ago who have completely identified themselves with the majority language speakers. For some of them Telugu is no more their mother tongue. They have completely shifted their loyalty and identity towards Tamil, the regional language. At the other extreme end we have semilingualism, a result of the above situations, where initially there is a determined shift and a subsequently shift to total loss of the mother tongue. Minority language communities in Tamil Nadu belonging to the Dravidian group; Kannada, Malayalam and Telugu and the Indo-Aryan group; Saurashtri and Marathi have shown signs of either shift towards Tamil or total loss Karunakaran [1983]. Lal [1986] states that the Tamil spoken by the Tamil Iyengars has taken into its system many features from Kannada which results in a minimal intelligibility to a Tamil speaker from Tamil Nadu. Although Fishman (1964) called the attention to language maintenance and shift as phenomena worthy of study nearly twenty years ago, the topic has inspired relatively few studies. Gal [1979] and Dorian [1981] as cited in Fasold (1990 : 218) are the first widely available monograph-length investigations of language shift in a specific community. According to Fasold [1990:213], "Language shift is sometimes referred to, somewhat dramatically, as language death. Language death occurs when a community shifts to a new language totally so that the old language is no longer used".

6.4.10. Simultaneous bilingualism among pre-school-age children

Titone [1972] argues that two languages can be acquired from the onset of language development. The optimum age for the introduction of early bilingualism would be between 4-5 years. This is particularly very significant when the parents themselves are unable to provide the necessary input. The imitative capacities of the child at this period are in the state of highest development and receptivity to socialisation via verbal communication is also high. Titone in the same study summarises the arguments for early bilingualism by saying that there is a very high motivation amongst young children to communicate and who at the same time enjoy playing with language and at the same time are less inhibited that older learners in the manipulation of sounds, words, structures etc. Young children perceive with tremendous sensitivity the highly nuanced differences in sounds, which coupled with their imitative capacities lead to the ready assimilation of distinctive differences between languages which might escape the attention of the older learner.

6.4.11. Compound/coordinate/subordinate bilinguals

Distinctions that are central to the topic of the assessment of bilingualism are the Compound/Coordinate/Subordinate bilingual classification. While these terms have fallen into disuse in linguistics in recent years they have been revived in the field of bilingual education in relation to language assessment. The above mentioned classifications are used to distinguish among three types of bilingualism that may result from different language-learning-contexts. Weinreich [1953] A compound bilingual is thought to have one merged meaning system; there is only one meaning and two lexical representations, one for each language. For example for a compound bilingual in English and Spanish the lexical representations 'book' and libro would have the same semantic meaning. In Hyderabad Bengali the word *mandu* and *osud* meaning 'medicine' have the same semantic meaning.

The Coordinate bilingual on the other hand, has two separate semantic meaning systems for representation and meaning in each language. In the case of the bilingual English/Spanish speaker, there are two meanings and two representations in coexisting systems. The linguistic signs have different representations because each language was learnt in a different context for example language' A' was acquired at home and language 'B' at school.

Subordinate bilingualism is said to arise when one language is used as a vehicle to learn a second. The semantic system that results from this indirect method of language learning consists of referents of the signs in the language being learned that are not actual entitles but equivalent signs of the naive language. For example the word 'libro' is not the actual object but rather the referent for the English word 'book'.

Weinreich's (1953) description of Compound-Coordinate bilinguals was expanded by Osgood and Sebeok (1954) to distinguish psychological processing patterns in bilingual speakers and listeners. Osgood's explanation is the same as that of Weinreich's with the exception that Osgood sees the two concepts as having psychological reality in that they are stored differently in the speaker-listener's nervous system.

Ervin and Osgood (1954) have made some observations of the importance of the language acquisition context arid the interdependent status of the bilinguals of two languages. After Weinreich's (1953) suggestion, Erwin and Osgood type bilinguals are treated as either compound bilinguals or coordinate bilinguals, with the distinction entirely dependent on how they acquired the two languages. Compound bilinguals acquired language in settings in which both languages were used interchangeably. As a result, compound bilinguals attribute identical meanings to the words and phrases that correspond in their two languages systems. Thus one can expect a kind of fusion of the two meaning systems as a simple function of the fact that both languages were learned in the same setting. For-example, a second generation immigrant in Hyderabad might learn *ghar* meaning 'house' as the word for his or her domicile in Bengali conversation but *illu* as the Telugu word word for the same object in Telugu conversation.

In fact, the acquisition of a second language in a typical traditional school setting can be classed as a compound bilingual setting. Here the student may learn–and traditionally often has, the second language through the medium ofthe first. This may be true of areas where children have the privilege of going to a school where their mother tongue is the medium of instruction or at least one of the languages he learns and can opt for, side by side, with the other language.

6.5. Same Questions and Issues

But what happens when it is a minority group like the Bengalis of Hyderabad whose languages not represented in any school in that region, because of its minority status and subsequently does not meet the constitutional specification, and also because it was not possible for the minority Bengali populace to muster up enough initiative or act in unison to start even one Bengali medium school? The Benglali speaking child becomes more and more dependent on the second language and aquiring this may be as unique as his acquisition of his mother tongue. At the same time one must remember that the classroom setting does not always provide the rich variation that a language in its normal setting does.

Even if the second language is presented so as to reproduce or approximate the first language acquisition setting, the setting is limited and to some degree hampered–already having been assigned a frame of reference by the first and native language. The Bengali minority may be grouped under the class of coordinate bilinguals who acquire their languages in separate contexts with diferent linguisitc settings populated by speakers of only one of the two languages.

As a result of this the meaning-systems of the two languages are somewhat distinct.

Compound Bilingualism, on the other hand appears to have assimilated both languages in essentially the same settings and probably with the same interlocutors. Ift his is the case then some degree of fusion will have taken place with a minimal difference between symbols in the two systems. Essentially the same environment is labeled by two separate systems, and the two systems bear a fare degree of resemblance to each other in the way in which they were initially constructed. An example of this situation is a bilingual home in which parents and family switch indiscriminately between one language and the other. This of course has its own repercussions on the children in the family. And this is especially true of the bilingual child with Bengali as his 1.1, and whose mother tongue is not well acquired due to these constant retroactive and proactive switchings from one language to the other. The end result is anybody's guess. The child may be a confused bilingual with a high percentage of interference in his mother-tongue and the intermittent switchings existing in the speech of his parents are bound to modulate his language acquisition pattern and it is this bilingual child who needs to be explored and who turn out to be a bilingual with a different set of norms governing his language behaviour.

6.6. Implications for the teaching of English in India

When an Indian child leams English in school, he learns it in addition to one or more languages that he already possesses. In this sense he is on his way to becoming a bilingual. But the crucial question is : what do the research in and insights from the study of bilingualism have to offer to English language teaching?

When English is taught, it is necessary to determine at the outset which or how many of the four skills of listening , speaking, reading and writing the learner needs to acquire, to what level of proficiency and for what purpose (s) on use.

In India, English is usually used in domains or areas where the first or the dominant language is *not* used, e.g. for computers, medical transcriptions, call centres and the like. The uses then have to be cultivated through English. This indicates that teaching or learning English through the mother-tongue may be counter productive. This is also a case for developing English for specific purposes, the content and function being determined by a suitable "needs analysis" of the particular domain or area. The degree of proficiency expected within a particular skill will then be determined by the demands of the specific use within a specific domain.

6.7. Let's sum up

In this unit we have considered the definitions of bilingualism, attempts to characterize it, some theoretical issues related to its specification, various types of bilingualism and its implications for the teaching of English as a second language in India.

6.8. Review Questions

1. What is the appropriate meaning of the term "Bilingualism"? Does it specify any linguistic condition of human society? Then what is the specific condition of a bilingual society?
2. Define the term "Bilingualism". What are the general features of bilingualism?
3. Describe the concept "Bilingualism" in the context of the Indian multilingual situation.
4. Write a short note on Compound/Coordinate/Subordinate bilingual classification. What are the differences between Bilingualism and Multilingualism?
5. What are the basic differences between Diglossic and Bilingual situation of a Speech Community? Which of them is spontaneous for adaptation in childhood?
6. What are the different kinds of bilingualism as elaborated by Phol?
7. What implications can the study and analysis of bilingualism have for the teaching of English as a second language in India?

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MODULE - 4

Unit 7 ❐ Second Language Acquisition

Table of Contents

7.0 Introduction : What is Second Language Acquisition (SLA)?

Definition of SLA (as endorsed by the ICoSLA Forum): SLA is a theoretical and experimental field of study which, like first language acquisition studies, looks at, and seeks to understand the phenomenon of language development, in this case the acquisition of second languages.

The term, "second" includes "foreign" and "third", "fourth" (etc.). Since the early nineteen seventies, SLA researchers have been attempting to describe and explain the behavior and developing systems of children and adults learning a new language.

The dominant aim behind this research is to extend our understanding of the complex processes and mechanisms that drive language acquisition.

7.1 The International Commission on SLA : (ICoSLA)

This Scientific Commission has been set up to fill a gap. That is, there exists no single, official, worldwide association that deals exclusively with second language acquisition (SLA) as an independent field of research (see below for description). There are only organisations that either:

- have an applied focus of interest connected with language learning and language teaching

or

- do indeed focus on SLA but are associated with a particular country or continent.

There being no world association, ICoSLA is designed to act as a single point of reference for all major international SLA activities and to provide various useful internet links for SLA researchers and people and institutions wishing to find out more about this field for whatever reason.

The commission acts a forum and currently includes representatives from:

1. the major relevant scientific associations
2. past and forthcoming international conference committees
3. editorial boards of major SLA journals

Points for ongoing discussion will include a range of issues from raising the awareness of SLA as a discipline worldwide to the accreditation of academic courses.

7.2 Understanding : Investigating SLA Phenomena

Investigators in the field of SLA are trying to unravel the mysteries of language acquisition, in this case, the acquisition of non-native languages.

SLA investigators, like their colleagues in first language acquisition research, base their investigations on previous theoretical and experimental studies. These studies may be carried out within their own field (SLA) as well as outside SLA, in various branches of theoretical and experimental psychology, theoretical linguistics and sociolinguistics. By virtue of the fact that language itself is complex, SLA has become a broadly-based field and it now involves, for instance:

- studying the complex pragmatic interactions between learners, and between learners and native speakers
- examining how non-native language ability develops, stabilizes and undergoes attrition (forgetting, loss)
- carrying out a highly technical analysis and interpretation of all aspects of learner language with the help of, amongst other things, current linguistic theory.
- developing theories that are specific to the field of SLA and which aim to account for the many facets of non-native behaviour.
- testing hypotheses to explain second language behavior using standard experimental techniques as well as also techniques specially developed for SLA purposes.

7.3 Helping : Applications of SLA Research

As indicated above, the goal of SLA is to understand how learners learn, i.e. the processes underlying non-native language acquisition.. It is, therefore, not the same as research into language teaching. However, despite the fact that SLA is focused on second language development as a phenomenon in its own right (and not on how it is deliberately facilitated, the firm hope is often voiced by people, even from within the SLA research community, that SLA findings will contribute towards the construction of a much more scientific basis for language instruction. Helping learners to learn does not require an understanding of SLA phenomena. However, applied research based on such understanding should be much more efficient and effective. Applied linguists whose particular interest is in facilitating the language learning process should find ways of interpreting relevant SLA research in ways that will benefit the language teacher.

SLA, in this light, should become an essential point of reference for :

- those involved in educational activities

- researchers looking at how to facilitate the learning process
- official bodies, e.g. boards of education and ministries responsible for influencing 1 and 2

To have a better understanding of second language acquisition and its theoretical implications, it is important for us to do a quick review of existing theories and the processes involved in first language acquisition.

7.4 Language Acquisition : Theory and process

This section covers the area of language acquisition. In broad strokes, it can be broken down into two parts. The first reviews general notions of how language acquisition proceeds. That is, it reviews theoretical positions that people have staked out regarding the acquisition process. The second part will focus more closely on particular landmarks in the acquisition process-landmarks that seem to be reached by all people regardless of the language being acquired.

7.5 Language as Innate

One of the themes that we have returned to numerous times throughout the course is that language is, as stated by many researchers rather concisely, an instinct. The idea is that humans are genetically predisposed to learn language (though as we have seen, this does not mean weare predisposed to learn any particular language). If we want to say that language is an instinct, however, it is important that we draw up a set of criteria regarding what we mean when we call something an instinct. Basically, saying that something is an instinct is a way of saying that something is an innate behaviour; a biologically controlled behaviour. This is different, for example, from saying that something is a learned behaviour, like driving a car or playing the clarinet. Eric Lenneberg has drawn up a set of criteria for determining whether something is 'a biologically determined behavior':

1. The behavior emerges before it seems necessary.
2. Its appearance is not the result of a conscious decision.
3. Its emergence is not triggered by external events (though the surrounding environment must be sufficiently rich for it to develop adequately).
4. Direct teaching and intensive practice have relatively little effect.
5. There is a regular sequence of "milestones" as the behavior develops, and these can usually be correlated with age and other aspects of development.
6. There is likely to be a critical period.

Language development in humans seems to exhibit these properties, some of which we shall look at a little more closely below. Briefly, let us note why.

- **The behaviour emerges before it seems necessary.** Language does appear to emerge before it is necessary to the extent that we begin to develop and use it before we need it to fend for ourselves, i.e. while our every need is still being taken care of by our primary caregiver(s).
- **Its appearance is not the result of a conscious decision.** Children don't decide to start acquiring language. Language simply develops in them. Compare this to deciding whether or not to join the track team, or deciding whether or not to take an elective, or deciding whether or not to learn golf.
- **Its emergence is not triggered by external events** (though the surrounding environment must be sufficiently rich for it to develop adequately).What this means is that language does not emerge because adults suddenly decide that it is time for "language school" or organized "language play sessions". The only thing necessary is that kids live in a world of language. What I said in class, I think, is that we can think of it metaphorically as if weare born ready to sing and need simply to be exposed to the song.
- **Direct teaching and intensive practice have relatively little effect.** This is true. Correcting children and drilling them on grammar won't make them learn language any faster. Compare this to say, piano lessons. Without the drills and intense lessons, it is very difficult to learn to play the piano.
- **There is a regular sequence of "milestones"** as the behaviour develops, and these can usually be correlated with age and other aspects of development. We will look at this more closely, but in broad strokes, this is true. Kids acquire language systematically, and cross the same basic milestones at roughly the same time regardless of the language that they are speaking.
- **There is likely to be a critical period.** This means that there is likely to be a period during which language acquisition is possible and after which language acquisition becomes highly unlikely, if not impossible. The idea is basically that there is a window of opportunity for language acquisition. This notion is generally accepted in one form or another by most linguists, though there is much debate regarding the issue. Your book notes that there are thought to be two critical periods. The first is hypothesized to last from birth to about two years old. During this time, it is hypothesized that if the child is not exposed to language at all, the child will never be able to gain "native" mastery of a language. The idea is that during the first couple of years of life, the language acquisition process has particular consequences for brain development and if the period is missed, the brain will never develop the same structures later. The second "critical period" has more to do with the issue of second language acquisition. Here, the basic idea is that after puberty, it is impossible (or nearly impossible) to learn a second language with "native"

mastery. This is why, for example, that second language learners never seem to shed their accents.

Hard, definitive evidence for the critical period hypothesis is hard to come by. Why? Well, imagine how well suggesting an experiment in which babies were isolated at birth for 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ... years would go over with human subjects committees on campuses and in other research centers around the world. But there have been some cases in which children have been discovered after long periods of linguistic isolation. Firstly, (1) the case of Genie who was isolated until she was roughly 14; and (2) the case of Isabelle who was isolated from spoken language (though may have been exposed to sign language) until the age of six and a half. Genie was never able to acquire language with anything even resembling the fluency that native speakers exhibit. By contrast, Isabelle caught up to her peers within about two years. Though these cases are not definitive evidence, they are suggestive and have been taken as evidence that there is a critical period. Note that Isabelle's case would seem to go against the idea that there is a first critical period that ends at two years, unless, of course, she was exposed to sign language and thus underwent the kind of brain development that is hypothesized to occur during that stage. Your book is not clear on all the details here, but the question would be an important one to ask. One final note that does seem to support at least the second critical period hypothesis is that young children do not seem to have great problems acquiring multiple languages if they are brought up in a bilingual or even trilingual environment. This contrasts with the difficulty that adult language learners have when trying to acquire a second language, even if they are immersed in the language that they are trying to learn. This difference is predicted by the critical period hypothesis, but is somewhat of a mystery if we don't assume that there is a critical period for language acquisition that ends sometime around puberty.

7.6 Theories of Language Acquisition

We previewed the possibilities by saying that language is an instinct and not a learned skill like playing the piano or riding a bicycle. But how do children acquire language? There are three general approaches to the problem, i.e. three general theories of language acquisition. These are :

- Imitation Theory
- Reinforcement Theory
- The Active Construction of a Grammar Theory

Which one do you think is the best? Given that we started the course talking about how grammar emerges in children, i.e. how children seem to be hard wired to be little grammar building devices, you probably can guess that the one weare going to argue in favour of is the Active Construction view. But letus briefly consider

each so that we can get a sense of how each model views the problem and what each model predicts.

7.7 Imitation Theory

Imitation theory basically says that children learn grammar by memorizing the words and sentences of their language. Before attacking this view, let's make sure we recognize that language acquisition must involve a lot of memorizing. There's simply no way to get around this problem. Clearly, children must hear the words (or see the signs) of their language in order to go about committing them to their mental dictionaries, and clearly English children learn English because they are getting English input, but memorizing alone is not adequate. Here are some problems with the imitation perspective:

- **Children produce many things not in the adult grammar** (like 'nana' for banana), i.e. they produce things not produced by adults. Some people might say that this is simply a consequence of the difficulty of learning how to speak and not a problem for the imitation theory. Speech is a complex activity requiring great muscular coordination, and little kids are simply inept at production, but they may still be simply memorizing. Maybe, but the problems don't end here.
- **Children make consistent errors that cannot be attributed to mispronunciation and which still are not ever heard in the adult grammar.** Children make errors like saying "goed" instead of "went" or "drawed" instead of "drew". These errors are important. Why? Because they indicate that the child cannot simply be memorizing all of the words in her or his language. Adults don't make these errors! If children are merely imitating, we have no explanation for this. One explanation is that kids are building a grammar, not simply memorizing, and that such errors are indications that the children are applying a past tense "rule" to irregular verbs that they have not yet committed to memory as exceptions to the normal pattern. This is a good approach, but it doesn't square with imitation theory.
- **Children can produce and understand novel sentences.** It's the infinite use of finite means issue which is addressed in the context of child language acquisition. If imitation is right, we would predict that kids would not produce sentences they had not already heard. If we assume that children are constructing grammars, however, we would expect them to do this. They acquire the "rules" of their syntax and thus have a powerful device for producing novel sentences according to the general syntactic rules of their grammar. Back to the problem, then, for imitation theory. It is simply puzzling why

children should have this capacity if language acquisition boils down simply to memorization of input. Kids should not be able to produce sentences not explicitly received as input.

7.8 Reinforcement Theory

The basic idea here is that children learn to speak like adults because they are taught to do so by being-praised and otherwise rewarded for doing things right. At the same time, they are helped because parents "correct" them when they make mistakes. There are two major flaws in this theory.

- Strangely enough, parents actually don't seem to correct children's grammar as much as we might think, and they don't praise them for using proper adult grammatical constructions either. What parents (or other caretakers) do seem to do is praise children for being truthful. So, your book points out that if a child uses a well formed sentence such as "the dog wants to eat", parents tend to correct the child in a way that the sentence is not true, as in "no Jimmy, the dog doesn't want to eat. It just ate." But if children are truthful but produce sentences that are ungrammatical in the adult grammar, such as "Nancy goed to school yesterday," parents often respond, "yes, she did" without bothering to correct the incorrect "goed".
- This isn't to say that parents never attempt to correct their children's grammar. But, even when they do, there is little evidence that this has any great effect on the language development of the child. Often times, children seem determined to continue to produce incorrect forms despite correction from adults. And when adults insist on trying to make the child "do it right", more often that not everyone involved has a frustrating time.

The bottom line is this. If reinforcement theory is really at the root of language acquisition, why does it seem to a) not even be what parents do most of the time, and b) hardly effective, if effective at all, when used for correction?

7.9 The Active Construction of a Grammar Theory

This brings us to our third (and preferred) candidate. This theory maintains that children "invent" the rules of grammar for themselves. Now, this is not to say that the grammar that they "invent" isn't based on the language around them. But, the crucial point is this. Only this approach explains how children do things like produce incorrect past tense forms such as "goed" or " hitted", or how they generate novel sentences that they have never heard, or why they seem almost impervious to correction from adults.

Coming back to the question of forms such as "*goed*", the issue is actually doubly interesting. Why? Because kids seem actually to acquire some irregular past tense forms and use them pretty early. Then, they often seem to "lose" them, coming out with things like "goed". And then, after a while, they start using the correct form again. What's happening? This is what seems to be the case. At first, the child does memorize a form like "went", by learning it and associating it with some activity and committing it to her or his lexicon. Then, however, the child's grammar gets to a point where a regular "rule" of past tense formation is solidified. At this point, the child over generalizes and applies the rule to the word "go" to get "goed" and this regular pattern overwhelms the irregular form. Finally, the child realizes that "went" is an exception to the past tense rule and again modifies her or his grammar accordingly by marking "go" as a verb that doesn't undergo the regular process of past tense formation and by reactivating "went" as the past form. Note that imitation and reinforcement have a tough time accounting for this type of phenomenon. Basically, in fact, they can't.

Finally, think about how this approach makes *Creolization* seem natural and expected. Think about children growing up with speakers of a pidgin language as their primary caretakers and thus as their primary source of linguistic input. If children are hard wired to be grammar builders, Creolization makes perfect sense. They develop a grammar out of the language input they have around them. If imitation theory is right, however, then we expect that Creolization should never happen. Children should simply acquire the Pidgin they are exposed to by repeating what they hear.

7.10 Important Aspects of Acquisition

In this section, we'll cover some general aspects of phonetic/phonological, morphological, syntactic, and semantic development in child language acquisition.

7.11 Phonetic acquisition

One of the first noticeable aspects of language acquisition is development in the phonetic realm. We know from our discussion of phonology in general that learning a language must involve learning to make sense of the speech signal by figuring out, for example, what the phonemes of one's language are and how these phonemes are realized as allophones in different contexts. This task is actually just the tip off he iceberg, but it is important to recognize that the child must develop a phonological grammar from the data that she or he is exposed to. Acquisition starts very early. Babies actually vocalize right from the time they are born, especially by crying. Within a couple of weeks, babies produce vocalizations that are limited to *gurgling*

and *cooing*. This gurgling and cooing gradually changes into what linguists call the *babbling* stage at about six months of age.

7.12 Babbling

The stage when babies produce non-meaningful sequences of consonants and vowels. These are most often in the form of CV syllables repeated over and over, such as [mama] and so forth. In a way, the babbling stage can be thought of as a period of time in which the baby is practising the difficult sequences of coordinated gestures jaw and tongue and velum movement, along with voicing control) that are necessary for normal speech production. These seem easy to us, because we are grown up (at least some of us!) and have already acquired our language and speak with ease, but the gestures necessary for speech production are, in fact, quite intricate. At the babbling stage, there is no clear association of sound and meaning on the part of the baby. That is, the baby doesn't seem to be saying or trying to say particular "words". What is interesting to note is that at the babbling stage the baby does seem to be picking up on the rhythm and intonation of the language that it is acquiring.

7.13 Phonological acquisition

Babbling gives way to a stage in which words do emerge. When babies come out with their first words, there appears to be a link between sound and meaning that is missing at the babbling stage. This happens at around 18 months of age. Babies seem at this point not to be aware of phoneme level differences in words. That is, they seem to memorize single words as chunks and not pay much attention to phonemic differences. So, the word for "bottle" might be both "ba" and "da". In adult speech, [b] and [d] are allophones of different phonemes and can be found in many minimal pairs. Babies aren't aware of this at first. They haven't developed a grammar that makes this distinction at this point.

Babies proceed from this initial "first words" stage to a stage in which they begin to develop an awareness of phonemic contrasts, i.e. of the important differences signaled by [b] as opposed to [d] in a language such as English. So, they begin to acquire particular sounds. Interestingly, they don't get all their sounds at once. Some sounds are more difficult to master than others. Bilabial sounds like [m] and [p] are among the first sounds mastered. Consonants like [l] and [r], which have a large number of phonetic similarities, are the most difficult to master. In fact, some children have persistent problems in English with their [l] and [r] sounds well into childhood. In terms of syllable structure, consonant clusters are harder to master than simpler CV syllables, and children thus acquire CV structures before they get clusters such as [str] or even [st].

Another thing children tend to do is shorten longer words. Examples are when they say 'nana' instead of 'banana' or 'tato' instead of 'potato'. What's interesting is that these deletions aren't random. Kids don't just shorten any word in any way. What gets deleted is an unstressed syllable that immediately precedes, a stressed vowel. It is as though the baby has cued in on the stressed and most important syllable of the word and so starts the word off with that. In fact, many English words have this pattern, where the main stress falls on the first syllable. (For example, all of the words in the last sentence have stress on the first syllable!) What's interesting is that although babies don't have the grammar of the adult, they are developing a grammar simultaneously. It's not simply that they are incompetent and can't say 'banana'. Rather, they vary from adult speech in a systematic way. This again points to support for the "Active Construction of a Grammar" theory.

7.14 Morphological and Syntactic Acquisition

At the same time that kids are busy acquiring phonemic distinctions and working hard on their consonant clusters, they are also acquiring morphology and syntax. At the one-word stage that we referred to above, the first words a child utters are usually familiar objects or people in their world. Pretty soon they also start to pick up on activities and come up with words like verbs and other important concepts, such as "mine" and "gimme". (Isn't it interesting how some of the core properties of human nature emerge right away!!) Anyway, from a syntactic perspective, the one word stage is called the holophrastic stage.

7.15 Holophrastic stage

The expression '*holophrastic stage*' is used in order to refer to the fact that at this stage children use a single word to express a whole sentence-like meaning. Basically, the idea is that they are making one-word sentences. We know they are making sentences and not just naming things, because they often use sentence intonation to show that they are asking a question or expressing surprise. This is not to say that they have the exact intonational patterns of an adult at this point, but they do often seem to be expressing or attempting to convey sentence type meaning in their one word utterances.

After the one word or holophrastic stage, children enter the *Two-Word stage*. This stage tends to combine important words with crucial semantic relationships. Your book lists a bunch of examples:

- agent + action = baby sleep
- action + agent = kick ball

- action + locative = sit chair (locative means something that locates an action or entity)
- entity + locative = teddy bed
- possessor + possession = Mommy book
- entity + attribute = block red
- demonstrative + entity = this shoe

Note that at this stage, the grammar is not the same as the adult grammar (this is a problem, remember, for imitation theory. How come children go through this stage if they don't get such sentences as input?) However, even though the word order isn't the same as the adult grammar, it is relatively consistent. And they control their intonation patterns more. This is more evidence for the active construction position. Here we have a picture of little kids as little grammar builders. The grammar may be simple at this point, but it still looks like a grammar and not like chaos. The two word stage, as you can see from the examples, has the feeling of being telegraphic. Babies go through this stage sometime between 18 and 24 months, depending on when they begin the one word stage.

After the two word stage, there isn't really a three word stage. Babies' speech is still telegraphic, but as time goes by, they gradually start to move beyond just using content words (like nouns and adjective and verbs without the inflected endings) and begin to acquire function morphemes like inflectional affixes. Again, these affixes seem to be acquired in a regular fashion, with some appearing before others in case after case. For example, in English speaking children, the progressive suffix -ing, as in "go-ing" appears much earlier than the 3rd person -s suffix, as in [walk-s]. The big picture is that this regular order of acquisition of function across English speaking children (children of other languages exhibit similar effects in their development) speaks well for the Active Construction of a Grammar theory.

We focus on three aspects of morphological and syntactic development that are useful to review. These are, the development of plurals, of negatives, and of interrogatives. Here are big points to bear in mind.

Plurals. The plural suffix is acquired pretty early on in the game. But, as is the case in the acquisition of the past, children go through a period when they regularize irregular plural forms, in essence, overgeneralizing the use of the regular plural. Why is this important? Again, it points to the fact that kids are acquiring language through building a grammar, not through simple rote memorization. Again, this is evidence for the Active Construction position.

Negatives. The acqi sition of negatives also shows evidence of grammar building in children. First, children just seem to slap *no* down in front of a sentence to negate it, as in "*No I drink juice*". Anybody who has ever been around children, in fact, knows that the word "no" appears with alarming frequency in their speech. Anyway,

they start refining things by inserting negative words in their sentences, as in "baby no sleep" or "baby can't drink". But, at this point, they don't seem to be conscious of the fact that "don't" is actually morphologically complex, consisting of a contraction of "do" + "not". The same goes for things like "can't" and "won't". We know this because the auxiliary verbs "can" and "will" and "do" aren't acquired until later on! Over time, children refine their use of negation, gradually closing in on the adult grammar. One of the last things to be perfected in the use of words like "anybody" and "anything" in sentences like "I don't want anything" which are often realized as "I don't want something" in children's speech.

Interrogatives. Acquiring interrogates is also a systematic business that seems to proceed through some regular stages. At first, children seem to ask questions by making use of rising intonation, e.g. more milk?, Mommy go?, etc... At the age of three, children begin to use auxiliaries in yes-no questions, and they put them in the right order, e.g. "can I have more?" But, at this point, they still don't show adult order in Wh-questions. They generally use regular declarative order after the Wh-word, as in "Mommy, why you are mad?" instead of "Mommy, why are you mad?" This is interesting, because at this point they have undergone a rapid growth in vocabulary and are in control of the word order inversion necessary for yes-no questions. So, what does this point to? Once again, we see that kids are going through stages of grammar development. They are not simply imitating what they hear. If this were so they would not go through a stage where they use the Wh-word at the beginning of the question but fail to invert the subject and the auxiliary verb-something that we know they can do since they do this in yes-no questions.

7.16 Semantic Acquisition

We'll end our discussion of child language acquisition with some quick notes on semantic acquisition. Of course, when children hear a word for the first time, they have no idea what it means.

The literature on how children acquire meanings is actually quite extensive and various theories have generated debate for years. But, we do know that children basically have to make guesses about what words mean (remember that they have to do this while they are also working on the task of identifying individual words in the speech stream). They make their guesses from being exposed to words that are used in particular contexts. A common case is that a child is exposed, for example, to a poodle in the street and sees mommy or daddy point to it and say "doggie". Well, even if the kid associates "doggie" with that object, there are a number of routes that the child can logically take. The child might see a squirrel and say, "doggie", clearly having taken the word "doggie" to mean something more general that it does in the adult grammar. Or, the child might see a dog, say a

labrador, and not say anything, failing to associate the word "doggie" with anything beyond poodle-ness. This trial and error process seems to be how children acquire word meanings. Though it might seem cumbersome, it is a fact that children tend to have a vocabulary of about 14,000 words by the time they are six! Did you think that a six year old had that large of a vocabulary?

The two concepts that I've illustrated for you with the "doggie" example have names. One is called **overgeneralization**, while the other is called **underextension**.

Overgeneralizations. Overgeneralizations are cases in which a child gives a word a broad range of meaning that it has in the adult grammar. So, in our example above, the child incorrectly generalized the word "doggie" to include squirrels and perhaps other furry animals that make up part of his or her world. Your book gives the example of a child who overgeneralized the word "fly" to include specks of dirt, dust, small insects, and bread crumbs. What is important to note here is that overgeneralization is not simply random. Children overgeneralize along reasonable semantic grounds. The kid who overgeneralized "fly" was certainly keying in on the importance of size. All of the things are similar, speck-like entities.

Underextensions. Underextensions have the opposite effect. In this case, it might help to think of them as cases in which the child is being overly cautious. The child associates a word with a smaller set of meanings or objects than it has in the adult grammar. I like the case that your book notes of the child who called a ball a ball only when it was under the sofa. One of the explanations for underextension that people have proposed is that children, especially very young ones around two years old, can't really tell the difference between inherent properties of things and accidental ones. In the case of calling a ball a ball only when it is under the sofa, the child is failing to realize that being under the sofa has nothing to do with the inherent "ball-ness" of the ball. Being under the sofa is an accident, i.e. not a quality of the ball at all. Older children do exhibit underextension as well, especially when dealing with a new item that may or may not be a member of a category whose boundaries are not overly clear. So, if I point to an olive and say "That's a fruit", you may not agree. You've essentially underextended the word "fruit" since an olive is, indeed, a fruit. I had this experience when I was learning Spanish. For me, as an English speaker, I don't generally include insects in the category of "animals". I realized that this wasn't true of Spanish when a friend of mine once discovered a rather large beetle lounging in his hair and jumped up screaming "Un animal!" Of course, I started looking around for a large rat, mostly due to the look of pure terror on his face. For him, beetles and other insects enter into the category 'animal'. For me, they didn't. Moral of the story...that's a case of underextension which in this case took place in my acquisition of the word "animal" in Spanish. So, I now have one "animal" in my English lexicon and a different one in my Spanish lexicon.

7.17 Overview of Second Language Acquisition Theory

An understanding of second language acquisition can improve the ability of mainstream teachers to serve the culturally and linguistically diverse students in their classrooms (Fillmore & Snow, 2002; Hamayan, 1990). While significant professional development is necessary to gain a full understanding of second language acquisition theory, some key concepts can be quickly understood and applied in the classroom.

Current theories of second language acquisition are based on years of research in a wide variety of fields, including linguistics, psychology, sociology, anthropology, and neurolinguistics (Freeman & Freeman, 2001).

One concept endorsed by most current theorists is that of a continuum of learning—that is, predictable and sequential stages of language development, in which the learner progresses from no knowledge of the new language to a level of competency closely resembling that of a native speaker. These theories have resulted in the identification of several distinct stages of second language development. These stages are most often identified as:

7.18 Stage I : The Silent/Receptive or Preproduction Stage

This stage can last from 10 hours to six months. Students often have up to 500 "receptive" words (words they can understand, but may not be comfortable using) and can understand new words that are made comprehensible to them. This stage often involves a "silent period" during which students may not speak, but can respond using a variety of strategies including pointing to an object, picture, or person; performing an act, such as standing up or closing a door; gesturing or nodding; or responding with a simple "yes" or "no." Teachers should not force students to speak until they are ready to do so.

7.19 Stage II : The Early Production Stage

The early production stage can last an additional six months after the initial stage. Students have usually developed close to 1,000 receptive/active words (that is, words they are able to understand and use). During this stage students can usually speak in one- or two-word phrases, and can demonstrate comprehension of new material by giving short answers to simple yes/no, either/or, or who/what/where questions.

7.20 Stage III : The Speech Emergence Stage

This stage can last up to another year. Students have usually developed

approximately 3,000 words and can use short phrases and simple sentences to communicate. Students begin to use dialogue and can ask simple questions, such as "Can I go to the restroom?" and are also able to answer -simple questions. Students may produce longer sentences, but often with grammatical errors that can interfere with their communication.

7.21 Stage IV : The Intermediate Language Proficiency Stage

Intermediate proficiency may take up to another year after speech emergence. Students have typically developed close to 6,000 words and are beginning to make complex statements, state opinions, ask for clarification, share their thoughts, and speak at greater length.

7.22 Stage V : The Advanced Language Proficiency Stage

Gaining advanced proficiency in a second language can typically take from five to seven years. By this stage students have developed some specialized content-area vocabulary and can participate fully in grade-level classroom activities if given occasional extra support. Students can speak English using grammar and vocabulary comparable to that of same-age native speakers.

Understanding that students are going through a predictable and sequential series of developmental stages helps teachers predict and accept a student's current stage, while modifying their instruction to encourage progression to the next stage. (For examples of instructional strategies explicitly tied to language acquisition stages, see this table.)

A concept endorsed by most language acquisition theorists is **Stephen Krashen's "comprehensible input"** hypothesis, (Please refer to Section 6.0 for detailed discussion.) For instance, a preschool child already understands the phrase "Get your crayon." By slightly altering the phrase to "Get my crayons," the teacher can provide an appropriate linguistic and cognitive challenge— offering new information that builds off prior knowledge and is therefore comprehensible (Sowers, 2000). Providing consistent, comprehensible input requires a constant familiarity with the ability level of students in order to provide a level of "input" that is just beyond their current level.

Research by **Merrill Swain** and others has extended this concept to include **"comprehensible output."** According to several studies, providing learners with opportunities to use the language and skills they have acquired, at a level in which they are competent, is almost as important as giving students the appropriate level of input (Pica et al., 1989, 1996; Swain & Lapkin, 1995).

Another theory that has directly influenced classroom instruction is **Jim Cummins's** distinction between two types of language: **basic interpersonal**

communications skills (BICS) and **cognitive academic language proficiency** (CALP). Research has shown that the average student can develop conversational fluency within two to five years, but that developing fluency in more technical, academic language can take from four to seven years depending on many variables such as *language proficiency level, age* and *time of arrival at* school, *level of academic proficiency* in the native language, and the *degree of support* for achieving academic proficiency (Cummins, 1981, 1996; Hakuta, Butler, & Witt, 2000; Thomas & Collier, 1997).

Later, Cummins expanded this concept to include **two distinct types of communication**, depending on the context in which it occurs:

- **Context-embedded communication** provides several communicative supports to the listener or reader, such as objects, gestures, or vocal inflections, which help make the information comprehensible. Examples are a one-to-one social conversation with physical gestures, or storytelling activities that include visual props.
- **Context-reduced communication** provides fewer communicative clues to support understanding. Examples are a phone conversation, which provides no visual clues, or a note left on a refrigerator.

Similarly, Cummins distinguished between the different **cognitive demands** that communication can place on the learner:

- Cognitively undemanding communication requires a minimal amount of abstract or critical thinking. Examples are a conversation on the playground, or simple yes/no questions in the classroom.
- Cognitively demanding communication, which requires a learner to analyze and synthesize information quickly and contains abstract or specialized concepts. Examples are academic content lessons, such as a social studies lecture, a math lesson, or a multiple-choice test.

Understanding these theories can help teachers develop appropriate instructional strategies and assessments that guide students along a continuum of language development, from cognitively undemanding, context-embedded curricula, to cognitively demanding, context-reduced curricula (Robson, 1995).

A basic knowledge of language acquisition theories is extremely useful for mainstream classroom teachers and directly influences their ability to provide appropriate content-area instruction to ESL students. It is especially important in those schools or districts where limited resources result in little or no instructional support in a student's native language. In these "sink-or-swim" situations, a committed -mainstream teacher with a clear understanding of language acquisition can make all the difference.

7.23 Stephen Krashen's Theory of Second Language Acquisition

"Language acquisition does not require extensive use of conscious grammatical rules, and does not require tedious drill." Stephen Krashen

"Acquisition requires meaningful interaction in the target language - natural communication - in which speakers are concerned not with the form of their utterances but with the messages they are conveying and understanding." Stephen Krashen

"The best methods are therefore those that supply 'comprehensible input' in low anxiety situations, containing messages that students really want to hear. These methods do not force early production in the second language, but allow students to produce when they are 'ready', recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production." Stephen Krashen

"In the real world, conversations with sympathetic native speakers who are willing to help the acquirer understand are very helpful." Stephen Krashen

7.24 Introduction

Stephen Krashen (University of Southern California) is an expert in the field of linguistics, specializing in theories of language acquisition and development. Much of his recent research has involved the study of non-English and bilingual language acquisition. During the past 20 years, he has published well over 100 books and articles and has been invited to deliver over 300 lectures at universities throughout the United States and Canada.

This is a brief description of Krashen's widely known and well accepted theory of second language acquisition, which has had a large impact in all areas of second language research and teaching since the 1980s.

7.25 Description of Krashen's Theory of Second Language Acquisition

Krashen's theory of second language acquisition consists of five main hypotheses:

- the Acquisition-Learning hypothesis,
- the Monitor hypothesis,
- the Natural Order hypothesis,
- the Input hypothesis,
- and the Affective Filter hypothesis.

The **Acquisition-Learning** distinction is the most fundamental of all the

hypotheses in Krashen's theory and the most widely known among linguists and language practitioners.

According to Krashen there are two independent systems of second language performance: 'the acquired system' and 'the learned system'. The 'acquired system' or **'acquisition'** is the product of a subconscious process very similar to the process children undergo when they acquire their first language. It requires meaningful interaction in the target language - natural communication - in which speakers are concentrated not in the form of their utterances, but in the communicative act.

The 'learned system' or **'learning'** is the product of formal instruction and it comprises a conscious process which results in conscious knowledge 'about1 the language, for example knowledge of grammar rules. According to Krashen 'learning' is less important than 'acquisition'. (Veja o texto ao lado e tambem outra pagina em portugues sobre *Acquisition/Leaming*).

The **Monitor** hypothesis encapsulates the relationship between acquisition and learning and defines the role of grammar. According to Krashen, the acquisition system is the utterance initiator, while the learning system performs the role of the 'monitor' or the 'editor'. The 'monitor' acts in a planning, editing and correcting function when three specific conditions are met: that is, the second language learner has sufficient time at his/her disposal, he/she focuses on form or thinks about correctness, and he/she knows the rule.

It appears that the role of conscious learning is somewhat limited in second language performance. According to Krashen, the role of the monitor is - or should be - minor, being used only to correct deviations from 'normal' speech and to give speech a more 'polished' appearance.

Krashen also suggests that there is individual variation among language learners with regard to 'monitor' use. He distinguishes those learners that use the 'monitor' all the time (over-users); those learners who have not learned or who prefer not to use their conscious knowledge (under-users); and those learners that use the 'monitor' appropriately (optimal users). An evaluation of the person's psychological profile can help to determine to what group they belong. Usually extroverts are under-users, while introverts and perfectionists are over-users. Lack of self-confidence is frequently related to the over-use of the 'monitor'.

The **Natural Order** hypothesis is based on research findings (Dulay & Burt, 1974; Fathman, 1975; Makino, 1980 cited in Krashen, 1987) which suggested that the acquisition of grammatical structures follows a 'natural order' which is predictable. For a given language, some grammatical structures tend to be acquired early while others late. This order seemed to be independent of the learners' age, L1 background, conditions of exposure, and although the agreement between individual acquirers was not always 100% in the studies, there were statistically significant similarities that reinforced the existence of a Natural Order of language

acquisition. Krashen however points out that the implication of the natural order hypothesis is not that a language program syllabus should be based on the order found in the studies. In fact, he rejects grammatical sequencing when the goal is language acquisition.

The **Input** hypothesis is Krashen's attempt to explain how the learner acquires a second language. In other words, this hypothesis is Krashen's explanation of how second language acquisition takes place. So, the Input hypothesis is only concerned with 'acquisition', not 'learning'. According to this hypothesis, the learner improves and progresses along the 'natural order' when he/she receives second language 'input' that is one step beyond his/her current stage of linguistic competence. For example, if a learner is at a stage T, then acquisition takes place when he/she is exposed to 'Comprehensible Input' that belongs to level 'i + 1f. Since not all of the learners can be at the same level of linguistic competence at the same time, Krashen suggests that natural communicative input is the key to designing a syllabus, ensuring in this way that each learner will receive some 'i + V input that is appropriate for his/her current stage of linguistic competence.

Finally, the fifth hypothesis, the **Affective Filter** hypothesis, embodies Krashn s view that a number of 'affective variables' play a facilitative, but non-causal, role in second language acquisition. These variables include: *motivation, self-confidence* and *anxiety*. Krashen claims that learners with high motivation, self-confidence, a good self-image, and a low level of anxiety are better equipped for success in second language acquisition. Low motivation, low self-esteem, and debilitating anxiety can combine to 'raise' the affective filter and form a 'mental block' that prevents comprehensible input from being used for acquisition. In other words, when the filter is 'up' it impedes language acquisition. On the other hand, positive affect is necessary, but not sufficient on its own, for acquisition to take place

7.26 The Role of Grammar in Krashen's View

According to Krashen, the study of the structure of the language can have general educational advantages and values that high schools and colleges may want to include in their language programs. It should be clear, however, that examining irregularity, formulating rules and teaching complex facts about the target language is not language teaching, but rather is "language appreciation" or linguistics.

The only instance in which the teaching of grammar can result in language acquisition (and proficiency) is when the students are interested in the subject and the target language is used as a medium of instruction. Very often, when this occurs, both teachers and students are convinced that the study of formal grammar is essential for second language acquisition, and the teacher is skillful enough to present explanations in the target language so that the students understand. In other words, the teacher talk meets the requirements for comprehensible input and

perhaps with the students' participation the classroom becomes an environment suitable for acquisition. Also, the filter is low in regard to the language of explanation, as the students1 conscious efforts are usually on the subject matter, on what is being talked about, and not the medium.

This is a subtle point. In effect, both teachers and students are deceiving themselves. They believe that it is the subject matter itself, the study of grammar, that is responsible for the students' progress, but in reality their progress is coming from the medium and not the message. Any subject matter that held their interest would do just as well.

7.27 General Principles for teaching ELL Students

Language acquisition theories have highlighted four key principles that can be directly applied to the mainstream classroom. These principles are important for all students, but are of particular importance to English language learners (Jameson, 1998).

7.28 Increase Comprehensibility

Drawing from Krashen's theory of comprehensible input, this principle involves the ways in which teachers can make content more understandable to their students. With early to intermediate language learners, these include providing many nonverbal clues such as pictures, objects, demonstrations, gestures, and intonation cues. As competency develops, other strategies include building from language that is already understood, using graphic organizers, hands-on learning opportunities, and cooperative or peer tutoring techniques.

7.29 Increase Interaction

Drawing from Swain's emphasis on comprehensible output, a number of strategies have been developed that increase students' opportunities to use their language skills in direct communication and for the purpose of "negotiating meaning" in real-life situations. These include cooperative learning, study buddies, project-based learning, and one-to-one teacher/student interactions.

7.30 Increase Thinking/Study Skills

Drawing from Cummins's theories of academic language and cognitively demanding communication, these strategies suggest ways to develop more advanced, higher order thinking skills as a student's competency increases. Chamot and O'Malley (1994) developed the Cognitive Academic Lang ge Learning Approach (CALLA) mentioned above to bridge the gap between Cummins's theories and actual

classroom strategies. These include asking students higher order thinking questions (e.g., What would happen if...?), modeling "thinking language" by thinking aloud, explicitly teaching and reinforcing study skills and test-taking skills, and holding high expectations for all students.

7.31 Use a student's native language to increase comprehensibility

Drawing from several different theories, including Krashen and Cummins, this principle also draws on a wealth of current research that has shown the advantage of incorporating a student's native language into their instruction (Berman, Minicucci, McLaughlin, Nelson, & Woodworth, 1995; Lucas and Katz, 1994; Pease-Alvarez, Garcia & Espinosa, 1991; Thomas & Collier 1997). Thomas and Collier, for example, in their study of school effectiveness for language minority students, note that first-language support "explains the most variance in student achievement and is the most powerful influence on [ELL] students' long term academic success" (p. 64). As mentioned in our section on instructional methods and models, using a student's native language as a support can be seen as both a general method or as any of a number of specific strategies. Many of the strategies we list below include, implicitly or explicitly, the use of a student's native language to increase his or her understanding.

7.32 Examples of instructional strategies linked to appropriate language acquisition stages

The chart on the following page is adapted from the Oregon Department of Education publication The.English Language Learners' Program Guide (n.d.). Each of the five stages of second language acquisition is linked to appropriate and specific instructional strategies.

Silent/Receptive Stage I	Early Production Stage II	Speech Emergence Stage III	Intermediate /Advanced Proficiency Stages IV & V
Use of visual aids and gestures	Engage students in charades and linguistic guessing games	Conduct group discussions	Sponsor student panel discussions on the thematic topics*
Slow speech emphasizing key words	Do role-playing activities	Use skits for dramatic interaction	Have students identify a social issue and defend their position*

Do not force oral production	Present openended sentences	Have student fill out froms and applications*	Promote critical analysis and evaluation of pertinent issues
Write key words on the board with students copying them as they are presented	Promote open dialogues	Assign writing compositions	Assign writing tasks that involve writing, rewriting, editing, critiquing written examples*
Use pictures and manipulatives to help illustrate concepts	Conduct student interviews with the guidelines written out	Have students write descriptions of visuals and props	Encourage critical interpretation of stories, legends, and poetry*
Use multimedia language role models	Use charts, tables, graphs, and other conceptual visuals	Use music, TV, and radio with class activities	Have students design questions, directions, and activities for others to follow
Use interactive dialogue journals	Use newspaper ads and other mainstream materials to encourage language interaction*	Show filmstrips and videos with cooperative groups scripting the visuals	Encourage appropriate story telling
Encourage choral readings	Encourage partner and trio readings	Encourage solo readings with interactive comprehension checks*	
Use Total Physical Response (TPR) techniques			

* It is important to structure activities that are both age- and liguistically appropriate.

7.33 Ten things the mainstream teacher can do today to improve instruction for ELL students

These tips were adapted from the *Help! They Don't Speak English Starter Kit for Primary Teachers* (1998) (developed by the Region IV and Region XIV Comprehensive Centers, the Center for Applied Linguistics, and ESCORT, a national resource center dedicated to improving the educational opportunities for migrant children) and from *Integrating Language and Content Instruction: Strategies and Techniques* (1991) by Deborah Short of the Center for Applied Linguistics.

1. Enunciate clearly, but do not raise your voice. Add gestures, point directly to objects, or draw pictures when appropriate.
2. Write clearly, legibly, and in print—many ELL students have difficulty reading cursive.
3. Develop and maintain routines. Use clear and consistent signals for classroom instructions.
4. Repeat information and review frequently. If a student does not understand, try rephrasing or paraphrasing in shorter sentences and simpler syntax. Check often for understanding, but do not ask "Do you understand?" Instead, have students demonstrate their learning in order to show comprehension.
5. Try to avoid idioms and slang words.
6. Present new information in the context of known information.
7. Announce the lesson's objectives and activities, and list instructions step-by-step.
8. Present information in a variety of ways.
9. Provide frequent summations of the salient points of a lesson, and always emphasize key vocabulary words.
10. Recognize student success overtly and frequently. But, also be aware that in some cultures overt, individual praise is considered inappropriate and can therefore be embarrassing or confusing to the student.

Summing up

In this unit we have defined Second Language Acquisition. We have looked at the various applications of SLA research. We have also reviewed the various theories of language acquisition. This is followed by an overview of second language acquisition theory and the five stages of acquisition. There is an elaborate account of Krashen's Theory and its relevance in SLA. There is also a note on the general principles on teaching ELL students. Finally there are some important guidelines for instructional strategies linked to appropriate language acquisition stages and also ten things the mainstream teacher can do today to improve instruction for ELL students.

Review questions

1. What are the various applications of Second Language Acquisition research?
2. What are the various theories of language acquisition?
3. What are the five stages of second language acquisition?
4. What is the relevance of Krashen's Theory in second language acquisition?
5. List in detail, the general principles for teaching ELL students.

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Unit 8 ❐ Child Language Acquisition

8.0. Objectives

At the end of this unit you will —

(1) have an understanding of how children learn a language
(2) have an idea of the stages of first language acquisition
(3) know how researchers study children's language acquisition
(4) understand how Chomsky's view of acquisition based on a theory of innateness differs from Piaget's and Skinner's
(5) have an idea of the critical period for language acquisition
(6) be familiar with some stages of language development proposed by linguists and psychologists studying child language acquisition
(7) be able to relate notions such as 'Universal Grammar', 'Speech Act', 'Discourse' with the issues of language acquisition
(8) be able to read articles in the field in the original in future
(9) be able to observe children acquiring their first language in natural surroundings.

8.1. Introduction

In your module I unit 3, you have read about the field of cognitive science and how the scientists of that field try to understand the human mind and brain. This unit will expose you to the study of one important aspect of the development of

human mind, that is how a language is acquired. Looking back at your childhood, can you really recall how you learnt to speak your native language? Notice that we can pinpoint events such as when we learnt to wear our shoes by ourselves, when we learnt to eat without anyone's help or when we learnt to ride a cycle. Either of our parents might have helped us doing these things. In addition, since all of us generally speak the language of our parents, they must have helped us learning our first language. But interestingly, one cannot remember when one's mother taught one the tense system or the number system or the rules of question formation in the first language, which we generally call the mother tongue. These are not remembered as important moments of our childhood because there were no such distinct moments' . It is true that our parents did not teach us the items of our first language one by one, nor did they clearly plan what to teach us when and how. Yet, isn't it fascinating to think that we learnt the language perfectly as we grew up? In fact, what happened was that there was a subtle, perhaps intuitive teaching process that neither we nor our parents were clearly aware of. We began by imitating what we heard from our parents. We said them as best we could, repeating them as random phrases. Our parents, on the other hand, either encouraged us or discouraged us in response to our performance as language users. They encouraged and rewarded us by responding positively or by complimenting us as and when we constructed correct phrases. They discouraged us when we made speech erors; they did so by not responding or by correcting our errors. As we grew up, the negative responses were less and positive responses were more. **The cognitive process of learning one's mother tongue through natural means from the environment is called languge acquisition,** it starts at a zero level and reaches a point of saturation when *competence* is achieved.

8.2. Uniqueness of language acquisition in human beings

When we think of first language acquisition, what catches our attention is the speed and accuracy with which it takes place. By the time a child is nearly ready for going to school, (s)he is a skillful language user. (S)he shows mastery over all modules of language organisation. (S)he does it in a very sophisticated way, without formal and overt instructions. No social, cultural or economic factors can curb a child's mastery over the first languge. The child would acquire it if his/her physiology of speech making allows it if (s)he lives in a linguistic environment i.e. if he/she is able to speak and hear and if he/she has people to talk to. The fact that a child acquires a language acqurately in a short time and without instructions, has been a major evidence for theorists who propose that human infants (in contrast to other animals) have an innate ability to acquire a language. This ability is usually called the **language faculty.**

Let us think about what a child needs to acquire the first language. Look

at the following points and try to match your experience and observation of your/someone else's learning the first language:

> psysiological ability to send and receive sound signals in the language > interction with the other speakers of the language to use that ability

If we suppose that the child is born with a language faculty, we must remember that it is only a potential ability; it needs to be activated. And that activation is done by the factors mentioned above. The linguistic input from the environment works in a very significant way in the activation process of the language faculty.

It is unique of human beings that all normal children develop language at an approximately same time. They do that despite the peculiarities of their cultural environment. Just as there is time for the other biological abilities (such as standing, walking, lifting things etc) to develop, there is a **schedule** for language acquisition of the child also. This schedule works in stages, which researchers have seen, is largely universal, despite the diversity of world languages. To give an example, English languge and Santali language may be different in their phonology and syntax but an English child and a Santali child would learn things of their respective languages following the same schedule. At a given stage, say, at the age of 30 months or so, both the children would show similar level of development in thir own languages. In other words, there is a step by step development which children follow in acquiring their first languge. These steps are also related to the maturation of the child's brain and its growing capacities of monitoring the **motor skills.** We are going to discuss certain stages of language acquisition below.

8.3. Stages of language acquisition

All human children can learn at least one language system. You must have noticed that no child start speaking a language one fine morning. They go through a series of stages when learning their native language. There is a phase when they just utter sounds without any meaning attached to them and then, in the next phase, they are able to speak words from the first language. The first phase can be called a *pre-linguistic phase* and it has two distinct stages: *cooing* and *babbling.* The second phase begins the *linguistic development* in children and in this phase the speech is telegraphic in nature, i.e. there are words put together without the accurate syntactic devices joining them. In this second phase, they first use one word expressions and then two-word expressions. After that, they can produce expressions of more than two words. Combining the two phases, then, there are altogether *five distinct stages* in the schedule of children's acquisition of language. These stages that are discussed below determine a biologically organised schedule.

Stage one : Cooing

In the first few weeks after their birth, children mostly cry. Have you ever thought why it is so that all children cry when they come to the earth, and why is it that the parents and doctors panic if a child takes time to start crying? It is because crying gives an exercise to the lungs and vocal cords. And, you must know it by now (from your units on Phonetics), how important it is to prepare the lungs and the vocal cords to produce speech sounds for the rest of the life.

The first stage towards language development is **cooing** when all children sound alike, no matter where they live or what their native language is. At this stage, they produce the first recognizable speech sounds. It has been noticed that among consonants, they produce the velar sounds [k] and [g] and among vowels, they produce the high vowels [i] and [u] at this stage. This stage spans roughly between three to six months of age.

Stage two: Babbling

The stage two starts roughly at the age of six months. This is when the child is able to sit up. During this stage, the indistinctive coos take on the sounds of the vowels of the child's native language. At this point, the children begin to sound differently and they are now on their way to learning .to speak their specific native language. This stage is called **babbling.** At this stage, a child is able to produce different vowels and some consonants such as the plosives and nasals. They can also combine sounds into single syllables (of CV structure) and duplicate them in strings of three or so, such as /ma-ma-ma/ or /da-da-da/. Though the parents feel excited that the child is trying to call the mother, the actual case is not possibly so. At a later stage of babbling, say roughly by nine months or so, which coincides with their ability to stand, they can attach intonation patterns to the combinations of consonants and vowels.

Stage three : one-word utterances

By the age between twelve and eighteen months, children can produce many single unit uterrances which are recognised as words of the mother tongue. When children are ready to produce full words, they generally begin by producing one-word utterances consisting of nouns. These nouns usually refer to the everyday objects in the child's environment such as, milk, eat, cup etc.

Stage four: two-word utterances

By the age between eighteen to twenty months, children progress to two-word utterances, usually consisting of a noun-verb combination. This stage begins when their range of vocabulary extends beyond 50 words.

Stage five : telegraphic speech

As the children grow, by the age between two and three years, they become more advanced in their first language acquisition. At this staqe, they produce longer utterances, consisting of three or more words. Children usually add adjectives to their utterances, and then finally adverbs. The noticeable feature of this speech is that it shows variation in word forms. They can properly use the regular **inflections** of nouns and verbs. However the ability to contruct **phrases** is yet to show up and what they produce is a string of lexical elements such as brother *want ball, cat drink milk, this my doll* etc. Of course, they clearly develop some sense of sentence structure and word order at this stage. The child's vocabulary starts to expand rapidly by the age of 30 months (i.e. two and half years) and it is arouond the time when the child starts running and jumping. By the age of three years the vocabulary contains hundreds of words and the pronunciation sounds close to the adult speech.

It may sound very simple to read, but it is really difficult to determine these stages. What is told in this subsection is based on a lot of research in the field of child language acquisition. Also note that there is often variation among children in terms of the age in which"" specific features of these stages appear. That is why it is customary to say expressions such as 'by the age of two years' rather than being specific saying 'at the age of...' .

8.4. The critical period

It is a fact that all human children can learn at least one language system. They go through a series of stages as discussed above when learning their native language. Scientists believe that there may be a **critical period** for first language acquisition. This means that there is a • time limit during which the child must be exposed to language if he/she is to acquire language naturally. A famous case study which lends support to the critical period theory is the case of a young girl called Genie. Genie was locked in a small closet-like room at the age of 18 months by her schizophrenic father. Her mother was blind and was also abused by the father, so she was unable to help Genie. After her father died, Genie was finally freed from the closet. She was 13 years old.

When Genie was first locked in the closet, she was just beginning to acquire language. After that she was not exposed to the language. She had no language skills when released at the age of 13. Genie's tragic case supports the hypothesis that language acquisition may be limited to a critical period. As an adult, Genie's language development was quite immature. She produced mostly nouns, some verbs, but few adjectives or adverbs. Her utterances usually consisted of no more than three words. Even after intensive language training and psychotherapy/ Genie has not been able to acquire normal language skills.

The relevant questions here are :

Why is there a critical period for learning language? How long is that critical period?

The critical period is thought to be related to brain plasticity and lateralization. Plasticity refers to how flexible the brain is in learning various functions. Lateralization refers to the specializations of the two sides, or hemispheres, of the brain. Scientists believe that the critical period for first language acquisition ends somewhere between the ages of 4 and 12. At this age, the brain appears to lose its plasticity for learning language. In addition, specialized language behaviors become controlled primarily by the left hemisphere of the brain. In theory, if a child is not exposed to language during the critical period, he/she will never be able to acquire it normally.

The explanation for Genie's inability to learn a languge is that she was not exposed to language during the critical period. She was not spoken to. She did not learn how to form words and to combine those words into sentences. When she was released from the closet at the age of 13, her brain had lost its ability to learn a natural language.

For more information on critical period, refer to your Paper II, Module 4, Unit 3, (part 2).

8.5. The acquisition process

As the child grows up, the linguistic repertoire expands towards achievement of competence. We often tend to think that the child is 'taught' the languge. But this approach seems to underestimate the real cognitive task performed by the child in learning the langugae. Most of the children are not given any instructions as to how to speak the language. The only thing given to the child is evidence, positive and negative; i.e. (s)he is told if a particular construction said by him/her is right or wrong. No one gives him/her instructions such as place the subject of the sentence first and then the verb which should be followed by the object or complement etc. The child's production of linguistic items is a matter of trial and error - to see what works and what does not. It is not possible that the child learns only by imitating or parrotting. If it was so, then the child would not be able to create any new sentence. In the remaining part of this subsection we would see how the child develops the sub-systems of morphology, syntax and semantics which are parts of his/her linguistic system.

Morphology : The child goes beyond the telegraphic speech by the age of three* years. At this time he/she is able to incorporate the inflectional morphemes into the speech produced. This means (s)he learns the grammatical functions of nouns and

verbs. In case of English children, the first one in this series is the '-ing' form in the constructions such as *cat* sitting, *mummy reading book, dad going office* etc. The next in order is the set of regular plurals with *-s' form. At this stage children often indulge in a process called 'overgeneralisation' by using the *-s' ending indiscriminately with all nouns. Thus froms such as *foots* (for *feet') , mans (for 'men') are produced. It has been noticed that even if they are corrected with the correct forms, in constructing quantifying expressions^ they tend to go back to the same process and produce expressions such as *three mens* or *two fects.* In case of verbal inflections, interestingly, the irregular forms such as **wentr* and **came'* are learnt first, probably because of their frequency of use and their ready availability as words. After that, the regular past tense forms start appearing and the child learns the use of forms such as *walked* or played. At this stage, again, the child makes some overgeneralisations such as *goed* and *corned* . By the age of four, the child works out the system of plural forms and knows by then which one is regular and which one is irregular. At the final stage of learning the morphology, the child masters the system of using *-s'" with the verbs preceded by third person singular subjects. They first learn the use of *-s' with the regular verbs such as *comes, looks,* then with the auxiliaries i.e. does, has. Though this is the general sequence, there are lots of variations among individual children. We must remember that the child does not learn morphology in isolation, but side by side with syntax and semantics. The-most important point to remember here is that the child does not learn it by imitation, but learns it by constant trial and error supported by negative and positive feedback.

Syntax: Regarding child langugage acquisition, the subsystem of syntax also confirms that children do not learn sentence making by imitating parents' speech. They use their language faculty to process syntactic data (made available to them in the form of phrases, clauses and sentences) and understand their internal organisation by hypothesis formation and hypothesis testing. Here also, they get negative and positive evidence from adult speakers for and against correct and wrong constructions respectively. In the acquisition of syntax, despite a wide range of variability, researchers have been able to identify three (overlapping) stages:

Stage one: 18 to 26 months,
Stage two: 22 to 30 months
Stage three: 24 to 40 months.

These stages may vary, because different children proceed at different paces.

In forming questions, the first stage involves two procedures. One is to add a wh-word in the beginning of an expression, such as *Where* Kitty? or *Where horse go!* The other procedure is to add a rising intonation to a statement-like expression, such as Sit *chair!* or See *ball!* In the second stage, expressions of more complex nature can be found, though the strategy of rising intonation continues. The use of Wh-forms

is more in the second stage. Some of the typical examples are the following : *What book* name? *Why you smiling? You want eat?* Notice that in both these stages, the other devices of question formation namely the use of auxiliaries and the change of position of subject and verb are absent. Still children can communicate with the help of wh-words and rising intonations in asking questions. In the third stage, the subject verb inversion starts to appear but the wh-forms do not undergo similar inversions. Even when the children start going to school, the required inversions in wh-expressions are absent. Sometimes the distribution of auxiliary is not accurate or there are redundancies. Some of the examples of this stage are the following: *Can I have a piece? Did I caught it? Why Kitty cant stand up? How that opened?* etc. Beyond the third stage, children start making their syntax of question formation accurate by mastering the intricate rules of transformation.

In the case of negatives, in the first stage, the child seems to take a strategy that 'no' or 'not' should be added in the beginning of an expression. (S)he constructs expressions such as: not a teddy Jbear, no eat, no sit here etc. In the second stage, the child learns the use of auxiliaries supporting the neagitives. (S)he also learns to place the neagative before the verb rather than in the beginning of the expression. The expressions produced at this stage are: *You can't dance, I* don't *know* etc. In the third stage, some of the second stage expressions persist but most of the first stage expessions disappear. The child also learns the consolidated use of 'won't' and 'didn't'. However, sometimes the presence of past tense in 'didn't' is overlooked and expressions such as 'I *didn't caught it*' are constructed. It has been observed that children use their own rules of negative formation and for quite some time uses expressions like 'Nobody don't like me'. This is probably because their logical sense takes more time to ta'ke shape.

Semantics : As grown ups, all of us have the experience of being embarrassed by our parents when they retell the anecdotes of how we used words when we were picking them up at the early stage of our languge acquisition. Every child in the early stages uses same words for referring to a large number of items. In the one-word stage (discussed in subsection 4.2.3.) many children use their limited stock of words to refer to a large number of objects which are unrelated. For example, the sound sequence 'bow-wow' starts with indicating 'dog' but it may be used to refer to cats, horses or cows. In other words, it is used for the generic animal rather thatn ttie specific 'dog'. This process of extention of reference is called **'overextension'** and it is a common semantic pattern of early learner's speech. The children overextend the meaning of a word on the basis of similarities of shape, sound and size. In the same way, the word 'ball' is extended to all kinds of round objects ranging from a lampshed to the moon. The word 'apple' also has been observed to have undergone similar overextension of meaning to refer to other round objects.

Another interesting observation of children's acquisition of semantics is that they acquire the antonyms rather late. The distinction between the pair of words such as 'more' and 'less', 'before' and 'after', 'buy' and 'sell' is learnt much later in childhood.

It is generally assumed that by the age of five, the child completes acquiring a considerably great part of his/her mother tongue. (S)he is then in a good position to start to learn another language, a foreign or a second languge. The question often addressed theoretically is that why is learning a second language so difficult, especially when a child can do the most of learning in the mother tongue all by himself/herself. This issue has been discussed in other units in. detail. We shall see now how child language acquisition has been approached by different theorists.

8.6. The theoretical exploration of child language acquisition

Today, language acquisition is one of the major topics in cognitive science. Every theory of cognition has tried to explore it. The fact that all normal humans speak and that nonhuman animals don't shows that language is essentially a human trait. The ability to use language cretively is something that distinguishes humans from the other animals. Language is a storage and transmitter of our thoughts. Hence thought that is transmitted and the language that transmits must be closely interrelated. And the interaction is quite complex in nature when we think of it as a well-knit system. Still, learning a first language is something every normal child does very successfully, in a time span of a few years. He does it naturally, without the need for formal lessons. Children's acquisition of language has received so much of academic attention because language is in the core of our being human and development of the language faculty is central to our growing up as normal human beings.

The scientific study of language acquisition began in the late 1950 's, around the same time when cognitive science as a branch of study was consolidating. The simultaneous development of language acquisition study and cognitive science was not a mere coincidence. Noam Chomsky's review of Skinner's Verbal Behavior (Chomsky, 1959) brought in fresh ideas to both the fields. At that time, being under the overall impact of behaviourism, the Anglo-American natural science, social science, and philosophy came to a virtual concensus about the following:

a. The mind consisted of sensorimotor abilities plus a few simple laws of learning;

b. language must be learned

c. Thinking must be a form of verbal behavior

d. Verbal behavior as an expression of thought, can be observed externally.

Chomsky argued that language acquisition can falsify these beliefs in a single stroke: children learn languages that are governed by highly subtle and abstract principles. Moreover, they do so without explicit instruction from anybody. They do

not get any other clues from the environment to the nature of such principles. It indicates that language acquisition depends on an innate and species-specific (unique to humans) module that is distinct from general intelligence. In last five decades, most of the debate in the field of language acquisition has attempted to test this set of ideas. We shall discuss below some theories of language acquisition.

Most of the theories that we present here may be considered in both LI (mother tongue) and L2 (second or foreign language) acquisition contexts. Remember that language acquisition theories have been influenced especially by linguistic and psychological schools of thought. Different sclolars have given relatively changing weights on different factors in approaching the acquisition process. We will see how it was done as we get to know about them.

8.6.1. Skinner's verbal behaviour

B.F. Skinner developed his theory supported by confirming experiments on operant conditioning. He published his studies in *The Behaviour of Organisms* 1938, Science and *Human Behaviour* 1953 and *Verbal Behaviour* 1957. These laid the theoretical foundation for his work on** 'programmed learning', a new educational technology.

Behavioristic view of language acquisition claims that language development is the result of a set of habits. This view has normally been influenced by the general theory of learning described by the psychologist John B. Watson in *1923,* and termed behaviorism. Behaviorism denies the nativist position that knowledge of language is innate, because they find it irrational and unscientific. According to them, Knowledge is the product of interaction with the environment through stimulus - response interaction. The process of stimulus (ST) - response (RE) learning works as follows.

An **event** in the environment (the unconditioned stimulus, or UST) brings out an unconditioned **response** (URE) from an organism capable of learning.

That **response** is then followed by another event appealing to the organism. That is, the organism's response is positively reinforced (PRE).

If the sequence UST —> URE —> PRE recurs a sufficient number of times, the organism will learn how to associate its response to the stimulus with the **reinforcement** (CST).

This will consequently cause the organism to give the same response when it confronts with the same stimulus.

In this way, the response becomes a conditioned response (CRE) . The most difficult part of the behavioristic view is perhaps the idea that all leaning, whether verbal (language) or non-verbal (general learning) takes place by means of the same underlying process, that is **through forming habits,** in 1957, B.F. Skinner produced a behaviorist account of language acquisition in which linguistic utterances served as CST and CRE.

When language acquisition is taken into consideration, Skinner's theory claims that both first language and second language acquirers receive linguistic input from speakers in their environment, and positive reinforcement for their correct repetitions and imitations. As mentioned above, the children acquire the language relatively easily when language learners' responses are reinforced positively.

These claims are strictly criticized in Chomsky's "A Review of B.F. Skinner's Verbal Behavior" (1959). Chomsky asserts that there is "'neither empirical evidence nor any known argument to support any specific claim about the relative importance of feedback from the environment". Therefore, it would be unwise to claim that the sequence UST —> URE —> PRE and imitation can account for the process of language acquisition. Moreover, the theory overlooks the speaker (internal) factors in this process.

In brief, Skinner's view of language acquisition is a popular example of the nurturist ideas. Behaviorism, was passively accepted by the influential Bloomfieldian structuralist school of linguistics and produced some well-known applications in the field of foreign/second language teaching - for instance, the Audiolingual Method or the Army Method. The theory sees the language learner as a tabula rasa with no built-in knowledge. The theory and the resulting teaching methods failed due to the fact that imitation and simple S-R connections only cannot explain acquisition and provide a sound basis for language teaching methodology.

8.6.2. Vygotsky' s Zone of Proximal Development

Lev Semynovich Vygotsky was a Russian psychologist. He studied conscious human behavior which led him to investigate the role that language plays in human behavior. Vygotsky's point of view was that **social interaction plays an important role in the learning process.** He emphazed on the role of *shared language' in the development of thought and language. The term 'shared language' refers to social interaction. It and can be best elucidated through the notion of *zone of proximal development'(ZPD). ccording to Vygotsky (1962; p.10), there are two developmental levels which determine the learning process. They are: **egocentricity** and **interaction.** One can look at what children do on their own and what they can do while working with others. They mostly choose to remain silent or speak less on their own when they are alone. Thus they have less egocentric speech. However, they prefer to speak to other children when they play games with them and they have more egocentric speech. The difference between these two types- of development forms has been called the **Zone of Proximal Development.** This zone refers to the distance between two factors: (a) *the actual developmental level and* (b) *the level of potential development.* The actual developmental level is determined by independent problem solving and the level of potential development is determined through problem solving under guidance from adults or in cooperation with more capable friends of the child.

The first thing that children do is to develop concepts by talking to adults. Then they solve the problems they face on their own. In other words, children first need to be exposed to social interaction that will'" eventually enable them build their inner resources. Zone of Proximal Development, an idea developed by Vygotsky over one hundred years ago, falls within a socio-cultural context. Regarding its educational applicability, it seeks to define the process through which students effectively learn in cooperation with a teacher. A student's Zone of Proximal Development, or ZPD, is defined as the student's range of ability with and without assistance from a teacher or a more capable peer. On the one end of the range is the student's ability level without assistance. On the other end of the range is the student's ability level with assistance.

Vygotsky contends that language is the key to all development and words play a central part not only in the development of thought but in the growth of cognition as a whole. Within this framework, child language development, what we call acquisition, can be viewed as the result of social interaction.

8.6.3. Piaget' s View of Language Acquisition

Jean Piaget was a biologist and a psychologist, his ideas have been influential in the field of first and second language acquisition studies. He studied the overall behavioral development in the human infant. His theory of development in children has striking implications as regards language acquisition. Piaget was one of those psychologists who think that language acquisition is a case of general human learning. He has not suggested, however, that the development is not innate, but only that there is no specific language module. Piaget's view was that **the development (i.e., language acquisition) results mainly from external factors or social interactions.**

Piaget outlined the course of intellectual development as follows:

a. '-The sensorimotor stage:	from ages 0 to 2	understanding the environment
b. The preoperational stage:	from ages 2 to 7	understanding the symbols
c. The concrete operational stage :	from ages 7 to 11	mental tasks and language use
d. The formal operational stage :	from the age 11 onwards	dealing with abstraction

Piaget observed, that the pre-linguistic stage (birth to one year) is a determining period in the development of sensory-motor intelligence, when children are forming a sense of their physical identity in relation to the environment. Piaget, unlike Vygotsky, believes that egocentric speech on its own serves no function in language development.

8.6.4. Cognitive Theory

Cognitive theory is based on the work of psychologists. Piaget's work is based on the idea that children can learn things when they are developmentally ready to do so since learning follows development. This can be regarded as a starting point of the cognitivist ideas. Cognitive psychologists emphasized the importance of three things: **meaning, knowing and understanding.** According to them, meaning plays an important role in human learning. 'Learning' is a meaningful process of "relating new events or items to already existing cognitive concepts." (Brown, H.D. 1987; p. 47) ; and it is thought to involve internal representations that guide performance. In the case of language acquisition, these representations are based on language system and involve procedures for selecting appropriate vocabulary, grammatical rules, and pragmatic conventions governing language use.

Cognitive psychologists see second language acquisition, on the other hand, as the "building up of knowledge systems that can eventually be called automatically for speaking and understanding" (Lightbown and Spada, 1993; p.25). Language learning, in this sense, is a wholistic process and not analysable as stimulus-response associations. Language learners pay attention to any aspect of the language that they are attempting to understand and produce. Then, step by step, they become able to use certain parts of their knowledge through experience and practice.

-In short, the cognitivists claim that language acquisition can be automatically attained. However it is not clear how it will be automatized. And what LI structures can be automatized through practice in L2 and what structures can be transferred to L2 are not clearly accounted for.

The cognitive theory emphasizes that language development should be viewed within the framework of how the learner discover the meaning capacity of language by taking part in communication. Del Hymes' description of communicative competence (Brown, 1987; p. 201; Ellisl986; p.259), for instance, reflects the principles of the Discourse Theory. Communicative competence includes knowledge of the following:

1. grammar and vocabulary,
2. knowledge of rules of speaking,
3. knowledge of how to use and respond to different types of speech acts
4. social conventions.

These abilities taken together determine the knowledge of how to use language appropriately.

8.6.5. The Discourse Theory

The Discourse Theory has resulted from a theory of language use. The discourse theorists believe that language acquisition will successfully take place when language learners "know" how and when to use the language in various settings and when they have successfully "cognized" various forms of competence such as grammatical competence (lexis, morphology, syntax and phonology) and pragmatic competence (e.g., speech acts). A language learner needs to "know" conversational strategies to acquire the language. Halliday (cited in Ellis, 1985: 259), for example, conducted a study on his own son's first language acquisition experience and asserted that basic language functions arise out of interpersonal uses and social interaction.

Based on the ideas above, first language acquisition notion of the theory is that **children accomplish actions in the world and develop rules of language structure and use.** Accordingly, in the case of L2 acquisition, language learners are encouraged to deal with accomplishing actions, which are thought to help them acquire the target language. The Communicative Language Teaching or CLT is the best known example of such a theory. In the communicative classes, - students are expected to learn by doing things. It is called **discovery learning**. The students are expected to acquire the language through the PPP principle. The three Ps stand for **presentation, practice and production.**

The Discourse Theory has drawbacks also. It overemphasizes the role of external factors in the process of language acquisition and gives little importance to internal learner strategies (i.e., innate processes). Some think that the Discourse Theory is similar to the behavioristic view of language acquisition in that environmental factors and input (or positive stimulus) are at the very center in attempting to explicate the acquisition process. The Discourse Theory is of course more sophisticated than the Skinner's views in accounting for the complex structure of communication. Yet it overemphasizes the role of "knowledge of competence and functions" in acquiring a language, and hence fails to notice universal principles that guide language acquisition.

8.5.6. The Speech Act Theory

The Speech Act Theory was developed by philosopher J.L.Austin. This theory holds that saying something is a way of doing something. In speech act theory, two kinds of meaning are seen in utterances. The first is the **prepositional** meaning and the second is the **illocutionary** meaning. The former refers to the basic literal meaning of the utterance conveyed by the particular words or structures. The latter refers to the "effect" the spoken or written text has on the listener or reader. For

instance the utterances including 'threatening' or 'apologizing' might have 'presupposition' or 'implicature' effects that listeners strive to figure out. It is, of course, normal for someone to use these utterances in his native language. The problem is how propositions and implicatures are acquired in the first and second language. It is debatable whether a formal instruction environment help the learners acquire them. It may just create an environment where learners know only ' about' them. In that case the question would be, Can it be labeled 'acquisition'?

8.6.7. Universal Grammar Theory

Among theories of language acquisition, Universal Grammar (UG) has recently gained wider- acceptance and popularity. It attempts to clarify the relatively quick acquisition of the first languge on the basis of 'minimum exposure' to external input. The 'logical problem' of language acquisition, according to UG proponents, is that language learning would be impossible without 'universal language-specific knowledge' (Cook, 1991; p.153-4). The main reason behind this argument is the input data. According to Cook, *Language input is the evidence out of which the learner constructs knowledge of language - what goes into the brain.* Such evidence can be either positive or negative. The positive evidence of the position of words in a few sentences the learner hears is sufficient to show him/her the rules of a language. This view supports that the external input per se may^ not account for language acquisition because the input is poor and defficient.

Similarly, the Chomskyan view holds that the input is poor and deficient in two ways.

First, the input is claimed to be 'degenerate' because it is damaged by performance features such as slips, hesitations or false starts. Accordingly, it is suggested that the input is not an adequate base for language learning.

Second, the input is devoid of grammar corrections. This means that the input does not normally contain 'negative evidence', the knowledge from which the learner could exercise what is not possible in a given language.

UG has generated valuable predictions about the course of **interlanguage** and the influence of the first language. Also, it has provided invaluable information regarding L2 teaching as to how L2 teachers (or educational linguists) should present vocabulary items and how they should view grammar. As Cook (1991:p58) says, *UG shows us that language teaching should deal with how vocabulary should be taught, not as tokens with isolated meanings but as items that play an important part in the sentence, showing what structures and words they may go with in the sentence.* The UG theory should, therefore, be studied in detail so as to endow us with a more educational and pedagogical basis for first language.

8.7. Let us sum up

In this unit, we took up the issue of how children learn a language. We restricted our discussion to the aspects of first languge acquisition. In the introduction, we tried to define what languge acquisition is. We emphasised on the naturalness i.e. the absence of formal instructions in the process of acquiring a language from the environment. We then discussed the uniqueness of language acquisition in human beings and said that language faculty, a potential ability to learn a language naturally is innate in human beings and it distinguishes them from the other animals on this planet. After that, we took up the issue of acquisition schedule and presented the stages that are followed by children in general in the acquisition process. The issue of critical period was also discussed to emphasize on the point that children's ability to learn a language is manifested best upto a certain age. The discussion then preceded to the acquisition process, taking up the modules of morphology, syntax and semantics to show how each of them takes shape in the early stages of language acquisition. In the last section, we had a brief survey of how different theorists approached the issue of language acquisition.

8.8. Review Questions

1. What is first language acquisition?
2. Why is language faculty considered as uniquely human?
3. What do you understand as the 'schedule' of first language acquisition? What are the differents stages in this schedule?
4. What is 'critical period'?
5. What are the basic stages in acquisition of morphology, syntax and semantics of acquisition of English as a first language?
6. What is 'verbal behaviour'? How is it developed?
7. What is ZPD?
8. What is the the course of intellectual development outlined by Piaget?
9. How is cognitive theory different from discourse theory?
10. How do the theorists of UG approach the notion of input?

8.9. Glossary

Acquisition: The process of picking up a language without formal instructions.

Competence: The knowledge of a language as a system of structures and rules and its use.

Behaviourism: An approach based on the assumption that learning is a process of habit formation.

Discourse: Language used in a real situation for real purposes of interaction through spoken and written mode.

Input: The language gained from exposure which is available to the brain for processing.

Interaction: Communication between people involving the use of language.

Inonation: The rise and fall of voice used to indicate the functions of an utterrance.

Speech Act: Doing something through language, for example: announcing something, getting help, requesting etc.

Syntax: The grammatical arrangement of words in a sentence.

Universal Grammar: Properties inherent in the human mind matching the basic principles that apply to all languages.

Utterance: A complete unit of language used for communicative purposes.

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Unit 9 ❐ Factors Related to Second Language Acquisition

9.0. Objectives

In this Unit, we shall continue from what was discussed in the last unit in this module (Module 4, Unit 2). In Unit 2, we looked at the role of first language and the interlanguage stage that the learner goes through to become a proficient second language user. We also looked at the personal factors which influence SLA. In this Unit, we shall consider the general factors related to Second Language Acquistion. At the end of the Unit, you should be able to discuss the following.

- The overall effects of the general factors which contribute to second language acquisition.
- Age as a crucial factor of SLA
- The role of attitude and aptitude of the individual learners to acquire a second language
- The different cognitive styles of learning which the learners utilize for acquiring a second language

- The reasons for motivation to learn/ acquire a 'new' language
- The effects of the personality of the individual learners on second language acquisition.
- The role of intelligence when learners acquire a language
- The scope of learner strategies and its stages of application in SLA
- The general characteristics of a good second language learner.

9.1. Introduction

In this Unit, we will identify and understand how the general factors influence Second Language Acquisition. Before we do that may be you will like to refresh your memory on what is commonly understood as *'Second Language Acquisition'*. According to Rod Ellis (1985:6), Second Language Acquisition (SLA) refers to 'the subconscious processes by which a language other than the mother tongue is learnt in a natural or a tutored setting'. In other words, SLA is the process by which a child or an adult acquires a new language after or along with the first language (which is often the mother tongue). Though acquisition and learning are treated as the same, there are some fundemental differences between the two which can be summarised as follows:

Language Learning	Language Acquisition
1. -Implicit and subconscious	1. Explicit and conscious
2. Meaningful interaction with the target situation - informal situation	2. Controlled interaction with the target language - formal situations
3. Focus on the meaning conveyed.	3. Focus on form and meaning.
4. Error correction and explicit teaching of rules are not relevant	4. Importance for error correction and presentation of explicit rules.
5. Encourages modification of utterances.	5. Encourages correct mental represn-tation of linguistic generalisations.
6. Uses intutive understanding of Grammar.	6. Uses grammatical rules.
7. Depends on attitude.	7. Depends on aptitude.
8. Stable order of acquisition.	8. Simple to complex order of language.

This distinction is clearly discussed in the **Monitor Theory** proposed by Stephen Krashen. He hypothesises that adults have two independent systems for developing ability in a second language - the subconscious language acquisition and the conscious language learning systems , which are interrelated. If you feel interested to read more , consult the book *Second Language Acquistion and Second Language Learning* by Stephen Krashen (1981).

In this Unit however, we will not discuss further on the differences in acquistion and learning. It is however important that you keep this distinction in mind as you read through the Unit. Now, lets get back to what we are to discuss in this Unit - the general factors related to SLA.

9.2. General factors related to SLA :

Research studies have shown that difference in the general factors like age, learning style,aptitude, motivation, personality and intelligence effect both the proficiency level of the learners and the ability to respond to an individual task. There is, however, more empirical evidence needed to understand about how the difference in general factors influences the route of SLA development in both children and adults. The general factors like *aptitude, attitude* or *motivation* have complex sets of features which occur in overlapping behavioural traits which makes it difficult to quantify them. As mentioned earlier, in this unit we will focus on the general factors which influence SLA.

Let's look at each factor more closely.

9.2.1. Age and SLA

The effects of age on the route of SLA could vary from the effects of age on the rate or success of SLA. Over the years there has been emphasis on both these approaches to understand the effect of age on SLA.

Age does not seem to alter the route of acquisition. Investigation of Baily etal. (1974), Fathmen (1975), Gazden et.al. (1975) showed that adults acquire the same set of grammatical morphemes in the same order as children. It is seen that learners seem to process linguistic data in the same way irrespective of how old they are. For further details, refer to Rod Eilis (1995).

The rate and success of of SLA however seem to be strongly influenced by the age of the learner. If learners of different ages are matched according to the amount of time they have been exposed to L2, it is seen that the older learners reach higher levels of proficiency. Research however (Snow and Hoefnagel-Holilee1978) shows that although adults outperform children, adolescents learn faster. It appears that although age improves the language learning capacity of an individual, the performance may be the highest during adolescence after that the performance declines. (*See section on Critical Period Hypothesis.*) It is relevant for the acquisition of *morphology* and *syntax* of a language; the difference is not so noticeable for *pronunciation*. However it is also seen that though longer exposure to L2 may lead to greater success this is restricted to the overall improvement in communicative ability rather than grammatical and phonological accuracy (Hatch 1983a).

There are some factors we need to look in detail to understand the child adult difference in L2 acquisition.

1.Critical Period Hypothesis. The Critical Period Hypothesis states that there is a period in every individual when language acquisition takes place naturally and effortlessly. According to *Penfield and Roberts* (1959) the first ten years of life is the optimum age for language acquisition. During this period, the brain retains plasticity, but this gradually fades away with the onset of puberty. This is due to the lateralisation of the language function. What do you think is meant by *lateralisation*? To make it simpler, the nemological capacity for understanding and producing language which involves both hemispheres of the brain, gradually gets concentrated only in the left hemisphere in most people. This causes difficulty to learn a language for older learners.

2.Another factor which can influence learning is cerebral dominance. *Lennebery* (1967) found that injuries to the right hemisphere cause more language problems in children than in adults. He found that adults who underwent surgery in the left hemisphere had total language loss which was not evident for children. Adults tend to have permanent linguistic impedimeat in such cases, unlike children who quickly regained their language ability. It was also seen that loss of plasticity affected only pronunciation and not any other levels of language. This was then explained as *multiple critical* periods (Selinger 1978) that an individual goes through in life. The process of lateralisation and concentration of language function to specific areas is perhaps a gradual one. Different aspects of language are learn better at different stages in the process. More empirical research findings are needed to establish the link between cerebral dominance and age differences in learners.

3. Cognitive factors:

One difference for the child-adult distinction is Piaget's theory of *'formal operations'*. According to Piaget, around puberty, many adolescents pass through a development stage called *'formal operations'* (See Inhalder and Piaget 1958), during which he/she reflects on the on the rules that he possesses and on his thoughts. He is able to develop general solutions to problems and has the ability to comprehend language as a formal system. An adolescent is able to *'pick up'* language like a child as well as supplement this process by conscious study. In other words, older children develop the meta awareness about the language by consciously studying the linguistic rules. They apply these rules when they use the language. There is therefore a different orientation to language of children and older learners.

4. Affective factors:

Differences in the affective states of young and older learners could also influence how the learner relates and and responds easily to the foreign language culture. Young children are seen to adapt more easily in a new socio-cultural context because

they are less culture bound than adults (Burn 1980b) . However, let us understand that this does not necessarily mean children are more rapid learners. Research shows (Neufeld 1978) that all learners have an innate ability to acquire functional vocabulary and a basic mastery over pronunciation and grammatical rules. Children however are more motivated to handle complex grammatical structures and different language styles.

Let's look at the findings related to age and SLA again.

a.The starting age *does not affect the route* of SLA. Though there could be differences in the acquisition order, these are not due to age.

b. The starting age *affects the rate* of SLA. Adolescent learners are faster learners than children and adults especially for grammar and vocabulary, if given the same exposure to the language. However there is no noticeable difference where pronunciation is concerned.

c. Both the number of *years of exposure* and the *starting age* affects the level of success. More exposure to the language improves the overall communicative fluency of the learners but the starting age determines the level of accuracy achieved, particularly in pronunciation. It is also seen that although young children only learn at the same rate or are slower than the older learners , they are more likely to go further.

d. Adults acquire primary levels (except pronunciation) more rapidly than children because of their greater cognitive abilities.j^dults achieve greater overall communication ability both due to exposure to language and due to proficiency developed through peer group interaction.

e.Affective factors and difference in language environment of children and adults may result in the differentlin success attained by children and adults.

9.2.2. Aptitude, Attitude and SLA

Aptitude is often defined in terms of tests that are used to measure it. (e.g. Caroll and Sapon's Modern Language Aptitude Test 1959). Aptitude tests, however, do not measure exactly the same behaviour. However, in general, they seek to measure the ability of learners to discriminate the meaningful sounds of a language to associate sounds with the written symbols and to identify grammatical regularities of a language (Ellis 1985: 112).

Caroll and Sapon 1959 identified **three major components of aptitude.** They are the following:

a. **Phonetic coding ability** : ability to perceive and memorize new sounds.

b. **Grammatical sensitivity** : ability to demonstrate awareness of the syntactical patterning of sentences.

c. **Inductive ability** : ability to notice and identify similarities and differences in grammatical form and meshing. (Ellis: 1985: 112)

Aptitude is thus related to conscious learning. It is also seen that there is a clear relationship between scores on aptitude tests to performance of the individual in monitored test situations.

Attitude: Attitude refers to the acquirer's orientation towards the target language and to personality factors. It relates directly to acquisition and indirectly to conscious learning. It is seen that the right attitude is needed to encourage intake and the use of useful input for language acquisition. Duley and Burt (1977) states the need for the acquirer to be 'open' to input by monitoring one's socio-affective filter.

Let us look at how the socio-affective filter works. Performers with high and strong filters will acquire less of the language they are exposed to as less input is taken in by them. If there is a 'low affective filter', as in children, the language acquisition process is more stable and permanent. If you are interested to learn more about the empirical studies done on the role of attitude and aptitude in SLA, refer to *Second Language Acquisition and Second Language Learning* by Stephen D. Krashen (1981).

Now that we have defined attitude and aptitude, let us look at the **pedagogical** implications in second language acquisition process. It is seen that attitudinal and motivational factors are perhaps more important than aptitude to enable second language acquisition. An environment which facilitates low affective filter is needed to promote real language use through the sufficient intake and output of L2. (Intake here refers to the language one is exposed to and output the language the person is capable of producing as a result of the input and intake.

9.2.3. Understanding cognitive styles in SLA

What do we mean by cognitive style? Spend a few minutes and write your thoughts on the cognitive styles.

Cognitive style is

Now read on..

Cognitive style may be defined as the manner in which we 'perceive, conceptualise, organize and recall information' (Ellis 1985: 114) Research has shown interesting evidence that each person has more or less a consistent mode of cognitive functioning. Cognitive style can range from field dependence to field independence as part of a continuum like this:

Field dependence _____ Field independence

Individuals vary in the extent to which they are tuned towards dependence or independence. There is no conclusive evidence as to which style facilitates learning better.

It is likely that field independence will lead to greater success in classroom learning while field dependence will promote naturalistic SLA. This is because the field dependent learner will use greater social skills to get more frequent input from native like speakers. In the classroom, on the other hand, the ability to analyse the formal rules of a language will be treated as more important.

Lets look at the features of field dependence and field independence in the chart below (Bits 1985: 115) to understand about cognitive styles better.

Field dependence	Field independence
• Personal orientation to an extemal frame of reference to process information.	• Impersonal orientation to an internal frame of reference to process information.
• Holistic approach to task where field is seen as a whole.	• Analytic approach to task where field is seen in terms of component parts.
• Dependent view derived from others.	• Independent sense of identity and views.
• Socially sensitive greater skill in interpersonal and social relationships.	• Not so socially sensitive.
• Greater skills in interpersonal and social relationships.	• Less skilled in interpersonal/social relationships.

Table No. 1 (Adapted from Ellis 1985 : 115)

Spend the next few minutes to think about your cognitive style. Are you field dependent or field independent or somewhere in between? What are the features mentioned in Table no 1 that you can relate to?

Write your answer in the space given below.

Review questions :

a What is meant by cognitive style? Write your answer based on your own views and the reading done in

b What do you think are the advantages of being field dependent in learning a second language?

c Discuss the merits of being field independent in your cognitive style in a formal classroom setting where L2 is taught.

9.2.4 Types of motivation

What do we mean by 'motivation'? You, for instance, are motivated to join the MA in ELT through the Open mode, inspite of many personal inconveniences you may have to face. That's a high level of motivation. It is commonly understood that a person's behaviour is governed by certain needs and interests which influence how the individual actually performs. Motivation and attitude (which we discussed in 2.4.4.2.2.) are therefore crucial factors which influence second language acquisition. **What is then motivation in ELT?** Think about it and write your response in the space given below.

Motivation in ELT is_____

In simple terms, motivation can be defined as the incentive, the need or the desire that the learner feels to learn a second language. Different research scholars (Brown 1981, Gardner and Lambert 1972) have tried to classify motivation based on their empirical study findings. Here, we shall look at a summary of these classifications.

Motivation can be divided into five types based on the findings of research studies.

These are:

a.Instrumental motivation:The motivation derived by the desire to achieve proficiency in a new language for utilitarian purposes. (Getting a job, joining a course etc.)

b.Integrative motivation .The motivation obtained by the desire to achieve proficiency in a new language in order to participate in the life of the community that speaks the language (e.g. When a Bengali woman marries a Telugu man and tries to learn Telugu.)

c.Global motivation.'Motivation of a general kind to the goal of learning a second language i.e. picking uj-languages for its own sake.

d. Situational motivation: The motivation which varies according to the situation (formal or informal) in which learning takes place e.g. in the classroom or at a restaurant.

e.Task motivation: The motivation for performing a particular learning task, e.g. to fill up an application form.

Studies have shown that most successful learners are those who have both talent and a high level of motivation for learning. It is also seen that the level and type of motivation is strongly influenced by the social context in which learning takes place. We do not however know clearly whether it is motivation that produces successful learning or it is successful learning that enhances motivation. Some studies (Mac Namara, 1973) shows that it is the need to get meaning across and the pleasure experienced when this is achieved that motivates SLA.

Lets do a task now.

Q. *Spend* some time and think about how you will help learners to improve their motivation to learn a second language. Write down any three steps to you will take to make them feel motivated.

Class:
No. of students:
Medium of instruction:
Steps that will be taken to improve motivation for SLA in students:

1.

2.

3.

Review Questions:

1. Define motivation in ELT.
2. What are the different kinds of motivation? Give an example for each. Give a different example from the one given in the lesson.
3. What is the kind of motivation you have to learn a new language?

9.2.5. Role of personality in SLA

Personality is generally seen as an aggregate of the personal traits of an individual. When we ask questions like — "Is Anita an extrovert or introvert? Impulsive or reflective? Authoritarian or submissive? Gregarious or quiet?" - we are referring to the personality of Anita. The answers that we get will give us some idea about the personality of Anita. Such personal characteristics along with other features thus make up the personality.

How would you define your own personality? Stop reading and write down your thoughts.

My personality traits are:

Research studies have looked at the role of self-confidence, capacity to emphasise, the degree of logicality or the tendency to analyze in relation to language learning. Two measures of self-confidence are anxiety level and extroversion.

It has been suggested that extroverted learners find it easier to make contact with other users of L2 and therefore obtain more input. In fact, as Krashen (1981) argues, a person with an outgoing personality may contribute to *'acquisition'*.

Self-confident people have the advantage of not fearing rejection as much as individuals with high anxiety level. Thus they are likely to expose themselves to repeated learning situations and do so repeatedly they have less personal turmoil than those who are self-conscious.

Let us now look at **empathy.**

Empathy is the capacity for understanding and experiencing another's feelings and ideas. It is also seen that learners with authoritative disposition are not as

successful in learning a second language as these with less authoritative personalities. It is also seen that empathy as a factor which influences second language acquisition is better understood through communication tasks than linguistic manipulation tasks. Research shows that more analytical tendencies appear in the acquisition of metalinguistic skills through conscious learning while the field dependent person acquires communication skills through subconscious learning.

9.2.6. Intelligence and its effects in SLA

Intelligence is the term used to refer to one's ability to master and use a whole range of academic skills. It is more the capacity rather than the contents of the mind (Mc Donough 1981: 126). It is this underlying ability to learn rather than the actual knowledge that is measured by intelligence tests. Intelligence is however not an essential factor in either L1 or L2 acquisition, when a language is acquired naturally.

Intelligence may influence the acquisition of some skills associated with SLA (for example, those utilized when second language is learnt in a formal setting) but it is not likely to influence the acquisition of say, oral fluency skills. This is because in a natural second language acquisition situation, the L2 knowledge is developed through learning how to communicate in the target language. Research has also shown that the effects of intelligence are limited to the rate and success of SLA, but there is no evidence that intelligence affects the route of acquisition as is evident in spontaneous language use.

9.3. Learner strategies and its stages

In this section, we will briefly look at internal process which account for how learners handle input and how and how learners use the L2 resources to produce messages in L2. Learners have usually two types of L2 knowledge,

a. Declarative and

b. Procedural (Faerch and Kasper 1983b)

Declarative knowledge consists of internalized rules of the second language and memorised chunks of language. It is about 'knowing that' of the language.

Procedural knowledge, on the other hand, consists of strategies and procedures employed by the learner to process L2 data for acquisition and for use. Is the difference between the two clear to you? Read the above paragraph again and make sure you understand it well.

Procedural knowledge can be further divided into social strategies and cognitive strategies. The social strategies allow the learner to manage interactions in L2 -

either in face-to-face contacts or L2 texts. For eg. when the learner joins a group who speaks L2, the individual uses a few chosen words to understand the communicative message and relies on help from others when there is a communication difficulty. * Cognitive strategies used under procedural knowledge comprises of various mental processes involved in learning and using the knowledge of L2. When a learner uses L2, the process involved in using L2 knowledge consists of the following:

a. Production and Reception strategies
b. Communication strategies.

The Production and Reception strategies are employed to use the existing L2 knowledge efficiently and clearly with minimum effort. The Communication strategies occur when the speaker is not able to communicate his original communicative goal in the way he/she planned. As a result, the individual is forced to reduce the goal or to locate alternative means to express it.

It must be clear to you by now that language use is made of both production and receptive strategies which operates when the learner utilizes easily and subconsciously the resources available to him /her. The communication strategies operate when the learners need to compensate for inadequate means with greater conscious effort.

Both native and non-native speakers use these strategies. What distinguishes the learners from non-native speakers is the frequency in which it is used (Ellis 1985 : 165).

Lets sum that information into a table (*seeTable no : 2*), so that you understand it clearly.

Research studies have enabled further classification of Communication strategies into two categories:

a. Reduction strategies
b. Achievement strategies.

While reduction strategies are used to avoid a second language use problem, achievement strategies are used overcome the problem. Reduction strategies are further divided into *formal* and *functional* strategies while achievement strategies get categorized into compensatory and retrieval strategies. There are still limited empirical studies on how communication strategies work, but there is sufficient evidence to suggest that their use is influenced by the L2 learner's proficiency level, the nature of the problem source, the learner's personality and the learning situation. There is still further need to clearly understand the effect communicative strategies have on linguistic development.

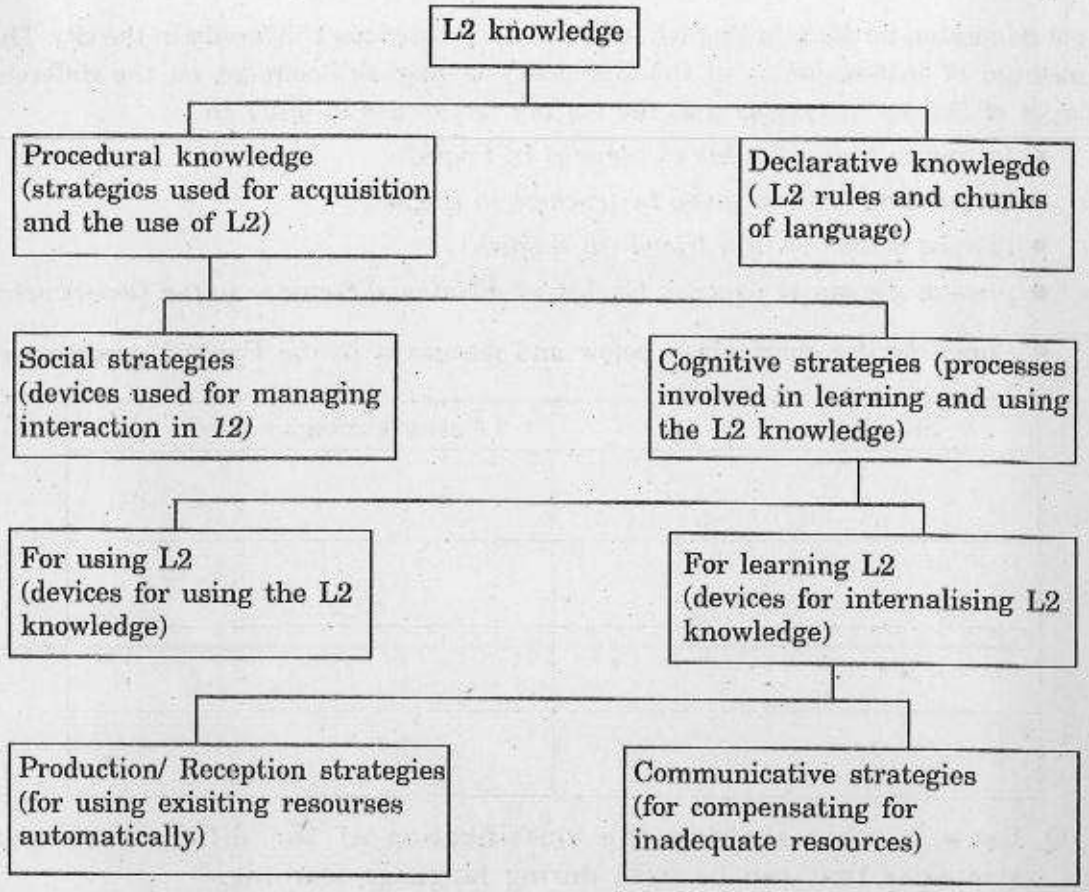

Table no .2 (Adapted from *The Types ofL2 Knowledge* Ellis 1985: 165)

In general, it can be stated that the use of communication strategies is to enable the L2 learner to use the appropriate /right form to say what he/she wants. Communication strategies help to expand the resources available to the L2 learner, for the main idea is to " keep the channel open" (Ellis 1985: 187).

It is however also argued that the successful use of communication strategies may prevent acquisition. A learner may become very skillful in making up for lack of linguistic knowledge by the use of varied communication strategies when it assists the acquisition process - aid the acquisition of lexis (vocabulary) than grammar. All these issues may have important pedagogical implications in the L2 classrooms which the teacher needs to reflect upon.

Review Questions:

Let's do a task now :

Q. Rajesh Sharma who studied in +2 level (vernacular medium of instruction) has

got admission for M.A. in English in one of the prestigious University in the city. The medium of instruction is in the University is English.Comment on the different types of learner strategies that the learner has to use in order to

- *introduce himself to his classmates in English*
- *understand lectures given by teachers in English .*
- *discuss a topic with a friend (in English) .*
- *present a seminar paper in English at a National Seminar in the Department.*
- **Complete the chart given below and discuss it in the Contact programme.**

Situation	Learner strategies used
1.	
2.	
3.	
4.	

Q. Draw a table showing the classification of the different learner strategies that can be used during language learning.

9.4. Defining the good second language learner:

Now that you have read about all the factors which influence second language learning, what according to you are the qualities of a good second language learner?

Spend some time thinking about it and write any three qualities you think a good second language learner should possess.

Three qualities a good language learner should possess are :
1.
2.
3.

There have been several attempts to specify the qualities of a good language learner (Rubin 1975, Naiman etal 1978). Based on these Rod Ellis(1985) has drawn up a comprehensive list on the characteristics of good language learning which are given below. You could also check to see how many of these qualities you or your students possess.

According to Rod Ellis, the good language learner will:

1. be able to respond to the group dynamics of the learning situation so as not to develop negative anxiety and inhibition.
2. seeks out all opportunities to use the target language.
3. makes maximum use of the opportunities to practice listening to and responding to speech in L2 addressed to him and others.
4. supplement learning that derives from direct contact with the speakers of L2.
5. be an adolescent or adult rather than a child to acquire the early stages of grammatical development.
6. possess sufficient analytical skills to perceive, categorise and store linguistic features of L2 and to monitor errors.
7. possess a strong reason for learning the L2 and also to develop a strong motivation to do communicative tasks.
8. be prepared to experiment by taking risks even if makes the learner appear foolish.
9. be capable to adapt to different learning conditions.

These are qualities which the language learner may aspire for whether in formal or informal settings. If all the above mentioned is true, it predicts that above all the "good language learner" is an *acquirer*, who first of all is able to obtain sufficient intake in the second language, and second, has a low affective filter to enable him to utilize this input for language acquisition. The good language learner may or may not be a

conscious learner. If he is, he is an "optimal Monitor user". We would therefore not be surprised to see above average or superior language aptitude in such a performer.

Data from Naimon *et al.* (1978) support these generalizations. They surveyed thirty-four "good language learners", and found that *immersion* and *motivation* were the most frequent responses to the question of what factors influenced successful second language acquisition. Further, they reported that "there is some evidence in the interview... that those subjects who learned a language in the country of the target language, though frequently combined with self-study, usually acquired it successfully" (p. 34). This conclusion is similar to that reached by Carroll (1967), in his study of college foreign language majors, as well as in other studies(Krashen, 1976a; Chapters).

The good language learners in Naimon et.al. (1978) agreed that the study of grammar alone was not enough: "Several interviewees, who had achieved high marks in their language courses at school. now attached little significance to this aspect of success" (p34).

Thus the mixture of formal and informal experience with the second language appeared to be the most popular approach. Good language learners/acquirers must do more than just be present in informal and formal environments. However, it appears to be the case that they 'go out and get' intake and have a low enough filter to utilize it for language acquisition while amny of them consciously learn (12/34 in Naimon et.al. indicated that conscious rules were useful for them; in Wesche 1977, 6/11 said the same thing), they appeared to be optimal monitor users, using learning as a supplement to acquisition in certain conditions.

9.5. Let us sum up

In this unit, a distinction was drawn between acquisition and learning. The unit then looked at the overall effects of the general factors of second language acquisition. It was noted that age does not seem to alter the route of acquisition. The rate and success of SLA, however, seem to be influenced by the age of the learner. Longer exposure to L2 seem to enhance the communication ability but not grammatical and phonological accuracy. In order to understand the child and adult differences in SLA, the concepts of critical period hypothesis, cerebral dominance, cognitive and affective factors were discussed. Research seem to show that adults acquire primary levels of acquisition faster than children due to their cognitive ability. The unit also looked at aptitude and attitude and their influence on SLA. Cognitive styles can range from field dependence to field independence. However, there is no conclusive evidence as to which style facilitates learning better. Motivation is also an important factor which influences SLA-whether it is instrumental, integrative, global, situational or task based. Role of personality, empathy and intelligence was also discussed in

relation to SLA. It is seen that people with an outgoing personality contributes more to acquisition. The effects of intelligence are limited to the rate and success of SLA and there is no clear evidence that it affects the route of acquisition. The unit also looked at the different learner strategies that a learner of second language needs to expose oneself to. Understanding the different factors which influence SLA helps in understanding the characteristics of a good language learner which was discussed in some detail in the unit.

9.6. Review questions

1. Distinguish between acquisition and learning of a language.
2. Discuss the role of age in SLA. Give examples to illustrate the child/adult differences.
3. What is critical period hypothesis ?
4. How does cerebral dominance influence learning?
5. What is the role of Piaget's 'formal operations' in SLA?
6. How do the affective factors influence SLA?
7. Distinguish between aptitude and attitude.
8. How do aptitude and attitude of learners effect SLA?
9. Write short notes on:
   a. Cognitive style and SLA
   b. Motivation in SLA
   c. Role of personality in SLA
10. How does the intelligence of the learner affect SLA?
11. What is the difference between declarative knowledge and procedural knowledge?
12. Explain with the help of a diagram (table) the different types of cognitive strategies that can be used in SLA.
13. What are the qualities of a good language learner according to Rod Ellis (1985)?

9.7. Glossary

Acquisition : the internalisation of rules and formulas to be used to communicate in the L2.

Acquisition device : a nativist notion; a device containing the possible grammatical forms of a language - a device which directs the acquisition process

Aptitude. (distinguished from 'intelligence') the specific ability that a learner has for learning a second language.

Attitudes. a set of beliefs possessed by the learners, about the target language culture, their own culture, about the teacher and the learning conditions.

Competence: constituted of internalised rules of the target languge which are organized into a system. ,

Comprehensible input: the type and extent of language that the learners are exposed to and can understand.

Feedback: acts such as correction, acknowledgement, request for clarification or paraphrase done in response to the learners' effort to communicate.

Filter: a barrier between the actual extent of language that a learner is exposed to and the extent (s)he attends to.

Fossilization : a point where an L2 learner may stop learning any more despite the fact that his/her set of internalized rules is different from the actual set of rules in the target languge.

Input : spoken or written form of language that the learner is exposed to in order to determine the rules of target language.

Interlanguage : systematic knowledge of a second language which is independent of both the learners L1 and L2.

Learning : internalization of rules and formulas which are used to communicate in a second language.

Motivation : the learner's overall goal or orientation to learn a second language.

Route of development: a number of transitional states en route to acquiring the target language rules.

Transfer . the process of using knowledge of the first language in learning a second language.

Universal Grammar : the properties inherent in the human mind, consisting of universal principles of language structure and rule formation.

9.8. Books recommended for further reading for this unit:

Rod Ellis, 1985. Understanding Second Language Acquisition. OUP.

Stephen D. Crashen, 1981. Second Languge Acquisition and Second Language Learning.

Duley, Burtand Krashen, 1982. Language Two.

Braindi, S.M. 1999. The Acquisition of Second Language Syntax

Spolsky 1989. Conditions for Second Language Learning.

Agnihotri *et al.* 1998. Social Psychological Perspectives on Second Language Learning.

Prabhu, N.S. 1987. Second Language Pedagogy.

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