

摘 要

交际是一种最为普遍的社会现象,也是一切人际交往的基础。第二语言教学作为师生之间的一种特殊交际形式,历来倍受人们关注。从世界范围来看,二语教学在近半个多世纪以来成绩斐然。但就我国的二语教学而言,尽管经过多年的不懈努力,总体上取得了长足进展,但问题依然存在,“产品”质量不尽如人意。笔者认为,其最根本的一点是没有跳出“代码交际”的窠臼,师生之间的交际被简约成一种简单的信息编码、传递与解码的过程。实践证明,这种传统的教学模式收效甚微。因此,要使传统的教学模式有所突破,我们就必须摆脱“代码交际观”的禁绊,进一步明确二语教学这种特殊交际活动的本质,以改变学生认知环境为立足点,切实提高学生的交际能力。

本文从人类交际的一般特征入手,比较了三种不同的交际观,即传统的交际观(代码模式)、格莱斯主义的交际观(推理模式)和关联理论的交际观(明示推理模式),其中着重分析了关联理论交际观中所提出的认知环境与明示推理模式。在明示推理交际模式的基础上,我们重新审视了二语教学的本质特征,探讨了学生交际能力内化的过程,以及老师在这一过程中如何对学生加以明示以达到培养其交际能力的目的。

目前关于二语教学的论著浩如烟海,人们对于如何提高学生的交际能力往往各持一词,但笔者认为从明示推理模式的视角来探讨二语教学能给人们以新的启示:交际与认知息息相关,老师应该高度重视学生认知能力的培养,从改变学生的认知环境入手,抓住交际能力内化的各个环节对学生加以明示,从而帮助学生不断提高交际能力。

关键词: 认知环境

交际能力

二语教学

Abstract

Communication is fundamental to a society and the basis of all human contact. SLTL (Second Language Teaching and Learning), a special form of communication between teachers and students, has always been the main concern within the academic and educational circles. Globally speaking, in the past half century great achievements have been made in SLTL, both theoretically and practically. However, as far as China is concerned, there remains much to be desired despite its swift progress in SLTL. The most serious is the quality of its product, which seems to be “quantity” against “quality”. We hold that the crux of the problem, mainly lies in its impractical teaching beliefs and methodologies. In practice, for quite a long time China’s SLTL is based on a traditional code mode of communication. The communication between teachers and students is reduced to be a simple process of information transmission, i.e., transferring knowledge about a second language from teachers to students, which, hardly surprisingly, is less productive than expected. Hence, it is of high necessity to reconsider the nature of SLTL and tackle it more practically.

To understand the nature of SLTL, we first review the characteristics of human communication and then contrast three different views on communication: the code model of communication, the inferential model of communication and the OI (ostensive-inferential) model of communication. In light of Dan Sperber and Deirdre Wilson’s OI model, we reconsider the characteristics of SLTL and make further exploration on the internalization of the student’s communicative competence and how teachers make ostensions in this process so as to promote the students’ communicative competence.

Currently, although studies and works about SLTL are mushrooming in vast numbers, it is often disagreed on how to improve the students’ communicative competence. In this paper, we argue that the OI model of communication sheds us at least a new light: communication and cognition are closely interrelated. When making ostensions in SLTL, teachers should take notice of the special characteristics of all the links of the internalization process, altering the students’ cognitive environment and assisting them in enhancing communicative competence.

Key Words: cognitive environment communicative competence SLTL

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Introduction

Communication is at the core of our humanness. From birth to death, many types of communication are in an integral part of our life. We interact with others to share information and beliefs, exchange ideas and feelings, make plans, and solve problems. In other words, communication is the basis of all human contact and helps us initiate, develop, control and sustain our contacts with others. Without communication, we would be unable to survive.

Although we cannot not communicate, we are free to communicate in different ways, either verbally or nonverbally, by postures, gestures, facial expressions, eye contact and even the use of space and distance. Language is unique to human beings, with many striking designing features¹ that no other animal communication systems can compare. Little wonder language becomes the prime medium of human communication, which in turn gives great impetus to the development of language. Naturally, human communication has been causing widespread concern among scholars, who devote themselves to the study of human communication, pondering over questions like “what is communicated and how communication is achieved”. In their studies, scholars of different schools attempt to project a general theory of communication, and thus come into being different models of communication, such as the code model of communication, the inferential model of communication, and ostensive-inferential model of communication.

SLTL (Second Language Teaching and Learning)² is the interaction between teachers and students, aiming at cultivating students’ communicative competence. It, in essence, is a type of communication with some special characteristics: 1) the major participants of this activity are two special groups “teachers” and “students”; 2) the main form of their interaction is “teaching” and “learning”; 3) the roles of teachers and students are asymmetrical in communication, i.e., communicators (teachers) and audience (students) do not hold the same responsibility; 4) the criterion for judging the success of this kind of communication is whether the students’ communicative competence is enhanced.

Now that SLTL is a special type of communication. Would a theory of

¹See Hu Zhuanglin et al, *Linguistics: A Course Book*. Peking: Peking University Press, 1988: 4-9.

² See 4.1.

communication be applied to illustrate SLTL? And now would we put the theory into the practice of SLTL. That is what we are pondering and probing. We hope to be able to give some reasonable answers in this paper. In order to provide some reliable suggestions for SLTL, we first contrast several classical theories on communication: the traditional code model, Grice's inferential model, and Dan Sperber and Deirdre Wilson's RT (Relevance Theory on communication), its OI (ostensive-inferential) model in particular. All these theories elucidate human communication in a certain degree. Drawing upon the merits of the first two models, we think, OI model of communication is of paramount importance for a deeper and more reasonable account for SLTL. According to OI model, communication is an activity of ostension and inference between the participants, with the purpose to alter each other's cognitive environment. This original view offers us a great many implications on the process of SLTL. In light of Sperber and Wilson's theory on communication, we redefine the characteristics of SLTL and develop a model of internalizing the students' communicative competence. We hold the view that the goal of SLTL can be achieved so long as we take a grip on the links of the process of internalization.

1. What is Communication?

1.1 Defining Communication

Etymologically, the word “communicate” originates in Latin “communis”, which means “common”, while “communication” implies the establishment of common relationship between human beings. Actually, communication is closely related to people’s daily life. Whatever our sex, occupation, and goals, communication of one form or another plays a major role. It is truly our bridge to the future, our link to the rest of humanity, and the tool we will rely on most as we make our way in the world.

Communication is everywhere and extremely familiar to us, and yet it is hard to locate a satisfactory definition of communication because of its complex nature. Despite various difficulties, people’s enthusiasm for the study of communication has never decreased—Large amounts of research work has been done in this field, resulting in a long list of definitions of communication. According to Dance and Larson, as early as 20 years ago, in the literature on communication they found 126 definitions of communication. Since then, countless others have been added to the list. All these definitions do help us to unveil the mysterious communication. Let’s skim through a few of them.

1) “Communication is the *exchange of ideas, information*, etc. between two or more persons. In an act of communication there is usually at least one speaker or *sender*, a *MESSAGE* which is transmitted, and a person or persons for whom this message is intended (*the receiver*).”³

2) “ In effect, we can define communication as the *deliberate or accidental transfer of meaning*. It occurs whenever someone observes or experiences behavior and attributes meaning to that behavior. It doesn’t matter whether the observed or experienced behavior is intentional or accidental, conscious or unconscious. As long as what someone does is interpreted as a message—as long as the behavior of one person affects or influences the behavior of another—communication is occurring.”⁴

³ Jack C. Richards, John Platt & Heidi Platt, *Longman Dictionary of Language Teaching & Applied Linguistics*. Peking: Foreign Language Teaching and Research Press, 2000: 80.

⁴ Teri, Kwal, *Communication Works*, Britain: Von Hoffmann Press, Inc., 2000: 6.

3) “Human communication is a subtle and ingenious set of processes. It is always thick with a thousand *ingredients* — signals, codes, meanings—no matter how simple the *message* or *transaction*.”⁵

4) “Any act by which one person gives to or receives from another person *information* about that person’s needs, desires, perceptions, knowledge, or affective states. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or nonlinguistic forms, and may occur through spoken or other *modes*.”⁶

Though slightly different, the above definitions map the nature of communication in one way or another. From these definitions, we know that communication is complex and multidimensional, taking place on different levels, involving some essential elements such as the participants of communication, messages, channels, context, and bringing about some effect or result. These elements intertwine and shape the process of human interaction.

1.2 The Essentials of Communication

From the foregoing discussion, we can see that all human communication shares certain elements that help define the communication process. The better you understand these essentials, the easier it will be for you to develop your own communicative abilities. Let’s start off by examining these essentials.

1) Participants

Participants are people who enter into relationships with other people. It is obvious that human communication involves participants —senders and receivers of information. During communication, the roles of the sender and the receiver are always changing, that is to say, the process of sending and receiving is constantly being reversed, just as Deborah Tannen says “Communication is a continuous stream in which everything is simultaneously a reaction and an instigation, an instigation and a reaction.”⁷

2) Message

Message is the information the participants convey in communication. In the course of communication, the participants transfer various messages, which may be

⁵ Samovar, L. A., etc., *Communication Between Cultures*. Cambridge: Cambridge University Press, 2000:7.

⁶ Julia Scherba de Valenzuela, Ph.D. from Google.

⁷ Deborah Tannen, *That’s not what I Meant! How Conversational Style Makes or Breaks Your Relations with Others*. New York: William Marrow, 1986.

verbal, nonverbal or both. Whatever people say or do, consciously or unconsciously, is likely to be interpreted as a message as long as the behavior of one person influences the behavior of another.

3) Channel

Channel is the way in which a message is conveyed from one participant to another. Verbally speaking, speech and writing are two most common channels of communication. Other modes of communication like facial expressions, gestures are of the same importance in human communication. Human beings are multichanneled communicators and they often change channels to effect communication.

4) Context

All communicative interaction takes place within some physical context, so context is often referred to the spatiotemporal situation where communication occurs. But as a matter of fact, context is more intricate than that and people may interpret it differently, thus springs up spirited discussion. No matter what views they held, people all agree that context is very influential in communication.

5) Feedback / Effect

In a way, it seems unnecessary to demarcate “feedback” from “effect”, since they are so closely related. Here we define them to be the same concept in different senses. In a broad sense, “effect” refers to “feedback”, information like words, signals and actions provided by some participants to produce or indicate some response or reaction to another. So far as this sense is concerned, the effect of communication can be emotional, physical, cognitive, or any combination of the three. Narrowly speaking, effect means the result of communication, that is, success or failure in communication.

1.3 The Characteristics of Communication

Despite the fact that it is not easy to define human communication precisely, we are able to recognize some of its general characteristics. On one hand communication is dynamic; on the other, communication is inferential by birth. To understand such characteristics of communication is sure to help us clarify how this process really works.

There is an indisputable universal about human communication that it is dynamic and inferential. When we call communication dynamic, we mean that communication is an ongoing activity and all of its elements interact with and affect

each other. For one thing, as long as we are alive, we communicate, and thus every interaction that we engage in is a part of connected happenings. All our present communication experiences may be thought of as points of arrival from past encounters and as points of departure for future ones, and for another, people, as participants in communication, are closely interconnected: whatever happens to one person must influence partially what happens to others. Since constantly affected by each other's messages, we are always experiencing an almost endless variety of physical and psychological changes. In addition, as all the constituents of communication are involved in complex interrelationships, change in one must lead to that in others. In a word, nothing about communication is static, and communication is a dynamic process.

Though we point out earlier in this chapter than communication function as our bridge to the future, our link to the rest of humanity, and the tool we will rely on most as making our way in the world, yet we have to admit that sometimes communication may frustrate human beings too because it is inferential by birth. By "inferential", we mean that human beings do not communicate by means of direct mind-to-mind contact. First, we are all isolated from one another by the enclosure of our skin. Our brain, like a black box works in a complicated way that it is very difficult for us to see how it does operate. Apart from this, there is another fact that though we share the same globe, we all live in a solitary confinement, just as an African proverb goes, the earth is a beehive; we all enter by the same door but live in different cells." However, despite our inability to have direct access to the thoughts and feelings of each other, we are lucky to possess the ability to infer. We make inferences from a single word, from silence, from long speeches, from simple head nods, and from glances in our direction or away from us.

Although people are in broad agreement that communication is the basis of human contact and possesses some important characteristics, yet they often disagree about what is communicated and how communication is achieved. Many scholars, from different points of view, illustrate the process of communication and probe into the ways to successful communication, thus emerge many theories and models of communication. Among them the traditional code model, Grice's inferential model, and Sperber and Wilson's ostensive - inferential model are of considerable influence. In the following passage, we will discuss them in details.

2. Traditional and Gricean Views on Communication

2.1 Traditional View on Communication: the Code Model of Communication

It has been a long tradition that quite a lot of scholars base their study of communication on semiotics, especially the concept of “code”. Semiotically speaking, we live in a world of signs and have no way of understanding anything except through the signs; the meaning of a sign depends on the existence of a code, which is a procedural system of conventions of communication and reflect certain values, attitudes, beliefs, assumptions and practices of a community. In other words, codes provide a framework within which signs make sense. On this semiotic approach, many theorists study the process of communication and posit some models of communication. As a whole, they believe:

- Communication is linear in that two persons communicate in a way that a message is conveyed from one to the other.
- Codes and meanings are mapped in a simple one-to-one correspondence.
- Communication is achieved by encoding and decoding messages. Communication failure is attributed to: a. incompetent coding; b. incompetent decoding; c. degradation of the signal (“noise”)
- A model established in such belief is also known as a code model of communication. Among various models, Saussure’s speech circuit and Shannon- Weave Model are quite familiar to us.

2.1.1 Saussure's Model of the Speech Circuit

Saussure’s model of the speech circuit partially consists of his model of the linguistic sign. According to Saussure, founder of semiotics, a sign is a meaningful unit which is interpreted as standing for something other than itself, composed of a “signifier” and a “signified”(sound- image and concept in his model): The former is considered to be the form that the sign takes and the “signified” the concept to which it refers. Signs are arbitrary. To be exact, the link between the “signifier” and the “signified” is arbitrary. The connection between the form and the concept of a sign is not logical but conventional, depending on social and cultural conventions i.e., “code”— a system of conventions. In other words, signs have no intrinsic meaning

and become signs only when users invest them with meaning with reference to a recognized code. Language is often regarded as the primary and most pervasive code in any society. On the basis of this understanding, Saussure devised a circular communication model⁸ as shown in the following figure:

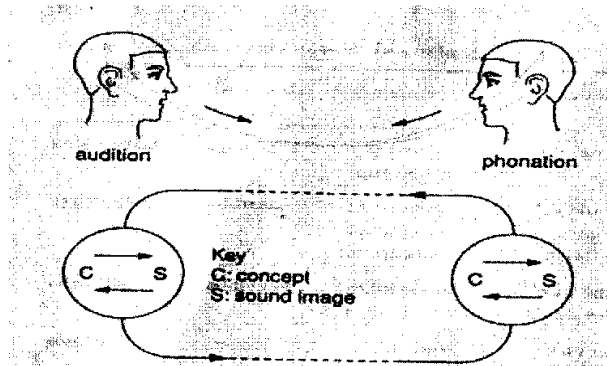


Figure 1: Saussure's model of speech circuit

This model shows the mechanisms of a dialogue: Acoustic signals are sent from a speaker A to a receiver B, who then, in turn, becomes the sender, sending information to A, who becomes the receiver. Saussure outlined two processes within this framework. The first one is phonation. Here the sender formulates mental signs in the mind and then gives acoustic shape to them. The second one, audition, is the opposite process of the receiver transforming the acoustic message into mental signs. Now you can see a most important feature of this model—the division into acoustic shape, or sound image, and the idea related to the image, the mental concept. What are transported in communication are concept and sound image!

2.1.2 Shannon -Weaver Model of Communication

Coincidentally, in 1949, Claude Shannon and Warren Weaver produced a similar model of communication. This is known after them as the Shannon-Weaver Model.⁹

⁸ Daniel Chandler, *Semiotics: the basis*. London: Routledge, 2002: 176.

⁹ Shannon, C. & Weaver, W., *The Mathematical Theory of Communication*. University of Illinois Press, Urbana, 1949. Shannon and Weaver's model is primarily involved with the investigation of technological communication. However, this model has become one that is frequently introduced

This model proposes that all communication include six elements: a source, an encoder (a transmitter), a message, a channel, a decoder (a receiver) and a destination. Communication happens when the information *source* (e.g. a speaker) selects a desired message out of a possible set of message. The “transmitter” changes the message into a *signal* which is sent over the communication *channel* where it is received by the receiver and changed back into a message which is sent to the “*destination*”(e.g. a listener). The interferences added to the signal in the process of transmission are referred to as *noise*. In face-to-face communication, the speaker can be both information source and transmitter, while the listener can be both receiver and destination. In accordance with this point, we can diagram the model as follows (slightly different from the original):

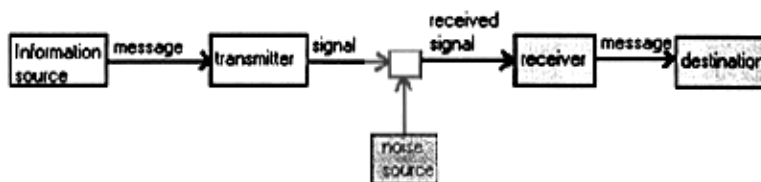


Figure 2: Shannon -Weaver Model of Communication

As the diagram shows, Shannon and Weaver hold that the process of communication is the delivering of messages: with reference to relevant codes, the transmitter encodes the messages into signals and transmits the signals to the receivers through different channels. What the receiver does is almost the same except for the reversal direction: receiving the signals and decoding them by referring to the code system (shared with the transmitter). The communication will be successful as long as there are no unwanted additions or noise in the process of transmission. Clearly, the emphasis here is much on the transmission and reception of messages. Comparing Saussure’s model of the speech circuit and Shannon-Weaver Message Model, we can find there is a colony of similarities in that both of them are

- linear: Though Saussure’s model is innovatively labeled as a ‘speech circuit’ and includes directional arrows indicating the involvement of both participants thus at least implying ‘feedback, it is nevertheless a linear transmission model (albeit a ‘two-track’ one) since it is based on the notion that comprehension on the part of the listener is a kind of mirror of

to students of human communication early in their study.

the speaker's initial process of expressing a thought. The linearity of the latter is more obvious: communication is thought of as a one-way process of delivering message.

- code-centered. Though in both models, there is not much explicit allusion to "code", yet both are code-centered in that they emphasize the necessity of encoding and decoding. As to the first model, in the process $C \rightarrow S / S \rightarrow C$ (C: concept; S: sound image), it is self-evident that the speaker and hearer have to share at least a fundamental set of codes in common, in order for them to communicate successfully. Likewise, according to Shannon-Weaver Model, you, as the source, have to express your purpose in the form of a message. That message has to be formulated in some kind of code. The communication encoder is responsible for taking the ideas of the source and putting them in code, expressing the source's purpose in the form of a message, and the decoder does the same conversely.
- simplistic to communication. Whether phonation and audition in the former, or encoding and decoding in the latter are presupposed to be identical, so are the roles between speaker and hearer, transmitter and receiver. The complicated communication is just simplified.

2.1.3 Problems with the Traditional Code Model of Communication

The similarities between these two models project the very characteristics of the code model of communication, according to which communication involves a set of signals, a set of message, and a code that relates the two. In verbal communication, "the signals would be utterances, the message would be the thoughts that speakers intend to convey, and the grammar of language would be the code"¹⁰. On this approach, the existence of an underlying code is the only possible explanation of how communication is achieved. Utterances and their meanings may be related in arbitrary ways, and understanding is a matter of unintelligent, mechanical decoding. Furthermore, efficiency of a communication system is defined as the fidelity of the message as it goes through the encoding-decoding cycle (from speaker to hearer). No doubt the code model provides us a simple and clear framework for the complicated communication. It has been very fertile in fields such as information

¹⁰ 何自然、冉永平,《语用与认知—关联理论研究》,北京:外语教学与研究出版社,2001:2。

theory and cybernetics, and has exerted great influence in the study of human communication. However, it may actually be misleading since communication is even more intricate and puzzling than the code model thus far suggests.

First of all, not any forms of communication are governed by such an underlying system of codes. For example, suppose A asks B, *What are you going to do?* B says nothing but shows him a key. Here B's behavior is not coded, i.e., there is no rule or convention saying that showing a key means that one is going out or coming home or something else. But we know A is likely to understand B well even in the absence of a code, and really that it is often the case with communication going without codes, and hence it is untenable to generalize the code model to any types of human communication.

Furthermore, even a common code is not sufficient for the communicative process and there is a wealth of evidence showing that the code model is not descriptively adequate in explaining some familiar phenomena, for example, how myths and literary works succeed in communicating more than their linguistic meaning, and how rites and customs succeed in communicating at all. Why people frequently use rhetoric (figures of speech) in their verbal communication. To these questions, the code model provides us no satisfactory questions. It is true that a language is a code which pairs phonetic and semantic representations of sentences, but there is a gap between the semantic representations of sentences and the thoughts actually communicated by utterances because human being are by no means a simple mechanism of transmitting message. The gap is bridged not by purely decoding, but by inferring, which is obvious. Let's take the following dialogue between a father and a daughter as an illustration:

(A father is waiting for his wife and daughter outside the cafeteria when his daughter comes out alone, and here is the dialogue between them.)

Father: Will your mother be long?

Daughter: She is with Mrs. Brown.

Here the daughter does not answer the father's questions directly. Rather, she tells her father that Mother is with Mrs. Brown. Let's see whether the code model works: it is clear that the father expects information about the time his wife will stay, but if he just decodes the information given by his daughter, he would get nothing but bewilderment since the given answer seemed completely irrelevant to his question. But the fact is that the father has no trouble in understanding his daughter, and

communication between them can go very smoothly because it is natural that besides decoding the father will also infer from the given information:

If Mrs. Brown is known to be dilatory and garrulous, his wife will not leave the cafeteria soon.

If Mrs. Brown is always quick with people, it will not be long before his wife comes out.

It is certain that both the father and daughter know Mrs. Brown; otherwise the daughter's answer would be meaningless. Of course, by making a series of inferences the father can get what he expects and the communication continues well.

In addition, another drawback from our point of view is the model's obvious simplicity. It looks at communication as a one-way process. Meanings are assumed to be somehow contained within the codes used in the message and the receiver can, as it were, take them out again. Matters such as the social context in which the message is transmitted, the assumptions made by source and receiver, their past experiences and so on are simply disregarded too. What is worse, it proposes the roles of the participants are symmetrical, which does not correspond with the asymmetricality of human communication.¹¹

Much evidence has shown us that communication is more than encoding, transferring and decoding messages. Meanwhile, it is also known to us that communication involves the recognition of intentions, and that inferring the intentions of the participants is critical in communication. However, to this common sense, some theorists do not take enough consideration. It is lucky that Herbert Paul Grice, the great philosopher and linguist, focused his attention on the study of the inferential recognition of the communicator's intentions, and constructed the well-known inferential model of communication.

2.2 Gricean View on Communication: the Inferential Model of Communication

In a wide range of fields, there is a similar consensus on the code model of communication. Many scholars hold the view that the process of communication is that the speaker encodes his thought; and the hearer receives an auditory or visual stimulus that is then decoded into a meaningful verbal message, and then the hearer could be said to have the idea that the speaker has encoded. However, from the above discussion, we know though the code model explains how communication is achieved

¹¹ See 5.1

in principle, it lacks practical feasibility in that it offers no adequate explanations to some types of communication. Fortunately, in his William James lectures at Harvard in 1967, Grice offered the first systematic alternative to the code theory of communication. That is his inferential model, which has opened up a new path for the study of human communication. Having drawn insights from Grice's ideas, many other scholars like Leech, Brown and Levinson develop their own theories of communication,¹² which are all inferential in essence and hence here are collectively called Gricean Model of communication (Grice's original theory is called Grice's model).

2.2.1 Grice's Model of Communication

Grice put forward the view that communication is not coding but inferential in nature. According to Grice, communication consists of the 'sender' intending to cause the 'receiver' to think or do something just by getting the 'receiver' to recognize that the 'sender' is trying to cause that thought or action. So communication is a complex kind of intention that is achieved or satisfied just by being recognized: during communication all a communicator has to do is to get the audience to recognize his or her intention to convey a message. Intentions are not decoded but inferred, by a non-demonstrative inference process in which contextual assumptions and general principles of communication play a crucial role.

On an inferential approach, the process of communication is that the communicator provides evidence of his or her intention to convey a certain thought, and the audience infers this intention from the evidence provided. For Grice, there seems to be an underlying assumption, that is, all the participants of the communication in general behave cooperatively because they want to be understood. This principle, termed the Cooperative Principle (abbreviated as CP), is considered to govern human communication (especially the implicit aspects): the participants should speak in a sincere, clear, succinct and orderly manner while providing just sufficient and relevant information. Stated simply, the CP provides that you should say what you have to say, when you have to say it, and the way you have to say it.

In order to explain further the Cooperative Principle, Grice borrows from the German philosopher Immanuel Kant four categories: quantity, quality, relation and

¹² See Brown, P. & Levinson, S. *Universals in Language Usage: Politeness Phenomena*. In Goody, E. (ed.), *Questions And Politeness: Strategies in Social Interaction*. Cambridge: Cambridge University Press, 1978: 56-289.

manner and develops four maxims of the CP, which then can be seen as describing the form of fully cooperative communication, verbal communication in particular. Below are these four specific maxims¹³:

1) Maxim of Quality (also called the Maxim of Truthfulness)

- Try to make your contribution one that is true.
- Do not say what you believe to be false.
- Do not say that for which you lack evidence.

2) Maxim of Quantity (also called the Maxim of Informativeness)

Make your contribution as informative as is required (for the current purposes of the exchange).

- Do not make your contribution more informative than is required.

3) Maxim of Relation (also called the Maxim of Relevance)

- Be relevant.

4) Maxim of Manner (also called the Maxim of Clarity)

- Be perspicuous.
- Avoid obscurity of expression.
- Avoid ambiguity.
- Be brief. (Avoid unnecessary prolixity.)
- Be orderly.

According to Grice, the CP and its maxims guide us in communication, though sub-consciously, or even unconsciously. We will try to say things which are true, relevant, as well as informative enough, and in a clear manner. The audience will also try to interpret what is said to them in this way. It is true that sometimes people behave in these ways. But in most cases, no one actually acts like that; instead, people do violate these maxims. Here Grice offers some explanation. He admits that it is not the case people follow these guidelines to the letter. "Rather, in most ordinary kinds of talk, these principles are oriented to, such that when talk does not proceed according to their specifications, hearers assume that, contrary to appearances, the principles are nevertheless being adhered to at some deeper level".¹⁴ In other words, if there are obvious signs that one, or more of the maxims are not followed, we just regard this an apparent failure of cooperation and assume that it is in fact co-operative, and then make assumptions contrary to superficial indications, and thus arrives at what the

¹³ Grice, H.P., *Logic and Conversation*, in Cole & Morgan (eds.), New York: Academic Press, 1975: 307-308.

¹⁴ Levinson, S.C. *Pragmatics*, Cambridge: Cambridge University, 1983: 98.

communicator means or implicate (termed as “implicature”).

In his “Logic and Conversation”, Grice suggests a general pattern for the working out of a conversational implicature, which might be given as follows: He has said that p; there is no reason to suppose that he is not observing the maxims, or at least the CP; he could not be doing this unless he thought that q; he knows (and knows that I know that he knows) that I can see that the supposition that he thinks that q is required; he has done nothing to stop me thinking that p; he intends me to think, or is at least willing to allow me to think, that q; and so he has implicated that q.¹⁵ Obviously, what Grice emphasizes is the mutual knowledge that the speaker and hearer possess.

In the light of Grice’s inferential model, on the whole people is cooperative in communication; however, for communicative purposes they may overtly and blatantly flout some maxim of the Cooperative Principle, and such floutings and exploitations can be seen to give rise to implicatures. It is Grice’s great contribution that he redresses the importance of intention recognition in human communication and gives a detailed account of how implicatures come about, which are the very points that the code model fails to describe adequately. Hence, many knots like the illustrating the traditional figures of speech are solved smoothly. According to Grice, phenomenon of using figures of speech like irony, metaphor, hyperbole and meiosis results from the speaker’s intentional violation of the maxim of quality. Let’s look at some examples:

1) irony

(In Chapter 74, *A DREAM OF RED MANSIONS* there is a scene that Wang His-feng, together with Wang Shan-bao’s wife, searched Tan-chun’s estate.¹⁶)

When the women arrived she deliberately asked them their business.

“Something’s missing, and we don’t know who took it,” His-feng told her. “For fear people may put the blame on these girls, we are making a general search to disarm suspicion. This seems the best way to clean them.”

Tan-chun laughed scornfully.

“Naturally, our maids are thieves and I’m their brigand chief. So search my cases first. They’ve given me all their stolen goods for safe-keeping.”

一时众人来了。探春顾问何事。凤姐笑道：“因丢了一件东西，连日访

¹⁵ Grice, 1975: 41-58.

¹⁶ 曹雪芹、高鹗, 1990, 《红楼梦》, 人民文学出版社; 杨宪益、戴乃鞅译, 北京: 外文出版社, 1995: 584.

察不出来，恐怕旁人赖这些女孩子们，所以越性大家搜一搜，使人去疑，倒是洗净他们的好法子。”探春冷笑道：“我们的丫头，自然都是些贼，我就是头一个窝主。即如此，先来搜我的箱柜，他们所偷了来的，都交给我藏着呢。”

It is perfectly obvious that what Tan-chun says is not what she really wants to convey. In Grice's account, this clearly flouts the first sub-maxim of Quality. But on the assumption that Tan-chun isn't simply stating falsehoods uncooperatively, Tan-chun's utterances can be interpreted as conveying something significant and something possibly true. Here, of course, what she is trying to get across is just the contradiction of what she has said. By saying "Naturally, our maids are thieves and I'm their brigand chief...", Tan-chun shows her great discontent with Wang His-feng and her accomplice.

2) metaphor

(A asks B, his old classmate who is studying European economy, about the recent developments in Britain.)

A: How are things in Britain?

B: Oh! Apart from the sunny prospects of the continued finds in the North Sea oilfields, Britain's economy is as bleak as ever; the future of education and the arts is clouded, and only the outlook for the electronics industry is bright.

Perhaps, the first impression B's answer made on us is very witty and humorous, and from this we can feel the magical power of metaphor. Here B uses words featuring the weather to describe the economical situation in Britain. For Grice, A's deliberate violation of the CP is clear to the audience that B is implicating that there are certain features of the weather like "bleak, cloud, and bright" can be attributed to the future of economy, that is, domains of the future and the weather are often superimposed.

3) hyperbole and meiosis

According to Grice, hyperbole and meiosis are the deliberately exploiting the maxim of Quality in opposite way. The former overstates the truth, e.g.,

A: I heard that Mary got full score in Maths test.

B: Yes, you know, she just has a nose for Maths, when she deals with numbers,
his brain works as fast as a computer

while the latter understates beyond the truth. From the following anecdote about Liu Fu and ChenYuan, both are professors of Beijing University, we may know more

about meiosis and Grice's interpretation about it. It seems that the trouble is stirred up by "meiosis". Here is the story:¹⁷

When in London, Chen, who knew that Liu didn't want to reveal his professorship of Beijing University, introduced Liu to a British scholar by saying casually: "Mr. Liu is *something of* a professor or a teacher..." Liu was very unhappy then. After returning to China, Liu wrote an article in YuSi 《语丝》, a well-known magazine, to mock Chen. At the end of the sentence "北京大学陈源先生, 即署名西滢的便是", Liu deliberately added an English annotation "A teacher of Peking National University, *something like* a Professor or a Lecturer."

In this story, both Liu Fu and ChenYuan used meiosis since words like *something of* and *something like* imply a kind of understatement: the former means "to some extent", while the latter "something approximating in character or amount", both indicating a higher degree of understatement. In accordance with the CP, this flouts the maxim of quality apparently. But on a deeper level, we know the flouting aimed at drawing people's attention and ridiculing the rival.

2.2.2 Leech's Model of Communication

Drawing upon Grice's conversational maxim and Brown & Levison's "face model", Leech proposed the Principle of Politeness (abbreviated as PP). According to Leech, people's violation of the CP is for the sake of "politeness", i.e., saving face; the CP and PP interact in governing human communication. To be exact, the CP has the function of regulating what we say and enables one participant in a conversation to communicate on the assumption that the other participant is being cooperative; however, the PP has a higher regulative role than this: to maintain the social equilibrium and the friendly relations which enable us to assume that our interlocutors are being cooperative in the first place, so the PP is a necessary complement of the CP. Here is the example Leech used to illustrate his view:¹⁸

A: *We all miss Bill and Agatha, won't we?*

B: *Well, we'll all miss Bill (with rising-falling intonation on the emphasized Bill).*

Obviously, B's remark implicates that *not all of us miss Agatha*. On what

¹⁷ 钱歌川, 《翻译技巧》, 北京: 商务印书馆, 1980: 134.

¹⁸ Leech, G., *Principles of Pragmatics*, London: Longman, 1983: 80.

grounds is this implicature arrived at? According to the CP, B achieves this by being less truthful and clear. However, as to why B does so is unknown. It is here that PP works: if more direct by adding '...but not Agatha', B would be more impolite to a third party, and hence B flouts the CP (the maxim of quantity) in order to uphold the PP.

Apart from his advocacy of redressing CP by PP, Leech has made a step further in studying human communication. He takes a functional view¹⁹ to language and defines language as a form of communication, and therefore is concerned with showing how language works within the larger systems of human society. Looking at language and communication in his original view, Leech diagrammed the following model to show how linguistic communication works.²⁰

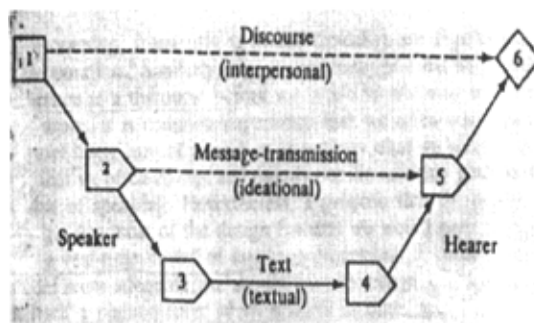


Figure 3: Leech's Model of linguistic communication

According to Leech, linguistic communication goes on from 1-2-3-4-5-6, and constitutes a transaction on three different planes:

- 1) an interpersonal transaction or Discourse: adjusting the input and output of information according to the established goal of communication, the attitudes and behavior of the participants, and some pragmatic principles such as PP and CP;
- 2) an ideational transaction or Message-transmission: conveying and interpreting message grammatically;

¹⁹ Leech's view to the functions of language is greatly influenced by Popper's four language function and Halliday's three functions of language, which bear a strong resemblance. Halliday's three functions are:

1. The ideational function: language functioning as a means of conveying and interpreting experience of the world.
2. The interpersonal function: language functioning as an expression of one's attitudes and an influence upon the attitudes and behavior of the hearer.
3. The textual function: language functioning as a means of constructing a text, i.e., a spoken and written instantiation of language.

²⁰ Leech, 1983: 59.

3) a textual transaction or Text: actual verbal communication between the communicators;

To be exact, 1-2-3 is the process of the speaker's encoding, i.e., the speaker chooses what he wants to communicate, changes it into message (a sense or ideational content encoded syntactically, phonologically and graphically as a text), and then transfers it to the hearer. At this stage, the interpersonal rhetoric, including PP and CP, puts constraints on what and how to convey in communication. Like most semioticists, Leech views the process of the hearer's decoding (4-5-6) is the parallel of encoding (1-2-3), that is, the hearer must go through the parallel stage of the encoding (Similarly, PP and CP play a crucial role here) and achieve the goal at last.

To illustrate how this mode works out in practice, Leech proposed the example "ordering a meal in a restaurant", shown as follows:²¹

1. The customer(s) wants to be served with Steak Diane.
2. In order to attain the goal in 1, s chooses a message, and ideation of this illocution: i.e., s formulates the proposition 'I'd like Steak Diane'. Note that s could have formulated this speech act in many other ways: for example, more economically but brusquely ('Steak Diane'), more politely ('I would like Steak Diane, please'), more dictatorially ('Waiter, bring me some Steak Diane'). The choice between these is determined in part by the extent to which the situation demands politeness: e.g., choosing a dish at restaurant is in this respect different from choosing a dish at a private dinner party.
3. In order to convey the message, s encodes it as a text, and the phonation of the sentence *I'd like Steak DIANE* (with a falling nucleus on Diane) results. (Note that s could have chosen other texts to express the same proposition: e.g., *Steak DIANE I'd like*. This utterance would be less in accord with Textual Rhetoric, however, as it would violate the end-focus maxim.)
4. The text is heard by h.
5. Then h decodes it into a message, which (if the transmission is successful) has the same sense as the original message at 2.
6. Finally, h interprets the force of the message, which (if the transmission of the discourse is successful) is recognized as s's giving an order for Steak Diane to h. The order is relatively indirect, in that s simply states his preference, leaving it to h to work out what is intended. But this force is determined by well-established implicature.

²¹ Leech, 1983: 62-63.

For Leech, in the stage 1-2 and 5-6, *s* relies on *h*'s deriving an implicature—*s* wants to be served with Steak Diane, and that this derivation depends on *h*'s assumption that *s* is observing the CP and the PP. The encoding stage (2-3) is essentially a process of mapping the sense into an appropriate phonetic output under the principles of textual rhetoric, which also operate the stage of decoding (4-5): *h*'s phonological, syntactic and semantic decoding of the text. Linguistic communication is supposed to be achieved in such process.

2.2.3 Problems with Gricean View on Communication

Certainly, both Grice and Leech contribute a lot in interpreting human communication. Individually speaking, Grice's inferential model has turned over a new leaf for the study of human communication in that it shows that communication is at least partly an intelligent activity, involving an exercise of reason and imagination. For Grice, utterances are not signals but pieces of evidence about the speaker's meaning, and comprehension is achieved when the hearer infers this meaning from the evidence provided. As to Leech, it is evident that his model of communication is comprehensive, involving not only the different functions of language as a form of communication but also the association between the communicators at both the superficial and deep level. However, both models of communication left something to be desired.

First, we know that the Cooperative Principle and its maxims is the core of the theoretical framework of the Inferential Model, but Grice made no clear explanation about its source and justification. Where does the Cooperative Principle come from? Is cooperation essential to communication? Do speakers really aim at truthfulness, informativeness, relevance and clarity? Why are people often so indirect in conveying what they mean? All these questions are left unanswered. What is worse, though Grice takes great effort to establish CP and its maxims, which are regarded as norms of successful communicative behavior, yet the significance of CP in interpretation is supposed to emerge only when it is apparently not followed. In other words, the illustration of communication bases on the violation of CP. In this sense, Grice's theory seems to be a paradox.

Grice's interpretation of the nature of the comprehension process is also highly disputable. Grice described comprehension as a form of a conscious, discursive reasoning process—The speaker said *P*; she was obeying the CP and maxims; she

could not have been obeying the CP and maxims unless she believes Q, and intends the hearer to believe it too. As a matter of fact, we know that it is unusual that people will go through such conscious reasoning during communication, and recent study in psychology also indicates that inferential processes in general are spontaneous, unconscious and automatic.

It is true that Grice has made great achievements in rehabilitating the truism that the publication and recognition of intention is indispensable in human communication. However, the framework he hypothesized for elaborating this idea stands no practical use and psychological plausibility, which evokes a colony of disagreements and the mushroom development of newer theories. Leech is among those who are seeking for the improvement of Grice's model. Though based on the functions of language, yet in essence, Leech's model is a supplement of the inferential model, and what he suggested are some modifications but no crucial breakthroughs.

On one hand, Leech emphasizes the importance of "to be polite" in communication (Grice referred to but made no further study), however his interpretation of "politeness" is problematic. According to Leech, "some illocutions (e.g., orders) are inherently impolite, and others (e.g., offers) are inherently polite."²² This view assumes politeness to be an abstract quality residing in individual expressions, lexical items or morphemes, without regard for the particular circumstances that govern their use. This assumption is disputable since politeness is indeed context-dependent and people from different circumstances vary greatly in understanding the self, hierarchy, and ways of information processing which are believed to be the main factors influencing "politeness".

On the other, though Politeness Principle is supposed to collaborate with, and even rescue the Cooperative Principle and its associated maxims, yet it is not clear, as we have seen, that the PP is in need of being rescued. It is even less clear that a principle of politeness indeed would be able to do so; at the least, such ability is not borne out by Leech's examples. Moreover, Leech attached great importance to the participants' mutual knowledge of rules or principles such as the CP and PP and their maxims on the interpersonal plane, and grammatical rules on the ideational and textual plane. Thus, the process of communication seems to be the expanding of rules and principles.

²² Leech, 1983: 83.

3. RT's View on Communication²³

3.1 The Origin of RT

It is clear now that though the code model and the inferential model contribute to our understanding of communication, yet neither of the two models provides an adequate description of communication in general. Is there any possibility to develop a more reasonable model? This is a problem of common concern. Among various newborn theories, Dan Sperber and Deirdre Wilson's research catches people's eye. According to them, in spite of the differences, the code model and the inferential model are not incompatible; instead, they can be combined in various ways. To be precise, communication can be achieved by coding and decoding messages, or providing evidence for an intended inference, or both. In 1986, they proposed an improved inferential model—the ostensive-inferential model of communication in their "Relevance Theory", which is an approach to communication and utterance understanding based on a general view of cognition. In contrast with traditional approaches (e.g., semiotic approach) and social-cultural approaches (e.g. Leech, 1983), RT views communication as a psychological matter involving inferential computations performed over mental presentations, governed by the Cognitive Principle (Human cognition tends to be geared to the maximization of relevance) and the Communicative Principle (Utterances create expectations of relevance).

The concept "relevance" is not new to us. In Grice's four maxims of communication, there is one called Maxim of Relation (or the Maxim of Relevance). However Grice left the maxim relatively undeveloped because he thought the formulation of relevance concealed a number of problems that were exceedingly difficult to clear up.²⁴ To most followers of Grice, relevance also seems to be a hard nut to crack, so they dodge it. By sharp contrast, Sperber and Wilson base their study on "relevance", which they mean to be a property of inputs of cognitive processes: utterances, thoughts, memories, actions, sounds, sights, smells, and so on. What

²³ All the quotations in this chapter are from *Relevance: Communication and Cognition (Second edition)*, except for caption. Dan Sperber and Deirdre Wilson, Oxford: Blackwell Publisher Ltd., 2001.

²⁴ Grice, H.P., *Studies in the Way of Words*, Cambridge, MA: Harvard University Press, 1989: 46.

makes an input relevant is the fact that it is worth processing. What makes an input worth processing is explained in terms of the notions of cognitive effect and processing effort (The greater the cognitive effects, the greater the relevance; The smaller the processing effort, the greater the relevance). The currently high-profile theory of communication, the Relevance Theory, is based on the definition of relevance and the two general principles.

3.2 Ostensive-Inferential Model of Communication

In illustrating RT, Sperber and Wilson present us with their inferential-ostensive model of communication. In this model, communication is described as a process of ostention and inference, which are just two sides of the same thing: from the communicator's point of view, it is ostention, showing or making manifest his informative intention, which is "better described as an intention to modify directly not the thoughts but the cognitive environment of the audience";²⁵ and from that of the audience it is inference, inferring from the evidence presented the communicator's intentions. Ostensive-inferential communication is further defined as follows: "the communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest to the audience a set of assumptions {I}."²⁶

Another important assumption of OI model is that communication alters the mutual cognitive environment of the audience and communicator, and mutual manifestness is of crucial importance. To be precise, in Sperber and Wilson's view, communication is an activity of ostention and inference, making the intention behind the ostention mutually manifest both to the communicator and the audience; mutual manifestness is the main factor of smoothing communication: a change in the mutual cognitive environment of the two people is a change in their possibilities of interaction (and, in particular, in their possibilities of further communication). Then what is cognitive environment and how mutual manifestness is achieved?

3.2.1 Cognitive Environment

To understand Sperber and Wilson's cognitive environment, we have to know

²⁵ Sperber & Wilson, 2001: 58.

²⁶ Sperber & Wilson, 2001: 63.

more about “context” since they are closely related but differ from each other. For the past few decades, people have realized the special importance of understanding meaning in context. However, for various linguistic schools, context means differently, and hence it is often vague what is meant by “context”. Traditionally, people’s effort tends to center upon the external environment in which language is used. Many scholars devote themselves to studying the external features of context such as speaker, hearer, place and time of utterance, etc. To any external feature of context, we know, there are a large number of possibly relevant facets. Thus, it is quite easy to get a general idea of this traditional view of context:

- 1) Context is all-inclusive: All features of context contribute to the understanding in communication. Everything relevant to a particular feature is considered to be “context”.
- 2) Context is stable: Context is fixed and pre-exists before people’s understanding.

Since context is delimited this way, it takes us little effort to understand why some theorists thought people could share every aspect of context. Of course, Grice’s inferential model “propositions + context \implies (inferring) the implicature of utterances” also seems undoubtedly logical. Clearly, in Grice’s model, context is used as a set of premises in interpreting an utterance, and furthermore the participants are supposed to absolutely share such contextual knowledge, otherwise communication will break off. But such an inclusive context doesn’t really work in communication. Instead, it just makes people confused because they will find themselves trapped in the explosion of potentially relevant information of context. Let’s use an artificial dialogue to show how “traditional” context works in communication:

A: Is Jane coming to the party?

B: *Her exams start tomorrow.*

Suppose 2a is given context, and then A can get a plausible interpretation (for B’s reply) yielded by the assumption in 2b.

2a: Jane gets very nervous about exams.

2b: If Jane gets very nervous about exams, she will not go to any party.

Given more information 3b about Jane, then A can make an assumption 3c.

3a: Jane gets very nervous about exams.

3b: When Jane gets very nervous about exams, she always bites her fingernails.

3c: Jane will be biting her fingernails.

Suppose information 4a is given, then b may derive a conclusion 4c.

4a: When Jane bites her fingernails, she wears gloves when she goes out.

4b: Jane will be wearing gloves when she goes out.

...

Undoubtedly, 2a, 3b, 4a... are all part of the "context". If more contextual information is given, there is nothing to stop the hearer adding more and more assumptions and deriving more and more conclusions (implicatures). As a matter of fact, though the context can be expanded indefinitely, but not all of the contextual information would work in a certain communication, and it is impossible and unnecessary for people to share all such knowledge. In this example, A will assume 2b is the most likely interpretation since people tend to pay attention to information that seems most relevant.

Sperber and Wilson also attach great importance to the crucial role that context or background assumptions play in the comprehension of people's behavior in communication, yet their interpretation of context varies from the traditional one. By context, Wilson writes, "I mean not simply the preceding linguistic context, or the environment in which the utterance takes place, but the set of assumptions brought to bear in arriving at the intended interpretation. These assumptions may be drawn from the preceding text, or from observations of the speaker and what is going on in the immediate environment, but they may also be drawn from the cultural or scientific knowledge, common-sense assumptions, and more generally any item of shared or idiosyncratic information that the hearer has access to at the time"²⁷. Furthermore, Sperber and Wilson state that a context is a psychological construct, a subset of the hearer's assumption about the world: expectations about the future, scientific hypotheses or religious beliefs, anecdotal memories, general cultural assumptions, beliefs about the mental state of the speaker, may all play a role in interpretation. For them, selection of an appropriate set of contextual assumptions is the crux of promoting people's communication. Then, why does the hearer choose some assumption instead of others? According to Sperber and Wilson, the choice is based on our beliefs and assumptions about the world that are organized in a sort of encyclopedia under some headings in our minds.

The difference between the traditional context and that of RT comes clear now. In RT, context is not static but interpreted as a set of dynamic assumptions. In fact, Sperber and Wilson proposed another term "cognitive environment" to mean all the

²⁷Deirdre Wilson, *Relevance and Understanding*, in Gillian Brown, etc, (eds.), *Language and Understanding*, Shanghai: Shanghai Foreign Language Education Press, 1999: 41.

assumptions in our mind. We will skim some of their elaborations on this notion:

*A cognitive environment of an individual is a set of facts that are manifest to him. A fact is manifest to an individual at a given time if and only if he is capable at that time of representing it mentally and accepting its representation as true or probably true. Then, to be manifest is to be perceptible or inferable. An individual's total cognitive environment is a function of his physical environment and his cognitive abilities. It consists of not only all the facts that he is aware of or capable of being aware of in his physical environment, but also the information retrieved from his memory and all the assumptions he could make.*²⁸

Obviously, the cognitive environment Sperber and Wilson stress is context in mind, a product of our cognizing the physical world. It is easy to understand this. As we know, cognition is an indispensable part of human life. We are engaged in lifetime's enterprise of deriving information from the physical world and constructing the best possible mental representation of it (Representational devices frequently referred to are categorization, association, abstraction, generalization, and reification²⁹). Our representations about the external physical world are by no means random but stored in our mind in the form of chunks and schemas.³⁰ In actual communication, any ostensive behavior will activate the relevant schemas and facilitate the processing of information, thus promoting the communication.

3.2.2 Communication: Altering Cognitive Environment by Ostension and Inference

It goes without saying that cognitive environments vary from one person to another since their cognitive abilities differ greatly, so does their representations of the world. Then, how can communication go smooth now that there is much difference in people's cognitive environments? As to this question, Sperber and Wilson suggest that though people's cognitive environments are never exactly identical, yet by ostention and inference they are likely to intersect (the same facts and assumptions may be manifest to different people). That is to say, by constant ostention and inference it is likely for people to share a mutual environment, the set of facts and assumptions that are manifest to them all. According to Sperber and Wilson, "mutual cognitive

²⁸ Sperber & Wilson, 2001: 39-41.

²⁹ Jef Verschueren, *Understanding Pragmatics*, Beijing: Foreign Language Teaching and Research Press, 2000: 176-180.

³⁰ See 6.2.

environments directly provide all the information needed for communication and comprehension”.³¹

Evidently, the development of mutual cognitive environments requires the joint effort of both the communicator and the audience. In other words, in communication the communicator and the audience have to co-operate with each other to achieve their goal of communication. However, the responsibility for co-ordination in communication is not equally shared by the communicator and audience since communication is an asymmetrical process anyhow.³² That is to say, the roles of the communicator and audience are not identical. In accordance with their assumption, it is left to the communicator to make correct assumptions about the codes and contextual information that the audience will have accessible and be likely to use in the comprehension process. The responsibility for avoid misunderstanding also lies with the communicator (speaker), so that all the audience (hearer) has to do is go ahead and use whatever code and contextual information come most easily to hand. What they assume does not mean that the audience (hearer) is passive in communication since the participants change their roles constantly, i.e., take turns being a communicator or audience.

No doubt OI model sheds light on our understanding of communication: it shows us that communication is not a success without effort system where communicators simply exchange well-packaged ideas, nor a rule-based or maxim-based system with too much implausibility, but an activity of ostention and inference “governed by a less than perfect heuristic”.³³ Such an original view on communication offers us a great many implications on SLTL.

³¹ Sperber & Wilson, 2001: 45.

³² See 5.1.

³³ Sperber and Wilson, 2001: 45.

4. SLTL: A Special Form of Communication

4.1 What is SLTL?

The second half of the twentieth century is a time of “global village” and “world wide web”, when communication between people has expanded beyond their local speech communities. As never before, people have to learn a second language, not just a pleasing pastime, but often as a means of obtaining an education or securing employment. At such a time, there is an obvious need to discover more about how second language education goes.

There is a list of terms about second language education. Some scholars may use Second Language Acquisition (SLA), and others may prefer the Second Language Learning (SLL). In this paper, Second Language Teaching and Learning (acronymed as SLTL) is applied. Here I'd like to make some explanations about “SLTL”. For one thing, here “second” can refer to any language that is learned subsequent to the mother tongue. Thus it can refer to a third or fourth language. For another, “second” is not intended to contrast with “Foreign ” language. Besides, instead of “acquisition” or “learning”, “TL” is used to indicate that second language study usually involves a bilateral activity consisting of “teaching” and “learning”, which interacts on each other and forms a very important type of communication. Since SLTL is defined as form of communication between teachers and students, the focus of our study here must be on the tutored and formal study of a second language.

4.2 The Essence of SLTL: A Special Form of Communication

To understand the essence of SLTL, it is necessary for us to make some explorations about what teaching and learning do mean and how they interact. However, concepts such as teaching and learning are always too broad to define, and it is often the case that people give different interpretations from their own perspectives of view. Therefore, here we just choose several general definitions for discussion, expecting them to be straws in the wind. Now let's have a look at the two definitions revealed by a search in contemporary dictionaries. Learning is “acquiring or getting of knowledge of a subject or a skill by study, experience, or instruction”. Similarly, teaching is defined as “showing or helping someone to learn, giving instructions, guiding in the study of something, providing with knowledge, causing to

know or understand". These definitions may be far from satisfactory but can give us an insight into the connotation of teaching and learning. For instance, breaking down the components of the definition of learning, we can extract some domains of research and inquiry:

- Learning is acquisition or "getting"
- Learning is retention of information or skill.
- Retention implies storage systems, memory, cognitive organization.
- Learning involves active, conscious focus on and acting upon events outside or inside the organism.

These concepts can also give way to a number of subfields within the discipline of psychology such as acquisition processes, perception, memory system, recall, conscious and subconscious learning styles and strategies. Very quickly you may find the concept of learning become very complex, yet in the learning of a second language, the second language learner brings all these and more variables into play.

Teaching cannot be defined apart from learning. As H.D. Brown writes, "Teaching is guiding and facilitating learning, enabling the learner to learn, setting the conditions for learning. Your understanding of how the learner learns will determine your philosophy of education, your approach, methods and classroom techniques".³⁴ So teaching, in harmony with our integrated understanding of the learner and of the subject to be learned, should cover the following aspects:

- the experiences which most effectively implant in the individual of predisposition toward learning;
- the ways in which a body of knowledge should be structured so that it can be most readily grasped by the learner;
- the most effective sequences in which to present the materials to be learned.

Coincidentally, Stephen N. Elliott in his *Educational Psychology* made another thought-provoking statement about the meaning of teaching.³⁵ He stated that teaching is a life in the classroom. To teach carefully, teachers should have as much knowledge about students as possible: their needs, characteristics and difference. Moreover,

³⁴ H.D. Brown, *Language learning and Teaching*, Beijing: Foreign Language Teaching and Research Press, 2002: 7-8.

³⁵ Stephen N. Elliott, et al, *Educational Psychology*, MC-Graw Hill Company, 2000: 2.

teachers should try to understand the learning process (the procedures and strategies that students to acquire new information) and explore effective instructional strategies. Here, we can imagine how intricate teaching is. Of course, no exception to learning!

Whatever interpretations there are, it is clear to us that teaching and learning are intrinsically and inseparably bounded up with each other just like two sides of a coin. In tutored and formal study of a second language, teaching and learning would be more closely related for its asymmetry. They interact on each other and form a special form of communication in human life. Here the word “special” carries more than one meaning. First, the major participants of this activity are two special groups “teachers” and “students”. Second, the main form of their interaction is “teaching” and “learning”. Third, the role of a teacher and that of a student is not identical: there is a vast gulf between their knowledge about a second language. Last but the most important is that the criterion for judging the success of this kind of communication is whether the students’ communicative competence is improved.

We are in broad agreement that the goal of second language teaching and learning is to develop the students’ communicative competence—the ability to communicate efficiently and appropriately in the second language. Correspondingly, to explore how students acquire such ability has always been the enthusiasm of both teachers and researchers. From various perspectives, they have done a majority of investigations and research about second language acquisition, proposed a variety of theories and approaches and put them into the practice of second language learning and teaching. All these give an impetus to SLTL, both theoretically and practically. Globally speaking, we have made a long step in improving the quality of the SLTL so far. Then what is the status quo of China’s SLTL?

4.3 The Status Quo of China’s SLTL

SLTL in China (English is given prior prominence as a global language.) has a long history and now occupies the attention of millions of its people. After decades’ reform, China has made swift progress in its SLTL. One outstanding feature is the popularization of SLTL. In Chinese secondary schools, at least one foreign language is taught as a compulsory subject. In some big cities, like Shanghai, a foreign language is also introduced at primary level (sometimes, even the children in the kindergartens are consciously cultivated in their interest in learning a foreign language). The enthusiasm for SLTL can also be seen from the mushroom

development of various foreign language-training courses and test programs of different levels.

It is acknowledged that in the past few decades, the education of second language (or foreign language, English particularly) in China has achieved more than ever before and greatly contributed to the economic construction and social progress of the nation, and the cultivation of friendship among all nations. However, we also have to admit that there still there remains something to be desired. The most serious one is the quality of its product. Though it cannot be denied that there have emerged a large number of well-rounded foreign language talents, yet comparatively speaking, we do have too many "mute and deaf" language learners, let alone the prevailing of Chinglish speakers. It is not unusual that some students, even some majors of a language, can't express themselves well with their foreign peers though they have been learning a second language for years. The badly lack of qualified simultaneous interpreters seems to be another evidence for the complaint of "quantity" against "quality"(According to an authoritative newspaper, in China the supply of simultaneous interpreters cannot keep pace with the increasingly demand. The total number of excellent interpreters is small. As for some minor language, it is smaller). Luckily, this problem has drawn people's great attention and a lot of measures have been and will be taken.³⁶

Then, why is the quality of China's SLTL less than satisfactory? Naturally we will think of the historical heritage of "poor hardware" such as inexperienced teachers and insufficient teaching facilities. Undeniably, there does exist the "bottle-neck" issue of the hardware, but it is not the crux of the problem. I hold that, besides its poor physical condition, the symptoms of China's SLTL perhaps mainly root in its impractical teaching beliefs and methodologies. In practice, for quite a long time China's SLTL is based on a traditional mode of communication, i.e., the code model of communication: teachers work as encoders of information (or providers of knowledge about the second language), and students come to be passive decoders or receivers of the information; teaching and learning, correspondingly, are viewed as two separate and mechanical processes: cramming (teachers are kept busy fulfilling their teaching task by cramming the students with various prescribed information) and absorbing (students are obliged to be fully engaged in dutifully assimilating the teacher's words of wisdom, working their way ploddingly through all kinds of

³⁶There is a series of discussion about this topic in *Foreign Language Teaching and Research* 2002.6: 401-413 /2003. 5:378-386.

assignments). In such a firm belief, the pattern of China's SLTL remains traditional too, i.e., textbook-based, teacher-dominated and test-oriented.³⁷ Though there have been great claims on diversifying the classroom teaching methods, teachers as well as students typically adopt the Grammar-Translation means to teach and learn, which focuses on grammar and vocabulary, on linguistic phenomena and the language itself, taking little consideration into the students' communicative competence. In a word, the communication between teachers and students is reduced to a matter of transmitting information. Though in the past few decades, China's SLTL has undergone a lot of reforms to satisfy the increasingly growing demands for developing qualified second language talents, yet it makes no substantial difference to the whole system of SLTL.

It is not hard for us to understand this reductive approach toward second language teaching and learning: it simplifies the process of teaching and learning, and makes it easy to control—no matter what differences there are, schools may adopt the same teaching materials, the same methodology and the same ways of evaluating. Pretty obvious, such a reductionistic view conceals the nature of SLTL, ignoring that teachers and students are individuals of great cognitive abilities. Hardly surprising that there always looms a large gap between teaching and learning, and that the quality of SLTL falls short of our expectations. How can China's SLTL make way out of the current predicament? Perhaps it is impossible for us to find a single answer to this question. But we are certain that to make a breakthrough in improving the quality of SLTL in China, it is of great necessity to reexamine the nature of SLTL and renovate our teaching belief. In this respect, Sperber and Wilson's ostensive-inferential model of communication may give us some real insights.

³⁷ For further understanding, please refer to the appendix I.

5. The Goal of SLTL: Cultivating Students' Communicative Competence

5.1 A Better Understanding of SLTL

In China, it is a matter of utmost urgency to improve the quality of SLTL. As we argue, that the crux of this problem lies in the transformation of its traditional teaching belief. With regard to this matter, we can find great illumination in Sperber and Wilson's OI model of communication. In accordance with this model, we can further redefine the characteristics of SLTL as follows: 1) SLTL is a special form of communication between "teachers" (communicator) and "students"(audience) which aims at developing the students' communicative competence by changing each other's cognitive environment; 2) The process of SLTL is that of "ostension" and "inference", that is, the communicator attempts to make his intentions manifest to the audience, and the audience infers the communicator's intentions from the ostension.3) Constant ostension and inference promote not only the actual communication between communicator and audience but also the internalization of their communicative competence. The above idea can be further illustrated as follows:

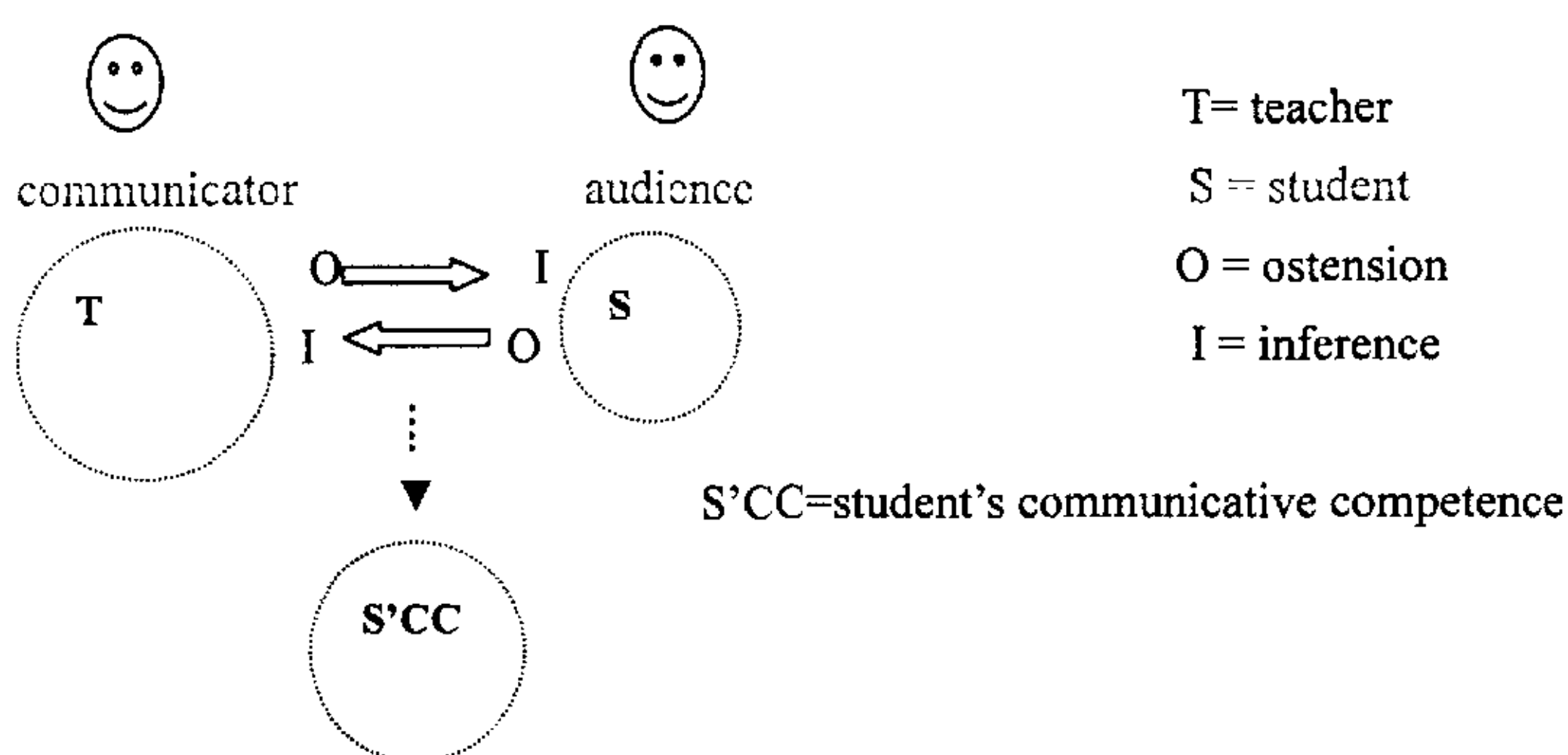


Figure 4: SLTL—a special form of communication

It is necessary here to make some specifications about the diagram. First of all, we characterize SLTL as a communication between T and S with the goal to cultivate the S'CC by constant ostension and inference. This is justifiable. On one hand, despite the fact that the cognitive environments of teachers vary from those of the students (especially about a second language), yet in the spirit of the OI model of

communication we know that by ostention and inference their cognitive environments will intersect and form mutual cognitive environment, which makes their communication proceed smooth. On the other, the OI model enlightens us that communicators (teachers and students) will alter each other's cognitive environment in communication (SLTL). In this sense, it goes without saying that such communication will ultimately speed the internalization of communicative competence since altering cognitive environment means reorganizing representations, shaping the process of internalizing the external world.

Readers may find that in the above diagram the two circles standing for "teachers" and "students" are not identical. The reason for this is to indicate another significant feature "asymmetry" about this special form of communication. By "asymmetry" we mean the role of the communicator and that of the audience are asymmetrical. Though it is true that any communication requires some degree of coordination between communicator and audience on some aspects, yet such a kind of coordination does not mean the two sides will take a half-and-half responsibility. Their share is determined by multiple factors. In SLTL, such feature is especially salient. As we know, before learning a second language, most students know nothing or just a little about the target language. What is worse, for various reasons students could only acquire such knowledge mainly through formal school education, to be precise, through the channel of "teaching".³⁸ Naturally, the balance of coordination in communication will fall on the teachers, who have to take more responsibility for broadening the students' cognitive environment and cultivating their communicative competence.

Considering there exists such a kind of asymmetry in the communication between teachers and students, we take the role of teachers as a starter to study the internalization of the students' communicative competence. Exactly, our main concern is how teachers work in making ostentions to further the internalization of the students' communicative competence. Moreover, for convenience's sake, we just make a one-way study of SLTL in this paper. That is to say, we suppose teachers to be the communicator and students the audience, who, accordingly play their respective roles of ostention and inference (though throughout the entire period of the communication, the communicator and the audience will change their roles constantly, and only through continuous ostentions and inference can the students' communicative competence gradually comes into being).

³⁸ Refer to 6.1.

5.2 What is Communicative Competence?

Though usually disagreeing with each other on how the communication between teachers and students is achieved, people do agree that the ultimate goal of SLTL is to cultivate the students' communicative competence. Then, what is communicative competence?

As early as in 1970's, Dell Hymes introduced the concept of communicative competence in his critiques of the inadequacies of Chomsky's definition of competence (attaching great importance to grammatical competence, the knowledge of grammar of an ideal speaker).³⁹ Hymes's original idea is that speakers of a language have to have more than grammatical competence in order to be able to communicate effectively in a language; they also need to know how language is used by members of a speech community to accomplish their purposes. In other words, they have to have communicative competence. Hymes defined communicative competence as the ability of the individuals to communicate with each other in certain situations and according to certain norms. According to him, the communicative competence of a speaker can be defined by the following four criteria:⁴⁰

- Linguistic possibility: what forms are possible in a language (similar to Chomsky's 'linguistic competence').
- Feasibility: the potential of the brain to learn, remember and perceive behavior. This is where such influences as tiredness and emotional state affect speech.
- Appropriacy: the social constraints on speech that define the appropriacy, and therefore, the acceptance of speech in a given setting on a given topic.
- Speech that actually occurs: speakers know certain linguistic forms and not others (which are equally 'grammatical') are used to express certain meanings, and they know how frequently these forms are used.

Hymes's theory of communicative competence has made a huge impact on many other scholars. From different points of view, quite a lot of scholars have proposed different frameworks for communicative competence ever since. In 1980, Michael Canale and Merrill Swain proposed a three-component (later extended to

³⁹ Hymes, D., *On communicative competence*. In Pride and Holes, 1972.

⁴⁰ Huang Cidong, *English Linguistics*, Shanghai: Yiwon Press, 1988.

four components) framework.⁴¹ According to them, one's communicative competence consists of linguistic competence, discourse competence, sociolinguistic competence, and strategic competence. The first two reflect the use of the linguistic system. Linguistic competence, encompassing our knowledge of the rules of a language, is the aspect of communicative competence that we associate with mastering the linguistic code of a language (the correct syntactic, lexical, and phonological forms in a language). Discourse competence, the complement of linguistic competence in many ways, concerns our ability of understanding and organizing spoken and written texts.

The last two components define the more functional aspects of communication. Based on Hymes's work, the sociolinguistic competence refers to the ability to use language appropriately in sociocultural contexts. This type of competence requires our understanding of the sociocultural rules and that of the social context in which language is used: the roles of the participants, the information they share, and the function of the interaction. Canale and Swain described strategic competence as "the verbal and nonverbal communication strategies that may be called into action to enhance the effectiveness of communication or to compensate for breakdowns in communication due to performance variables or due to insufficient competence".⁴¹ In other words one's strategic competence involves his ability to use different strategies to effect communication and solve problems that arise in communication.

Canale and Swain's constructs of linguistic, sociolinguistic, discourse, and strategic competences provide a convincing characterization of one's underlying abilities that can then be related more easily to the contexts of actual language use. However, it is not clear how different patterns of underlying abilities may be more effective in some context than others, and how these underlying abilities are mobilized into actual performances. So it does not really deal with how ongoing, ordinary communication is achieved.

Canale and Swain's definition of communicative competence has undergone some modifications over the years. In 1990, Lyle Bachman proposed a similar, but more complex model of communicative competence⁴². This model provides a more organized and detailed account of the underlying components of communicative competence, which may be best captured in Bachman's schematization of what he calls language competence (as shown in Figure 5) and components of communicative

⁴¹ Michael Canale and Merrill Swain 'Theoretical bases of communicative approaches to second language teaching and testing', in *Applied Linguistics* 1980:1-47

⁴² Lyle Bachman, *Fundamental Consideration in Language Testing*, New York: Oxford University Press, 1990: 87.

language ability in communicative language use (Figure 6):

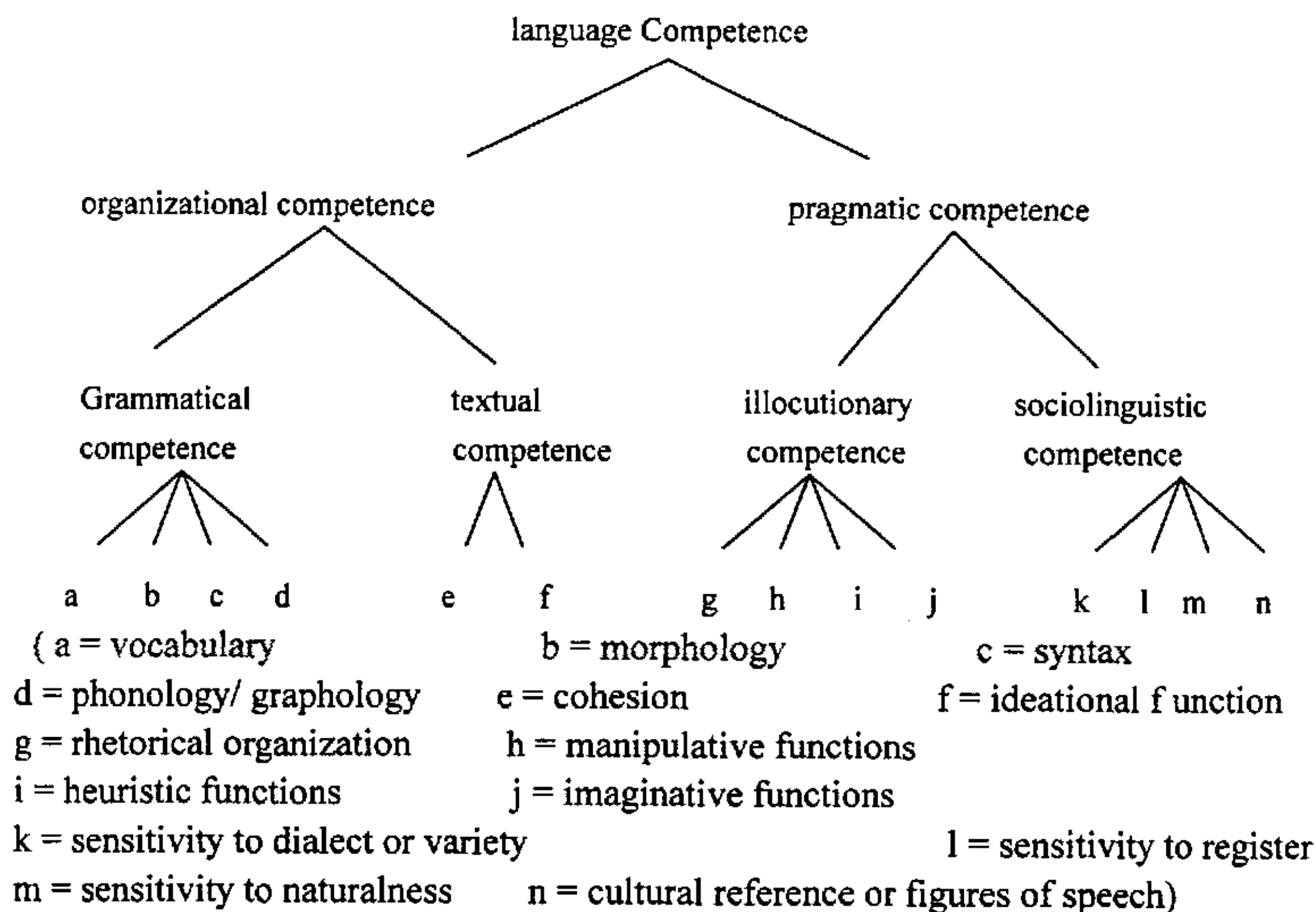


Figure 5: components of language competence (Bachman 1990:87, slightly adapted)

According to Bachman, a speaker's communicative competence includes his language competence and strategic competence. One's language competence, as the tree diagram shows, consists of not only his organizational competence (all those rules and systems that dictate what we can do with the forms of language, whether they be grammar or discourse) but also pragmatic competence, which involves the functional aspects of language (illocutionary competence, or, pertaining to sending and receiving intended meanings) and sociolinguistic aspects dealing with such considerations as politeness, formality, metaphor, register, and culturally related aspects of language.

A drastic change of Bachman's model is the role of strategic competence, which is no longer compensatory but central to all communication: serving an "executive" function of making the final decision among many possible options. To be specific, one's strategic competence plays a meditating role between meaning intentions, underlying competences, background knowledge and context of situation by determining communicative goals, assessing communicative resources, planning communication and executing this communication. The crucial role of strategic

competence is further illustrated in Figure 6:

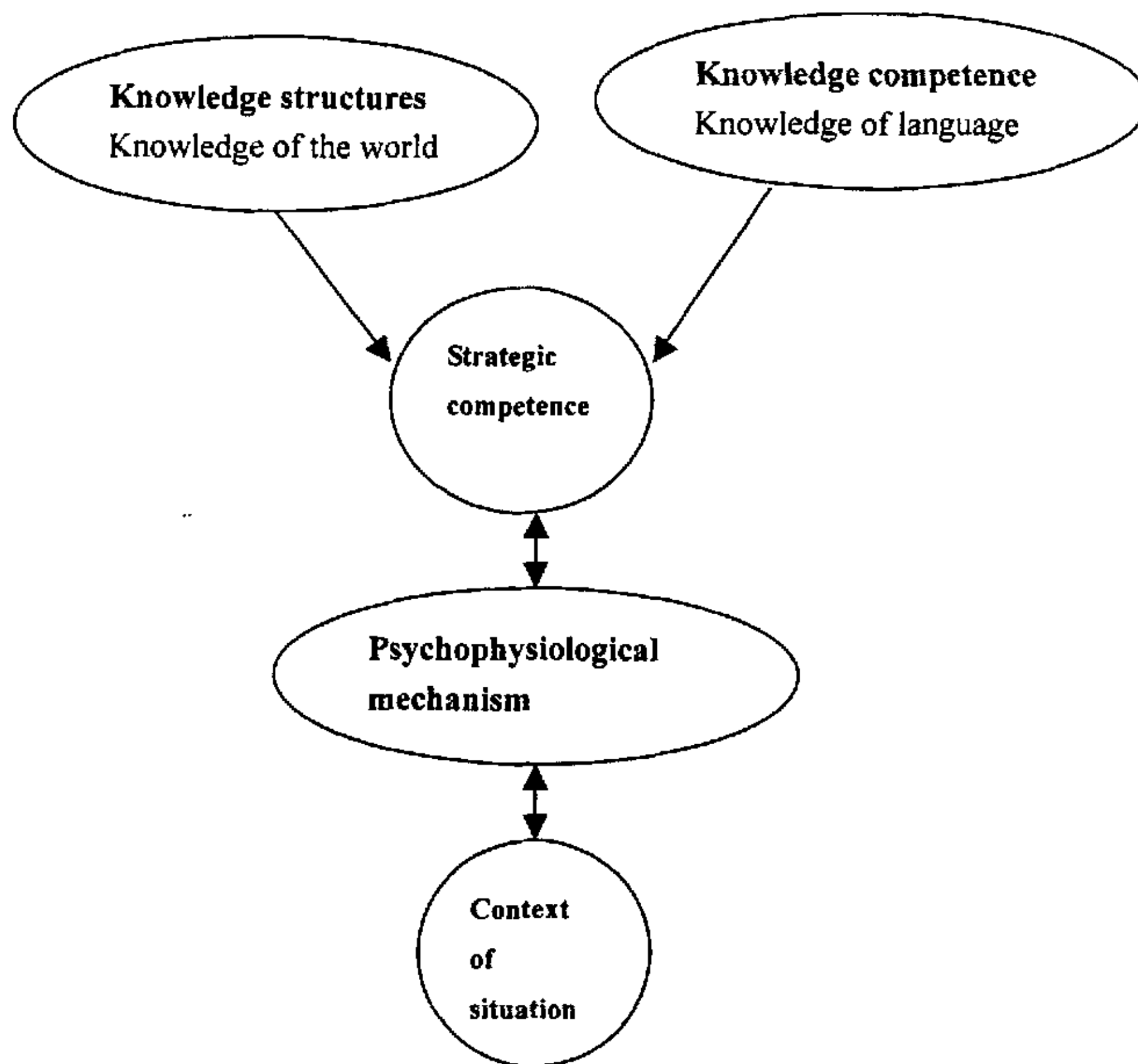


Figure 6: Components of communicative language ability in communicative language use
(Bachman 1990:85)

Pretty obvious, Bachman's framework offers us an easily comprehensible explanation of communicative competence in that it takes into not only the language competence but also the strategic competence. What is more important, Bachman's study of competence integrates some other factors as psychological mechanism, which is indispensable in communication. Anyhow, we can see despite the vast proliferation of different theories of communicative competence, one consensus is that communicative competence is a highly complex ability: involving not only one's knowledge of a language itself but also his capacity to communicate appropriately in the language by using different strategies. In other words, one has to know not only what to do but also how to do on various occasions. Appropriateness is the key criterion of measuring one's communicative competence. Retroactively speaking, such ability is an internalized one, a product of our experiencing the external world.

Then, how is our communicative competence being continuously internalized when we cognize the world?

5.3 The Internalization of Communicative competence

As we have discussed, one's communicative competence is his ability to communicate appropriately. A successful communicator is generally supposed not only to know what to do but also how to act on different occasions, which means he has to be possessed of both knowing-what and knowing-how. According to Sperber and Wilson's view on the formation of cognitive environment and recent research in cognitive science, we obtain such knowledge just by experiencing and cognizing the world we live in. Our communicative competence is, of course, an internalized ability, a joint product of cognition and communication. All these enlighten us that SLTL—the special form of communication should be nothing but a process of continuously internalizing students' communicative competence. Then, how on earth is the students' communicative competence internalized in this process?

To be brief, in a formal tutored study of a second language, the students' communicative competence is internalized by constant ostention and inference (Note, we just make a one-way study). However, the interaction of teachers and students in SLTL is so intricate that we have to observe their roles respectively. For one thing, as far as a student is concerned, to perform his function in the internalization of communicative competence means he has to undergo a series of mental operations: deriving information from his environment, restructuring the information, storing the information for future use.... This is a nonstop process as long as we are alive. For another, from the point of view of a teacher, it will be his duty to offer appropriate ostentions to fulfill the students' needs. Here we can also see that however significant the teacher's role is, all the ostentions he makes should be student-centered, so is SLTL, the process of internalizing the students' communicative competence. Therefore, it is our primary task to reveal how the students' processing system works to initiate the study of internalizing communicative competence.

We are in general agreement that our central processing system consists of psychological mechanisms that are involved in using language. According to the general model of information processing,⁴³ this central processing system comprises

⁴³ David W. Carrol, *Psychology of Language*, Beijing: Foreign Language Teaching and Research Press, 2000: 46-51.

three mental structures (sensory stores, working memory and permanent memory) and involves a set of processes that move information from one structure to another. If we apply this model to the interpretation of SLTL, we can give a general description of how the internalization of communicative competence goes on as Figure 7 indicates:

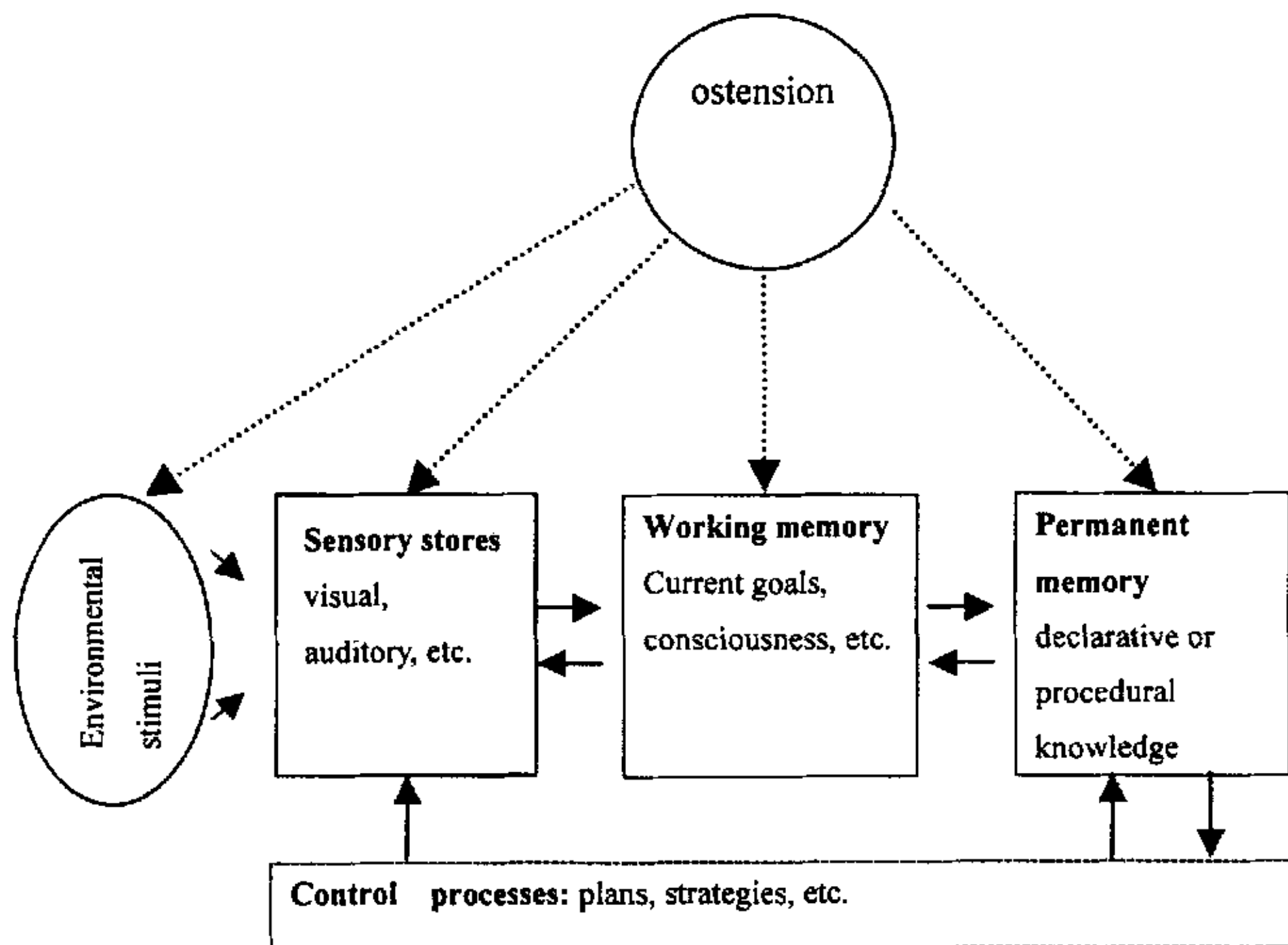


Figure 7: the internalization of communicative competence

As the diagram shows, first any environmental stimuli concerning the second language—the constellation of sights, sounds, and other sensory events to which the student is constantly exposed—go into the student’s sensory stores through different channels. As the first step in the information processing sequence, the sensory stores perform the function of taking in new information, identifying it, and choosing whether to process it more extensively. Initially identified, most of the information in these stores will disappear very rapidly because it is not germane to our current goals. Though the rest is represented in a literal, unanalyzed form, yet sensory stores could hold information only for exceedingly brief intervals, just long enough to locate and focus on relevant bits of information and transfer them into the next stage of processing — working memory (also called short memory), which has both storage and processing functions. In addition to the new information coming from the sensory stores, working memory also contains the “old” information (“records”) from the long-term memory that is retrieved for processing the oncoming information.

Once information has been transferred to working memory, a variety of control processes may be applied, among which rehearsal and chunking are two important examples since both the life span and capacity of the working memory are severely limited. In general, information is lost from working memory in less than half a minute unless it is “renewed.” and it is often lost in only a few seconds.⁴⁴ Another important thing to know about working memory is that its storage capacity is quite small. Though the exact capacity differs slightly for different kinds of information, yet as psychologist George Miller put it, it’s constant enough to be called the magic number seven plus or minus two (7 ± 2) bits of information.⁴⁵ Fortunately, there are some effective ways like rehearsing and chunking to get around all these limits.

No matter how good a job we do of chunking and rehearsing, working memory is not a good place to store information for long periods of time. So information that must be tucked away for a long time goes to permanent memory (also known as long-term memory), which is “a repository of our knowledge of the world. This includes general knowledge, such as rules of grammar or arithmetic, along with personal experiences, such as memories of your childhood. Permanent memory holds all of the information we have retained from the past that is not currently active (that is, in working memory). These memories are used to interpret new experiences, and, in turn, the new events may later be added to this storehouse of information.”⁴⁶

We come to know that just from the perspective of students, the process of internalizing communicative competence is that his sensory stores take in information from the environment while information from permanent memory is retrieved to recognize different patterns. The identified information, if relevant to the current activity, is held temporarily in working memory. As new information enters working memory, some of the older information is reorganized into larger units, other information is lost, and still other information is sent to permanent memory.⁴⁷ The

⁴⁴ Ellis, H.C. & Hunt, R.R, 1993. *Fundamentals of Cognitive Psychology*. Madison, WI: Brown and Benchmark.

⁴⁵ Miller, G.A., *Psychological Review*, 1956, 63: 81-97.

⁴⁶ Carroll, 2000: 49-50.

⁴⁷ As to this process, Sperber and Wilson make a different exposition (2001: 47-48, 263-266): when an input (for example an utterance) is processed in a context of available assumptions, it may yield some cognitive effect by modifying or reorganizing these assumptions. Cognitive effects may fall into the following cases: 1) strengthening existing assumption; 2) contradicting existing assumption; 3) combining with existing assumptions to yield contextual implication. But it is obvious that the essence of their exposition is the same as what we discuss here.

accumulative information in his permanent memory constructs the knowledge he needs in communication. For this point we can find more evidence in Bartlett's research about "schema"⁴⁸ and John Anderson's study concerning declarative knowledge and procedural knowledge.

As early as in the 1930s, Bartlett F.C. did a lot of research about the mental frameworks stored in our permanent memory, which he called schemata (This term has been a household word in cognitive science). Bartlett pointed out that people process new information through schemata that are constructed from knowledge and beliefs they always possess, filtering new experiences and give meaning to them. Definitely, Bartlett's "schema" confirms the crucial role of the mental structures in our minds. As to the functions of schemata we will have a further discussion in Section 2, Chapter 6, so the center of our attention is shifted to Anderson's study.

In 1983, John Anderson proposed a twofold division for the information in our permanent memory.⁴⁹ He distinguishes between declarative knowledge, involving both semantic memory and episodic memory⁵⁰ that can be described (declared) in words, and procedural knowledge, which can be accessed only through performance. By declarative knowledge he means the special type of information that consists of consciously known facts, concepts or ideas that is usually stored in terms of propositions, schemata, and propositional networks. In contrast, procedural knowledge is the information concerning things that we know how to do. It underlies the execution of all complex skills and includes mental activities such as problem solving, language reception and production and using different strategies.

It is beyond dispute that so-called declarative knowledge and procedural knowledge are just the requirements of our communication. It comes from the joint contribution of sensory stores, working memory, permanent memory in dealing with the environmental information. Conversely, such knowledge, either knowing-that or knowing-how,⁵¹ will direct us in different forms of communication. Of course, our

⁴⁸ Bartlett, F.C. 1932. *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.

⁴⁹ Anderson, J. *The Architecture of Cognition*, Cambridge, Mass: Harvard University Press, 1983. *Cognitive Psychology and Its Implications*, 2nd ed., New York: Freeman, 1985.

⁵⁰ See Carroll, 2000: 50.

⁵¹ Færch, C. and G. Kasper, 'Procedural Knowledge as a Component of Foreign Language Learner's Communicative Competence' in H. Boete and W. Herrlitz (eds.), *Kommunikation im(Sprach-) Unterricht*. Utrecht, 1983.

According to them, declarative knowledge is "knowing that"; it consists of internalized L2 rules and memorized chunks of language. Procedural knowledge is "knowing how"; it consists of the strategies and procedures employed by the learner to process L2 data and for use. Procedural knowledge can be subdivided initially into social and cognitive components.

communicative competence, ability to behave appropriately, will be enhanced during our communication with the external word in all its form.

6. Teachers' Ostension in Cultivating Students' Communicative Competence

As already discussed, from the angle of the students the internalization of communicative competence means a process of information processing. His central processing system is a magic processor, working energetically to transform various environmental stimuli into systematic knowledge, which in turn guides him through communication. The performance of this processing system depends on whether its components' cooperation in dealing with the external input. No doubt, the functions of these components are crucial links of internalizing one's communicative competence. But another factor that can never be ignored is the teachers' role in this process since we have defined SLTL is a communication between teachers and students. Then, what will happen to the internalization of the students' communicative competence if the teachers' role is considered? It is effortless for us to find an answer since we have known that the part teachers play in SLTL is ostension. Of course, teachers will center upon how to make ostensions to help students optimize the co-ordination of these links and thus advance the internalization of the students' communicative competence. In the following passage, we will explore how the teachers' ostention works in each link of the process of internalization.

6.1 To Understand the Importance of Input in SLTL

When discussing the internalization of communicative competence in 5.3, we referred to the external environmental input. Given the special situation of SLTL, it is necessary for us to reconsider its vital role here.

External information input has a determining function in language acquisition. It is the first step of internalizing communicative competence and plays a leading role in this process. Though it seems that when acquiring our mother tongue, we don't have to lavish too much pains on the external input, yet its importance in SLTL can never be overstated. Why is there such a sharp contrast? The reason for this is obvious since a native language is acquired in a "natural" environment. Anywhere, whether schools, families or even the whole society, is likely to be the ideal place to study our mother tongue. Likewise any information stimuli from the environment may be ideal input for our study of native language. Little wonder it is unnecessary for us to take too much consideration into the information input. However, in SLTL, this would be a different case. To some degree, we can even say the environment for a second

language learner is often “artificial”. As we know, for one reason or another, only a small number of people study a second language in the target country. The vast majority of learners study a second language in a formal way, i.e., mainly through the channel of school education. This means most learners will have to study in created environments, which are comparatively limited. It is just because of such congenital inadequacy of environmental stimulation that we emphasize the leading role of input in SLTL, and furthermore, owing to the asymmetrical role of teachers and students in communication it will be a task of top priority for the teachers to help students organize the information input scientifically, just as Glaser says if you can aid students in organizing and processing information, you will help them to become more competent and to improve their learning both in and out of the classroom.⁵² Actually, it is no exaggeration to say a teacher’s ostention works mainly by his devotion to dealing with input, which correspondingly exerts great influences on the other steps of internalizing communicative competence.

Although people acknowledge the need for input, they tend to disagree greatly on what roles the external information input plays. According to Rod Ellis, there are three different views about the roles of input: the behaviorist, the nativist, and the interactionist.⁵³ The behaviorist view emphasizes the importance of linguistic environment, which is treated in terms of stimuli and feedback. The nativist view minimizes the role of the input and explains language development primarily in terms of the learner’s internal processing mechanism. Our study here is conducted largely within the interactionist framework that sees language development as the result both of input factors and of innate mechanisms, which interact on each other—The learner’s processing mechanisms both determine and are determined by the nature of the input. Similarly, the quality of the input affects and is affected by the nature of the internal processing system. In the belief that the internalization of communicative competence derives from the collaborative efforts of the learners and teachers and involves a dynamic interplay between external and internal factors, we begin to explore how teachers make ostentions in each link of the students’ internalization of communicative competence.

⁵² Glaser, R.. *The reemergence of learning theory within instructional research*. American Psychologist, 1991, 45: 29-39.

⁵³ Ellis, Rod, *Understanding Second Language Acquisition*, Shanghai: Shanghai Foreign Language Education Press, 1999:129.

6.2 How to Make Ostentions

As discussed previously, when making ostention teachers should keep in mind the special characteristics of all the links of the internalization process. First, we know it is only through the sensory stores could the environmental information enter our central processing system. Certainly we do hope all the input could be taken in and processed efficiently, yet actually, “not all environmental input has equal value to the students and only that input which is noticed then becomes available for intake and effective processing”.⁵⁴ In other words, attention operates at this point to select information for further processing. Then, what influences operate upon noticing and how can the features of input be made more likely to be processed? Undoubtedly, we would think of the frequency and salience of the input. Generally speaking, other things being equal, the more frequent a form, the more likely it is to attract more attention. It is not difficult to understand this because when some stimulus occurs more often, there will be more presentations and opportunities to be noticed. Some studies have indicated input may facilitate processing by modeling specific forms with high frequency. So teachers should take flexible measures to deal with the frequency of input in SLTL.

A second influence is the perceptual salience of the input. Again, other things being equal, the more a form stands out in the input stream, the more likely it is that it will be noticed. Correspondingly, the more prominent stimulus emerges clearly because it gets greater chance of impinging on the sensory stores, the less prominent recedes. However, to make some input salient is by no means easy. Generally, as to the teachers, the more impact their presentation has—for example if it is colorful, dramatic, unusual in any way — the better. Note that some learners remember better if the material is seen, others if it is heard, yet others if it is associated with physical movement (visual, aural and kinaesthetic input): these should ideally all be utilized within a good presentation.⁵⁵ For instance, to foreground a spoken word, teachers may take the following aspects into consideration: 1) the position of a phoneme in the word; 2) the emphasis given to the word in speech, i.e. whether it is stressed or

⁵⁴ Schmidt, R. ‘*The role of consciousness in second language learning*’, in *Applied Linguistics*, 1990:17-46.

⁵⁵ When making ostentions, teachers should bear in mind that individual learners differ in a number of ways, which have been identified as influencing learning outcomes. Therefore, try to adopt teaching methods best adapted to the students proves vital. As to the main variables among learners, please refer to the appendix II.

unstressed; 3) the position of the word in a sentence. Go a little further, it would be more complicated.

So far we have discussed that teachers' ostension works in the first link of internalizing communicative competence, aiding the students in taking in the environmental information efficiently by working on the properties of the input such as frequency and salience. In the following stages, things would be more complex. As we know, after the initial selection of different sensory stores, some information is lost and the rest enters the working memory for conscious manipulation. First, our central processing mechanism matches the new information with that retrieved from the permanent memory. This process is also known as pattern recognition. Second, a variety of control processes like chunking are applied to reconstruct the incoming information and finally transfer the storage to the permanent memory for the future retrieval. You may find what the working memory does is an arduous job if you still remember its notorious limitation in life span and capacity, so here priority is given to the ways of reconstructing of information that are supposed to overcome the shortcomings of the working memory.

As noted before, regardless of the nature of the information, we are rarely able to hold more than five to nine bits of information in working memory. However, we have different way to get around such limits. One way is to learn the information well enough to transfer it into permanent memory. Another way is chunking—regrouping individual pieces of information into larger chunks (units of memory proposed by Miller) so that more information can be put into the 7 ± 2 units of the working memory. These may give teachers implications that the emphasis of their ostentions in this respect should be on how to help students reorganize the oncoming information so that more information can be manipulated and stored in working memory. For example, if the students are asked to read the following list of words once and then to recall it in ten seconds:

tiger	bicycle	house	bear
apartment	lion	cheese	apple
carrot	hotel	car	bus

The students probably would not be able to recall it perfectly a few seconds later, because 12 chunks normally exceed the capacity of working memory. But if teachers make ostentions “you can divide the words into four groups—animals, vehicles,

housing and food”, then the task of recalling would be less difficult for the students.

The above example is very simple. Actually many other chunking strategies can also be used to facilitate the function of the working memory. Meanwhile, we can see chunking is to impose an organization to the incoming information, which is of equal importance for permanent memory though it is probably not related to a need to save capacity. Rather, organization in permanent memory helps to facilitate the storage and retrieval of information. As we know, although permanent memory seems to have no space limitation, yet data may be lost for various reasons such as interference, lack of retrieval cues, and perhaps even sheer decay. Therefore it is necessary to reorganize its storage. Similarly, teachers’ ostensions are crucial at this link of the internalization process. Take the above example again, if the teacher gives another instruction “you can memorize the words by making up stories containing all of the words in the list”, the students may find it much easier to memorize the list. For instance, the list could be memorized as “The houses of Bear, Tiger and Lion are in the same apartment near a hotel. They often ride bicycles to buy apples, carrots and cheese together, but when it rains, they have to take a bus or a car. ”

From the foregoing examples, we can also make sense of the enormous effect that reconstruction of information has on the students’ performance in learning. Then how is information restructured? Many studies (e.g., Bartlett’s study of schema) prove that when processing new information, we often turn to the old information in our permanent memory for help. This is often termed as retrieval.⁵⁶ Retrieval occurs at different stages of the internalization process. As noted earlier, at the first step of the information processing sequence, our sensory stores do not just mechanically register but identify the incoming information and select some for further processing. Such selection is partially based on our prior knowledge and experience. For example, when someone asks you what time it is, do you carefully observe all of the minute markings on your watch? No, your past experience enables you to ignore the irrelevant and concentrate on the section where the hands and numbers are. In addition, the reorganization of the stored information in the working memory and permanent memory is also significantly directed and affected by prior knowledge, beliefs, and experiences, which can be verified by the following experiment: first read the passage and then attempt to write down as much as possible of what you have just read.

⁵⁶ Retrieval is the act of recognizing, recalling, and reconstructing what we have previously stored in memory (Stephen N. Elliott, et al, 2000: 282).

*With hocked gems financing him, our hero bravely defied all scornful laughter that tried to prevent his scheme. Your eyes deceive you, he had said, an egg not a table correctly typifies this unexplored planet. Now three sturdy sisters sought proof, forging along sometimes through calm vastness, yet more often over turbulent peaks and valleys. Days became weeks as many doubters spread fearful rumors about the edge. At last, from nowhere, welcome winged creatures appeared, signifying momentous success.*⁵⁷

Probably, not only did you experience difficulty in recalling the exact words and the sequence of sentences in this seemingly incoherent account, you may also wonder what it was all about. Now ask your friend to do the same but give a hint in advance: this is the story about Christopher Columbus discovering America. You may find it will not take much effort for your friend to make sense of the passage because his prior knowledge about Christopher Columbus offers him a framework with which to interpret and understand the given information.

Here the contribution of one's prior knowledge or experience in processing information is pretty obvious. Further evidence can be found not only in Bartlett's "schema", Anderson's "procedural knowledge and declarative knowledge", but also the "contextual assumption"⁵⁸ Sperber and Wilson make, and even the explanatory concept "prototype"⁵⁹ proposed by Rosch. However different their theories are and whatever terms they use, their findings have all proved that the existing knowledge is a major factor to interpreting our ability to communicate appropriately in social situations—we learn to associate utterances and other communicative behavior with an appropriate group of concepts already stored in our minds. To be exact, it is a law of the internalization of communicative competence that the oncoming information is processed through mental frameworks constructed from previous knowledge or experience, while at the same time the original frameworks may be changed (reinforced or dismissed), or new ones are built up.

Given that schema-utilizing & constructing⁶⁰ is the key to the internalization process, of course, teachers should lay particular stress on developing the students'

⁵⁷ Dooling, D.J., & Lachman, R., *Effects of Comprehension on Retention of Prose*. Journal of Experimental Psychology, 1971, 88: 216-222.

⁵⁸ "Our beliefs and assumptions about the world are organized in a sort of encyclopedia in our minds under headings..." Wilson, 1999: 42.

⁵⁹ See Rosch, Eleanor, 'On the internal structure of perceptual and semantic categories'. In: Timothy, E. Moor, ed., *Cognitive development and the Acquisition of language*, London: Academic press, 1973:111-144.

⁶⁰ In this paper, we prefer the frequently used term "schema or schemata" for the framework(s) in our minds.

ability to utilize and construct schemata in SLTL. To encourage this ability in students, it is advisable to help the students understand or organize information by the underlying rather than the surface level characteristics of a situation, the necessary data, and the correct procedural knowledge, for example, to adopt advance organizers in SLTL, which Ausubel described as a form of expository teaching: providing an abstract general overview of new information to be learned that occurs in advance of actual reading.⁶¹ Suppose teaching Hemingway's *For Whom the Bell Tolls*, a teacher may summarize the major features of the novel before the students read the book. Then he could lead a discussion among the students about such concepts as loyalty and steadfastness. By doing so, the teacher could help the students ready their cognitive frameworks to incorporate the new information, which is likely to bridge the gap between students what students already know (e.g., their ideas of loyalty to friends), and what they need to know (the abstract notion of loyalty inherent in the novel) before they actually encounter the material.

What we have discussed is mainly on the aspect that prior knowledge and experience facilitate people's understanding in communication, yet we have to realize another indisputable fact that not all the frameworks in our minds facilitate language learning all the time. Just think of the famous experiment conducted by Allport and Postman.⁶² They presented a picture that shows a black man in a subway car (he is apparently talking to a white man who is carrying a razor) to one subject. Then the subject was asked to describe it to another subject who could not see it. The second subject repeated the description to a third person, who retold it to a fourth, and so on. However, in over half the trials, the razor migrated from the white hand to the black hand at some point in the retelling, and something that didn't belong to the original picture was added to. Here the common schema of blacks as more violent (This schema is stale, and nowadays schemata about the black may be completely different.) than the white seems to have influenced what subjects recalled. Their study indicates that some of our past knowledge or experience may distort understanding in communication. When it comes to SLTL, such phenomenon becomes much more salient.

In SLTL, it is often the case that students carry over their previous performance or knowledge to subsequent learning, which is usually known as transfer.

⁶¹ Ausubel, D. *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart & Winston, 1968.

⁶² Allport, G. W. & Postman, L. J. *The Psychology of Rumor*. New York: Holt, Rinehart & Winston, 1947.

Certainly, we all expect positive transfer that occurs when the prior knowledge facilitates the learning (just as the cases we have discussed earlier). However, negative transfer, which means the previous performance hinders the performance on a second one, is also a common occurrence. Then, which part of our prior knowledge or experience will be the potentials of transfer? How can we take full advantage of positive transfer, while changing the negative one? As to these questions teachers should make every possible exploration in advance so as to provide reliable ostensions to the students.

Here we would like to add a few more words about the transfer of one's native language and culture in learning a second language. Various studies show that students tend to transfer the features of their first language to the system of the second language that they are learning. Generally speaking, we could distinguish two types of transfer: one is cross-linguistic, happening at different levels of the language systems; the other is cross-cultural, and here we mean it for the pragmatic transfer that mainly arises from cultural differences. The former is relatively easy for us to deal with and large amount of work has been done, while the latter is a little bit problematic. For one thing, cross-cultural transfer may directly result in the failure of communication; for another, things involved in different cultures are often delicate and hard to handle with. But this does not mean we could do nothing with it. Instead, teachers could take various measures to help students reduce the negative transfer of cultures. Our suggestion for the teachers in this aspect is to guide students to learn more about the target language and its culture such as customs, values, and ways of thinking, feeling, and acting, then put that culture in relation with one's own to help students explore the way that two cultures may project on to each other the perception of their own. By establishing such a sphere of interculturality,⁶³ students are likely to transform cultural barriers into cultural bridge, thus paving the way for appropriate communication

6.3 A Case Study

In the previous section, we have approached how to make ostension from different angles. We believe that teachers' ostension should be student-centered, especially students' cognitive-environment-centered, so as to improve their

⁶³ See Kramsch, C. *Context and Culture in Language Teaching*. Shanghai: Shanghai Foreign Language Education Press, 1999: 205.

communicative competence. Basing upon the OI model of communication, we propose an approach as the following table shows. The case study here is based on the observations conducted at two classes of the same level for the purpose of examining whether the approach suggested in this paper is more effective than the traditional one.

- **Hypothesis:** The teaching approach based on the ostensive-inferential model of communication is more effective than the traditional one in SLTL.
- **Subjects:** 70 students of Shanghai Institute of Technology of the same level—Class One: 35; Class Two:35.
- **Independent Variable:** Traditional Teaching Approach & Teaching Approach Based on OI Model (abbreviated as “Approach II ”), shown as follows:

Traditional Teaching Approach	Approach II
Primary emphasis on developing basic skills and building understanding from the “bottom up.”	Primary emphasis on schema-utilizing & constructing, and developing understanding from the “top down.”
teacher-dominated teaching-task-concerned Classroom activities are usually based on textbooks and workbooks.	student-centered communicative-competence-concerned Teachers guide students in learning. Classroom activities are usually based on primary data sources and manipulation of materials.
1) Vocabulary & grammar first. (e.g., detailed explaining followed by drillings)	1) Warm-up activity (helping students ready for some topic and activating the relevant frameworks in their minds).
2) Text: bottom to up (e.g., analyzing the text mainly by reading and translating)	2) Assist students understanding the materials and reconstructing frameworks in different ways (e.g., Teach the vocabulary in the form of “chunks” instead of isolated words; the text is comprehended by giving cues; do exercises in the workbook selectively and offer supplements to guide further learning.)
3) Exercise: answer-focused (e.g., centering on the workbook and explaining the excises one item after another)	3) Reinforce the students’ ability to communicate in what they have learned.

- **Dependent Variable:** results of the tests after the teaching task
- **Procedures of the Experiment:**

The teacher chooses Unit 1-8 of College English Two⁶⁴ as the teaching materials for the experiment. According to the syllabus, the teaching task is to be finished within 18 weeks (four periods each week). While carrying out the teaching task of each unit, the teacher adopts traditional teaching approach in Class 1, and Approach II in Class 2.

- **Test and Analysis:** When finishing 2 units, the students are required to take both oral and written exams at the same time (The same paper is used in both classes), so the students are tested 4 times. The statistics of the results are as follows:

Mean		Mean of Class 1	Mean of Class 2
Test			
Test 1	oral	67.51	74.35
	written	75.60	80.58
Test 2	oral	68.00	78.56
	Written	80.23	84.75
Test 3	oral	67.95	82.63
	written	78.56	81.20
Test 4	oral	65.58	83.55
	written	79.20	87.42

Mean: the average score of the students in each test

Comparing the above statistics, we find that the performance of Class 2, where Approach II is adopted, tends to be better in each test, whether oral or written, than that of Class 1, in which we take the traditional approach. Moreover, the mean of Class 2 is on the rise in each test. All these show us (at least partially) that teaching approach based on the ostensive- inferential model of communication is more effective than the traditional teaching approach in SLTL.

⁶⁴ 董亚芬, 1997, 《大学英语》(精读)第二册。上海: 上海外语教育出版社。

Conclusion

We are unanimous that SLTL is a form of communication between teachers and students, aiming at cultivating the students' communicative competence. However, in practice it is often taken as a mechanical process of transmission, i.e., transferring knowledge about a second language from teachers to students, which, hardly surprisingly, is less productive than expected. Now it becomes a matter of great urgency to improve the quality of SLTL. The crux of this problem, as this paper suggests, is to reconsider the nature of SLTL and tackle it more practically.

To understand the nature of SLTL, we first review the characteristics of human communication and then contrast three different views on communication: the code model of communication, the inferential model of communication and the ostensive-inferential model of communication. The traditional code model interprets communication as a process of message transmission. Grice's inferential model emphasizes the importance of inferential recognition of the communicator's intention, but Dan Sperber and Deirdre Wilson's model stress the relationship between cognition and communication. Here communication is described as an activity of ostension and inference between the communicator and audience, with the purpose to alter each other's cognitive environment. In light of Sperber and Wilson's OI model, we redefine the characteristics of SLTL, pointing out that SLTL is asymmetric in essence. Further exploration is made on the internalization of the student's communicative competence and how teachers make ostensions in this process.

So far we have made considerable discussion about how to promote the students' communicative competence in SLTL, yet in many respects further work is desirable. Among the most important is how to put theory into practice. On one hand, it is hard to track down an appropriate interface between theory and the practice of SLTL. Another knotty problem is whether the research can cope with the complex real world situation since not a single theory can bring together all the diverse factors in SLTL. All these indicate that our emphasis should be on making our research more fruitful. In a word, there is no end to learning, nor is there to the study and research of a language.

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Appendix I

Table 1:

There are important differences between a teaching approach based on cognitive constructivism and a more traditional teaching approach. The following table summarizes some of the main differences:

Some Differences Between Traditional and Constructivist Classroom	
Traditional Classroom	Cognitive Constructivist Classroom
The primary emphasis is on developing basic skills and building understanding from the "bottom up."	The primary emphasis is on the big ideas and developing understanding from the "top down."
Classroom activities are usually based on textbooks and workbooks.	Classroom activities are usually based on primary data sources and manipulation of materials.
Students are viewed as passive recipients of information supplied by the teacher-expert.	Students are viewed as knowledge seekers, creating their own personal understandings of information.
Teachers are viewed as experts, providing information to students on predetermined topics.	Teachers are viewed as guides for learning, assisting as students develop and answer their own questions on topics and/or activities of interest to the student.
A limited number of correct answers exist and are accepted.	Students' hypotheses, questions, and views are accepted and used to guide further learning.
Students often work individually on teacher-developed assignments.	Students often work collaboratively on projects of their own design.
Assessment is usually done separately from instruction, often taking the form of objective tests.	Assessment is usually incorporated into the learning process, often taking the form of teacher observations, student performances or exhibition of projects, and/or student self-assessments.

Some Differences Between Traditional and Constructivist Classroom
(source Adapted from J.G. Brooks & M.G.Brooks, 1993.)

Appendix II

Table 2:

There is a veritable plethora of individual learner variables which researchers have identified as influencing learning outcomes. The following table lists the main variables mentioned in three surveys.

Altman(1980)	Skehan(1989)	Larsen-Freeman and Long(1991)
<ol style="list-style-type: none"> 1. Age 2. Sex 3. Previous experience with language learning 4. proficiency in the native language 5. personality factors 6. language aptitude 7. Attitudes and motivation 8. General intelligence (IQ) 9. sense modality preference 10. Sociological preference (e.g. learning with peers vs. learning with teacher) 11. Cognitive styles 12. learner strategies 	<ol style="list-style-type: none"> 1. language aptitude 2. motivation 3. language learning strategies 4. Cognitive and effective factors <ol style="list-style-type: none"> a. extroversion/introversion b. risk-taking c. intelligence d. field independence e. anxiety 	<ol style="list-style-type: none"> 1. Age 2. Socio-psychological factors <ol style="list-style-type: none"> a. motivation b. aptitude 3. personality <ol style="list-style-type: none"> a. self-esteem b. extroversion c. anxiety d. risk-taking e. sensitivity to rejection f. empathy g. inhibition h. tolerance or ambiguity 4. cognitive style <ol style="list-style-type: none"> a. field independence b. category width c. reflexivity/impulsory d. aural/visual e. analytic/gestalt 5. hemisphere specialization 6. learning strategies 7. other factors e.g., memory, sex

Factors listed as influencing individual learner differences in language learning in three surveys.
(Source Adapted from Rod, Ellis, 1994.)

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