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**A COGNITIVE-PERCEPTIVE APPROACH TO LANGUAGE TEACHING:  
THE CASE OF EXPLICIT GRAMMAR**

**ABSTRACT.** This paper proposes a theoretical model, which justifies the teaching of grammar rules within those courses specifically designed to exploit the innate capacity to acquire language, i.e. that species-specific ability whereby linguistic information is intuitively processed and encoded into an implicit language source from whence it is retrieved to direct language production. The parameters for the provision of a suitable grammatical input are directly extracted from the model.

It is highlighted that the perception of syntax, which results from a filtering by the brain, can only be mediated or verified within a communicative context, that is, by using one or more of a set of interactive modes. It is argued that a refusal by the teacher to provide an explicitly-requested grammatical input is inconsistent with the model and must be considered a departure from the same. From an empirical examination, it would appear that any such departure provokes an interference with or a breakdown in the interaction between teacher and learner with the result that the efficiency of the entire model is put into jeopardy.

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<sup>1</sup> S. Filice sections 1, 4, 5, 7; R. Rizzo sections 2, 3, 6, 6.1.

**Keywords:** cognitive-perceptive; interactive mode; implicit/explicit language

**ABSTRACT.** Questo articolo propone un modello teorico che giustifica l'insegnamento della grammatica all'interno di quei corsi specificamente progettati per sfruttare la capacità innata di acquisire un linguaggio, vale a dire quella abilità specifica in cui l'informazione linguistica viene processata intuitivamente e codificata in una fonte di linguaggio implicito da dove viene recuperata per dirigere la produzione linguistica. I parametri per la fornitura di un input grammaticale appropriato vengono estratti direttamente dal modello.

Si evidenzia che la percezione della sintassi, che risulta da un filtraggio da parte del cervello, può essere solo mediata o verificata all'interno di un contesto comunicativo, cioè utilizzando uno o più di un insieme di modalità interattive. Si sostiene che il rifiuto da parte dell'insegnante di fornire un input grammaticale esplicitamente richiesto è incoerente con il modello e deve essere considerato un allontanamento dallo stesso. Da un esame empirico, sembrerebbe che una tale distanza provochi un'interferenza o una rottura nell'interazione tra insegnante e studente con il risultato che l'efficienza dell'intero modello è messa a repentaglio.

## 1. Introduction

Today, in English as a Second Language (ESL) and English as a Foreign Language (EFL) grammar teaching methods are an ongoing debate. Some experts, such as Terrell (1991), Norris and Ortega (2002), and Ellis (2006), to mention some, support the idea of Explicit Grammar Instruction (EGI); they consider grammar as the backbone of languages advocating that learners should be presented with explicit grammar in their lessons. Others, however, think that knowing the grammar doesn't necessarily lead to language mastery. They contend that focusing on explicit grammar teaching produces unsuccessful language users. Krashen (2003) defends the idea of avoiding EGI since it may interfere with a natural acquisition process. Which one of these methods may be considered the best option to guarantee an optimal learning process?

Ellis (2006), along with Long (1983) and Norris and Ortega (2002), supports the idea of the importance of including explicit grammar in a second language acquisition process. Ellis explains that grammatical deficiencies may cause a breakdown in communication and interfere with an intended message, therefore, although language learners need to speak fluently, they also need to speak accurately. Thus for purposes of clarity and coherence to the recipient, it may be suggested that explicit grammar instruction is essential in second language acquisition. Similarly, Richards (2002) asserts that grammar-based methodologies have been replaced by communicative approaches giving more importance to fluency than to accuracy. As a

result, the teaching of grammar has been isolated from language acquisition and is causing a major concern. Students encouraged to speak for communicative purposes focus their speech on meaning without paying any attention to grammatical accuracy. Nevertheless, there are grammatical mistakes that can change meanings and consequently interfere with communication. Richards (2002, p. 38) explains that there is a grammar-gap problem in the development of linguistic competence and he affirms that “what has been observed in language classrooms during fluency work is communication marked by low levels of linguistic accuracy”.

The teaching of linguistic forms is not only backed by theory but also by recent studies. For instance, Norris and Ortega (2002) demonstrated that teaching grammar is appropriate and that it may make a difference in the results obtained in the language learning process. Based on such studies, Ellis (2002, p. 223) explains that “not only did Form Focused Instruction make a difference but also that it made a very considerable difference” and concludes that there is “ample evidence to show that form-focused instruction (FFI) has a positive effect on second language (SL) acquisition”.

Teachers who focus on language forms, explaining the grammar rules and practicing through drilling hold a traditional view of language teaching. They equate language to grammar mastery and accurate usage and may create disaffected students who can produce correct forms on exercises and tests, but make errors when they try to use the language appropriately in contextualized situations. By contrast, other

teachers think that people can acquire language without any overt grammar instruction much in the same way children learn their mother tongue. They believe that conscious use of language forms may result in high affective filter and consequently poor language proficiency and fluency. These teachers prefer language use to language usage and focus on meaning rather than form. For language activities, they provide contextualized and authentic language and do not refer to rules or forms at all.

In recent years, the degree of implicitness and explicitness of grammar rules has received much attention. The result of an implicit instruction aims to provide learners with conditions under which they can internalize the pattern without awareness whereas an explicit instruction involves teaching some rules during the learning process and encouraging them to develop metalinguistic awareness of the rules (Dekeyser, 1995, as cited in Ellis, 2009). In this article, we promote the importance of explicit grammar when deemed necessary and when specifically asked for by the students presenting a theoretical model of the teaching/learning process.

## **2. Implicit/Explicit L2 learning and knowledge**

Distinguishing between implicit and explicit knowledge is of great significance for language teaching. Thanks to studies in language education, applied linguistics, psychology and cognitive neuroscience, we know that implicit and explicit learning are distinct processes, that human beings have separate implicit and explicit memory

systems, that there are different types of knowledge of and about language stored in different areas of the brain, and that different educational experiences generate different types of knowledge (Ellis, 2008).

According to Ellis, R. (2009), implicit language learning takes place without either intentionality or awareness. Schmidt (1994, 2001) distinguishes two types of awareness: awareness as noticing (involving perception) and metalinguistic awareness (involving analysis) and argues that noticing typically involves at least some degree of awareness. Thus, from this viewpoint, there is no such thing as complete implicit learning and so a better definition of implicit language learning could be ‘learning without any metalinguistic awareness’ Explicit language learning is necessarily a conscious process and is generally intentional as well. It is conscious learning ‘where the individual makes and tests hypotheses in a search for structure’ (N. Ellis, 1994, p. 1). As Hulstijn (2002, p. 206) puts it, “it is a conscious, deliberative process of concept formation and concept linking”.

The distinctions related to implicit/explicit learning and knowledge originates in cognitive psychology, which distinguishes implicit and explicit learning in two principal ways (Ellis 2008):

(1) Implicit learning proceeds without making demands on central attentional resources. As Ellis (2008, p. 125) says, “generalizations arise from conspiracies of memorized utterances collaborating in productive schematic linguistic productions”. Thus, the resulting knowledge is subsymbolic, reflecting statistical sensitivity to the

structure of the learned material. In contrast, explicit learning typically involves memorizing a series of successive facts and thus makes heavy demands on working memory. As a result, it takes place consciously and results in knowledge that is symbolic in nature (i.e. it is represented in explicit form).

(2) In the case of implicit learning, learners remain unaware of the learning that has taken place, although it is evident in the behavioral responses they make. Thus, learners cannot verbalize what they have learned. In the case of explicit learning, learners are aware that they have learned something and can verbalize what they have learned.

Rod Ellis (2009) identifies the criteria that may be used to distinguish implicit and explicit L2 knowledge as follows:

- Implicit knowledge is tacit and intuitive whereas explicit knowledge is conscious;
- Implicit knowledge is procedural whereas explicit knowledge is declarative;
- L2 learners' procedural rules may or may not be target-like while their declarative rules are often imprecise and inaccurate;
- Implicit knowledge is available through automatic processing whereas explicit knowledge is generally accessible only through controlled processing;
- Default L2 production relies on implicit knowledge, but difficulty in performing a language task may result in the learner attempting to exploit explicit knowledge;
- Implicit knowledge is only evident in learners' verbal behavior whereas explicit knowledge is verbalizable;

- There are limits on most learners' ability to acquire implicit knowledge whereas most explicit knowledge is learnable;

- The learner's L2 implicit and explicit knowledge systems are distinct;

- L2 performance utilizes a combination of implicit and explicit knowledge.

There is still a lot of controversy and conflicting views on the overall role of implicit and explicit knowledge in SLA. Thus, further insight in these areas is a major challenge for all concerned.

### 3. Clarifying key terms

Before presenting the model, it might be useful to clarify the terminology used in both title and text although it has been directly taken from the linguistic and psycholinguistic literature:

- **perception** concerns those operations whereby knowledge is integrated via the sensory organs (cfr. Apperception – de Beaugrande and Dressler, 1981)
- **cognition** deals with the process whereby this knowledge is stored, organized and used;
- **recognition** means a successful match between perception and prior cognition;
- **implicit language source** (Bialystok, 1978) describes the system wherein unanalyzed information about language is stored;



- **explicit linguistic knowledge source** contains a set of linguistic features, which can be examined, articulated and manipulated;
- **Interactive modes** (this paper) refer to the various means whereby interaction can take place. Mode is defined by its first dictionary meaning, which is a manner of doing or acting whereas interactive owes its being to the invaluable works of Wilga Rivers.

#### 4. Some preliminary observations

It is obviously implied by the present model (fig. 1) that some teachers should be teaching grammar and refuse to do so! This might seem to suggest that the teacher is some kind of irrational being who takes a perverse delight in frustrating the real needs or desires of the learner. Nothing could be farther from the truth. Many caring and dedicated teachers are convinced with Bialystok (1978) that linguistic interactions during informal conversations are relatively automatic and that the informal assimilations of information into an implicit knowledge source is a more appropriate learning technique than those analytical approaches which relegates knowledge into explicit sources.

Krashen (1977) holds much the same view of the learning process. In describing research into the different ways of accumulating knowledge, he suggests that unconscious acquisition is of perhaps greater value in the communicative process than conscious learning since data confirm that conscious grammar is most available

in grammar tests, is hardly available at all in oral communication, and is only used to a moderate degree in composition (p. 153).

Lyons (1968) put forth a proposal, along completely different theoretical lines, but whose implications for the teaching of grammar are somewhat similar. He believes that though there is considerably more to language than can be explained by a conditioned reflex (cfr. Chomsky, 1965), there does appear to be a certain automatic element which can perhaps be explained in behaviorist terms.

Since it is impossible to refute the experimental data provided by both Bialystok and Krashen without evidence to the contrary, we must at least consider the possibility that our learners are more likely to use the system correctly if their learning approximates second-language acquisition in a target-language environment. To suggest that it might approximate first language acquisition is a rather absurd. It is obvious that learners who fully possess the complex code of their mother tongue will have no need to replicate the entire process since they have already developed cognitive strategies enabling them to exploit such resources as a general knowledge of the world, contextual clues and previously acquired linguistic generalizations.

However, it must be remembered that second language acquisition is a time-dependent phenomenon and that greater attention should be paid to time as a criterion variable (Seliger, 1981). This means that in providing a linguistic input from whence syntactic data can be informally assimilated into the implicit language source, the prime difficulty consists in delimiting the problem space so that the learner can easily

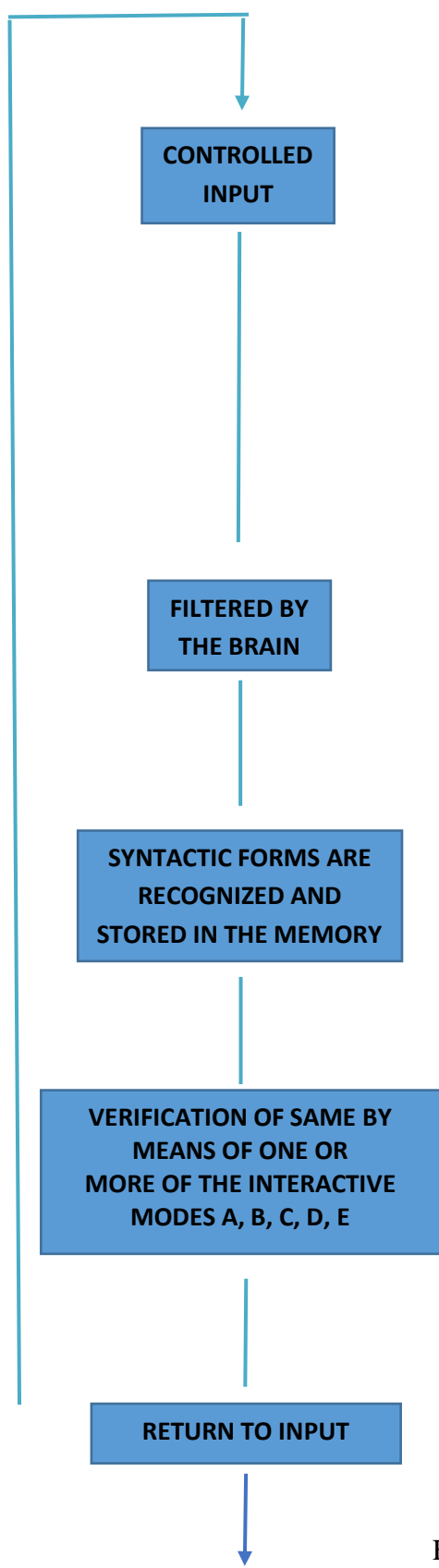
and quickly recognize syntactic structure where recognition means a successful match between perception and prior cognition. This, however, is not always possible. It might, in fact be argued that it is never possible since the teacher cannot know what is going on in the learner's mind.

Assuming then that the teacher can provide a suitable input—an assumption that still belongs to the sphere of science fiction—what must be done in face of explicit grammatical questions? That they must be answered, is the only reasonable conclusion to the present model. It is in fact totally irrelevant whether or not the particular grammatical input provided is of any practical value. What matters is keeping open the communication line between teacher and learner.

Good learning can only take place in an environment where the learner can obtain affective support whenever it is required. Interpersonal relationships between teachers and students are indeed an important aspect of the classroom climate. The validity of the method can often be secondary to the interpersonal relationship between teacher and learner, which can affect the quality of students' motivation to learn and classroom learning experiences. Research shows that the most influential factor contributing to student achievement is the teacher (Stronge and Hindman, 2003; Sanders, 2000; Akbari and Allvar, 2010; Davis, 2003). When students have supportive relationships with their teacher, they feel more motivated and engaged in the learning process. Weber, et al., 2005 (as reported in Mazer, et al., 2013, p.255), found that when students consider classroom work to be meaningful, have the

opportunity to demonstrate their competence, and believe their input is vital to the course, they are motivated to communicate with their instructors for relational, functional, and participatory reasons. Interested and involved students ask questions because they want to feel knowledgeable in the subject matter and this cannot be ignored. In fact, according to Davis (2003), teachers can influence students' social and intellectual experiences via their abilities to instill values in children such as the motivation to learn; by providing classroom contexts that stimulate students' motivation and learning; by addressing students' need to belong; and by serving a regulatory function for the development of emotional, behavioral, and academic skills.

## THE MODEL



Although Krashen states that acquisition can only take place when the input is **comprehensible**, the term **controlled** has been preferred in this paper since comprehensible input implies perfect knowledge of what goes on in the learner's brain. **Input** is by definition controlled from **without**, i.e. by the teacher or teacher-selected written or spoken text in a teaching/learning situation. However, just as the native speaker can deploy **opting-out** or **off-putting** strategies to control linguistic input, so can a learner **mediate/refuse** and consequently control incomprehensible input.

Input is examined with the help of such resources as general knowledge of the world, contextual clues and previously acquired linguistic information.

The linguistic information thus obtained can be either perfect, imperfect or incorrect.

The only place where verification of linguistic data can possibly take place is in an **interactive context**.

The **practical value** or otherwise of this loop is **irrelevant** to the model.

Fig. 1: Cognitive-perceptive Model

The word interaction has been used here in the widest possible sense. It does not necessarily imply the physical presence of an interlocutor who can often find a successful substitute in the computer, in the language laboratory or even in the grammar book in the specific case of grammatical queries. An examination of these various interactive modes (fig. 2) has interesting implications for the teacher.

Interactive mode	Implications
a) With the native speaker	<ul style="list-style-type: none"><li>• grammatical explanations are often asked for and/or given</li></ul>
b) With peers	<ul style="list-style-type: none"><li>• grammatical explanations are often asked for and/or given</li></ul>
c) With the computer / internet	<ul style="list-style-type: none"><li>• specifically-designed software and online websites enable grammatical explanations to be asked for and given</li></ul>
d) With the language laboratory	<ul style="list-style-type: none"><li>• most of the current materials include specific practice of grammatical rules</li></ul>
e) With the grammar book	<ul style="list-style-type: none"><li>• grammatical explanations are asked for and given</li></ul>

Fig. 2: interactive modes and relative implications

Given a, b, c, d, e, it is inconsistent with the model to hypothesize that the teacher alone should refuse to provide grammatical input. In fact, any such refusal constitutes a departure from the model and provokes an interference with or a breakdown in the interaction between teacher and learner. For further insights on interactions between type of instruction and type of language feature, see Spada and Tomita (2010).

## 5. Pedagogical implications

The pedagogical implications of the model (fig. 1) are immediately apparent. The teacher should always supply a grammatical input X at a time Y where both X and Y are determined by the learner.

### a) Determining X

The particular grammatical input to be provided is determined both by the learners' explicitly stated needs and by their ability or desire to deal in abstractions. Since a description of syntax is to be considered unsuitable if it fails to meet the specific needs of the learner, the teacher must be sufficiently flexible to vary the form of this input which can be couched in either formal or informal terms or even implied by concrete examples of language use.

### b) Determining Y

A grammatical input should be provided whenever the learner specifically asks for examples or explanations of language usage or whenever communication fails to occur because of incorrect or incomplete recognition of grammatical rules.

It can be rightly argued that the second case belongs to a teaching rather than a learning model. However, the teacher does have a responsibility to anticipate the needs of those learners who are either too shy to request help directly or too frustrated

to realize that a lack of correct syntax can often cause a breakdown in communication.

It is worth noting that although both native speaker and peer will often correct systematic errors whether they impede communication or not, it is in no way implicit in the present model that the teacher should feel obliged to do so.

## **6. Discussion**

It is obvious that the language learning process would be better modelled by an interactive system wherein the semantic, pragmatic and syntactic levels intertwine. Apart from any other considerations regarding the nature of language, a model, which sees syntax as a completely autonomous component could never function in real time since an investigation of all the alternative structures available would lead to an over-computation requiring vast operation times. However, in the case of the present model it did seem important to simplify its visual appearance with the result that the pragmatic and semantic levels have been eliminated from the flow diagram although they are implicit in the accompanying text.



## 6.1 Controlling the input

It has been already suggested in this paper that the primary reason for controlling the input is that of delimiting the problem space so that the learner can easily intuit content. The learner in a target-language environment is subjected to such exposure that a single failure to understand is practically irrelevant to the whole acquisition process. But classroom time is so limited and so costly that the problem of efficiency must of necessity be central to the debate. What criterion or criteria should be used in selecting a particular input? Slobin (1973) speaks of an input, which is simple to process by the reader, where simple is defined by a set of rules for intelligibility and has no implications as to the complexity of the language system or code. The crucial characteristic in determining whether or not language acquisition takes place would appear to be this simplicity parameter—a parameter as yet but poorly defined.

In recent years, there has been a tendency to conceptually dichotomize the source and nature of linguistic knowledge. Bialystok and Frohlich (1977) speak of a fundamental difference between implicit and explicit language sources; Krashen (1976) describes a monitor whose application in formal as opposed to informal speech requires that the speaker be focused on the former rather than on the meaning etc. Stern distinguishes between formal and functional language use (1974, 1978), whilst Olsen points to the difference between the written and oral forms of language (1977). But the pair of descriptors with the most far-reaching effects from a

pedagogical point of view has been that of linguistic and communicative competence (Hymes, 1972) which has brought about changes in the instructional goals not only of the single teacher but also in those of entire educational systems.

## **7. Conclusion**

Most teachers may realize that communicative competence is attained neither by grammatical-translation methods nor by a repeated drilling of grammatical structures. They are aware of the fact that many learners taught by traditional methods will describe all the rules of a language yet fail to demonstrate this knowledge in spontaneous speech. Generally speaking, however, from our experience we have observed that when learners are informed of the grammatical rules, they feel more comfortable, self-confident and motivated in the classroom.

Another factor that should not be neglected by teachers is Student's Learning Style. Is the learner comfortable with the teaching technique adopted? Does the learner work better and feel more comfortable with inductive or deductive methods? For a class of mixed learning styles the teacher needs to try to provide instruction using as many different methods as possible, which also helps to create a pleasant environment and to connect students by making them feel participants of the whole learning design. In other words, each class is going to have different grammar needs and goals and it is up to the teacher to determine these goals and provide the means

with which to meet them. Fluency and accuracy, we believe, are two ingredients that make up a practical and more integrated learner of the language. Although recent studies confirm that explicit teaching strategies have a better effect on improving the EFL learners' L2 grammar, further research is required in this direction.

In their anxiety to promote language acquisition in as natural an environment as possible, many teachers tend to forget that learners possess two sets of skills, which coexist quite happily in their use of a first language alongside those skills, enabling them to make grammatical decisions in real time with no recourse to an explicit grammar; they also possess formal skills, which are bound up with literacy and metalinguistic awareness. These are the skills, which enable them to focus only on the form as opposed to the meaning of a language. To deny their existence is to refuse to accept an essential component of the language acquisition process.

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