

# The emergentism in language learning: the study of a later adult student

## *O emergentismo no aprendizado de línguas: um estudo de um aluno em adulez avançada*



### *Cláudia Silva Estima*

Doutora em Estudos da Linguagem (UEL). Professora do Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul. Professora do Instituto Federal do Rio Grande do Sul

Recebido para publicação em dezembro de 2010.

Aprovado para publicação em junho de 2011.

### **Resumo**

O objetivo desta pesquisa é de apresentar um estudo de caso do processo de aprendizado que uma aluna brasileira em idade de adulez avançada apresenta ao estudar inglês como língua estrangeira, de modo que seja possível caracterizar a teoria ou teorias que sustentam o processo dessa aluna. Os relatos de diário de classe da aluna, escritos ao longo de um curso de inglês, foram analisados segundo a teoria do emergentismo e o pensamento complexo. As evidências identificadas nos dados indicam que a aluna aplicou uma série de recursos para aprender a língua alvo, caracterizando um processo complexo que abarca mais de uma simples teoria de aprendizado de línguas.

**Palavras-chave:** Língua estrangeira; aprendizado; adulez.

### **Abstract**

The objective of this paper is to present a case study of the learning process that a Brazilian later adult student presents when learning English as a foreign language so that it can be characterized the theory or theories that underlie this student's paths for learning. The reports of this student's diary class, written along an English course, where analyzed in terms of the traits of the emergentism theory for language learning and the complex thought. The evidences from the data show that the student applied a variety of resources to learn the target language, characterizing a complex process which encompasses more than a single theory of language learning.

**Keywords:** Foreign language; learning; elderly.

## **1 Introduction**

Understanding students' learning process of a foreign language has been a continuous concern in Applied Linguistics. Several theories have tried to characterize, to organize, to settle, and to sequence learning by making considerations about the role of input as well as about psicomotors, neurological, cognitive, affective and interactional aspects. These theories encompass to explain some of the variables involved, but still fail to explain others.

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## **2 A theoretical perspective to learning**

Some theories have tried to explain language learning and the variables involved in the process. Early studies looked at language learning as behaviors which resulted from external stimulus to the individuals; a theory named behaviorism.

*Say what I say* is the sentence Spada and Lightbown (2000) use to define behaviorism. According to this theory, repetition generates learning. There is a belief that learning is the result of imitation which is largely based on memory use. The behaviorist theory includes three types of learning: the classical conditioning, which involves experiments carried out with animals in laboratories, as the ones described by Pavlov. These experiments have lead to the description of formulations about learning based on the theory of stimulus-response, the operant conditioning, which includes formulations about reinforcement by rewarding, and social learning, which emphasizes that imitation will occur by the imitation of most appropriate considered models (GLEASON and RATNER, 2000). This theory states it is the environment that is a determining factor to learning to people, who are considered *tabulas rasas*, that means, minds which are totally blank (SKINNER, 1974).

Noting that the behaviorist theory does not account for cognitive and mental

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processes applied in learning, researchers propose the cognitivist psychology. In the cognitivist theory, *everything is in your mind*, according to Spada and Lightbown's (2000) characterization. In this theory, learning is analyzed and focused on the mental processes involved in learning. There is a belief that children are biologically programmed to language, because they are provided with a language acquisition device, a black box, according to Chomsky's terms. Therefore, learning is a result of a mental comprehension of the internal system of the language. In this period, Chomsky (1971), by the observation of the learning stages which coincide in different languages, states that people have certain innate knowledge in regard to a universal grammar. That is to say, common principles which rule all languages. This is innate and refers to the nature of all languages of the world; this belief has generated the innatist theory. The proposers of cognitivism say that learning is a result of the individual's exposition to a limited number of samples of language, those of which activate the language acquisition device.

Several studies, though, observed that learning neither resides solely in the environment, nor in the mind of the individuals. The socio-interactionist view, characterized by *a little help from my friends* (SPADA and LIGHTBOWN, 2000), proposes

that learning is a result of the interaction between the child and the environment which he-she is inserted. The role of social interaction in this theory of learning is fundamental to the development of a language.

The socio-interactionists say that learning a language is the result of interaction and mediation, and not from the single exposure to the language as the cognitivists claim. According to Gleason and Ratner (2000, p. 415), this means that social individuals acquire a language as a consequence of their need to communicate with other people. Important proponents of this theory are Piaget e Vygotsky. Piaget (1986) states that a language develops as a system of symbols to express knowledge acquired by the interaction with the physical world; Vygotsky (1989) argues that thought is essentially internalized language and is the result of social interaction (SPADA and LIGHTBOWN, 2000). That is to say, an interactive environment helps the child to move forward to higher levels of knowledge.

The socio-interactionist theory answered many of the issues involved in language learning, but still it was very often taken as a homogeneous process, which tried to find systematic regularities.

Ellis and Larsen-Freeman (2006) propose a debate to look at language and

language use from a different point of view. The authors depart from the understanding that each variable in language learning constitute a small part of a complex picture. According to them, languages are multi-agent, complex, dynamic, nonlinear, an adaptive system, chaotic (at times), open, self-organizing, characterized by strange attractors, which constitute a definition that conflates a property theory with a transition theory. The variables are not only many playing their parts, but also interacting, sometimes overriding each other in a nonlinear fashion, modulating and mediating each other, attenuating and amplifying each other, diverging or conveying as powerful multiple effects.

Ellis and Larsen-Freeman (2006) claim that a great deal of variability in language learning can be observed and, therefore, a multilevel and interactional analysis is required in terms of learners factors (age of arrival, length of residency), instructional factors (degree to which the learner has been exposed to explicit study of L2), discourse factors (genre type and informational overload), social factors (interlocutor norms and status), and motivational factors (integrative motivation, respect for teachers, desire to succeed at school), which all conspire.

As defined by the Ellis and Larsen-Freeman (2006), emergentism conceives a pattern of language and language use which is neither restricted to innatism nor to the environment triggering the language process by the exposure of input; but rather, it emerges from the interaction between the agent (person's ability) and the agent's environment ( the context affordances). “Language is complex. Learners are complex”, say Ellis and Larsen-Freeman (2006, p.560).

Larsen-Freeman (2006) proposes that the emergentist theory of language learning is a ‘make-do solution’. She claims that language is dynamic and adapted to a specific context in progress. This process is defined as not discrete and stage like, so that behaviors can be progressive, others, regressive; gradual or sudden. The process, according to her, is not the unfolding of some prearranged plan, but a system adapting to a changing context, which is transformed in a uniquely and individual manner at various levels, degrees and times. Larsen-Freeman (2006) emphasizes that there is little fixed about language.

### **3 A theory of theories**

Morin (2003) proposes that we have to resist the temptation of rationalizing theories,

because theories are not knowledge, but they make it possible to have access to knowledge, they are not the arrival point, but a possibility of a departing point. Therefore, theories are not a solution but a possibility of dealing with a problem.

Morin (2000) claims that we should not rationalize reality, reducing it to a one single idea or intending to capture what we understand by reality in the order and in the coherence of a paralyzing system. Moreover, we should avoid normalization, which eliminates the weird, the irreducible and the mysterious. Theories which reflect the thoughts of a society, as Morin (2003) points out, need to reconstitute the active role of the subject, who does not reflect society, but who reconstructs it by observing, remodelling and thinking reality. The subject has to be seen as the one who searches, constructs and thinks.

Morin (2003) proposes the complex thought, which breaks with the dictatorial paradigm of simplification, disarticulation and fragmentation. In Morin's (2003) terms, the complex thought is characterized by the simultaneous impossibility and the need of a totalization and of a unification to a synthesis. Therefore, there is this tendency, but the complex thought combats this aspiration. Individuals are conscious that knowledge, thought and any piece of work are in an unfinished state.

Morin (2003) calls the attention that, in education and in learning, it is necessary to be conscious about the unfinished, so that any work, instead of disguising its limits, makes them evident. The complex recaptures notions like uncertainty, the incapacity of formulating an eternal law, of conceiving an absolute order; it is never complete. The order is relative; the order is not absolute, substantial, unconditional and eternal, but relational and relative, depending on the conditions, the existence and the continuation. It makes a criticism to a way of thinking that cuts, reduces and unidimensionalizes reality. It tries to correct a simplifying thought which tries to make it transparent the link between thought, language and reality, postulating an illusion of an absolute normalization of 'a giant, a silent and an astounding reality' (MOURIN, 2003. p. 30). Complexity is not something to be made simple, but it translates a doubt. In Morins (2003, p. 59) words, "the complex thought knows it perfectly that generalized certainty is a myth". According to the complex thought, reality can not be captured by a single capacity, faculty or skill, but only the conjunction of all of them, which is much more than the addition of them all.

#### **4 Methodology**

In order to throw some light into the discussion about an understanding of the characteristics of foreign language learning process of English by later adults, this study presents a case study of a later adult student (Ana, 57 years old<sup>1 2</sup>), whose diary class reports are analyzed. The reports of the diary were written in the end of every class, during an average of 20 minutes along a course of foreign language in the year of 2007. Students were encouraged to write freely about their experience in learning writing reports in their mother language (Portuguese) with insertions of the target language (English). Ana's reports were chosen to be studied in terms of the emergentism theory and the complex thought which can be identified in her writings.

## 5 Data analysis

A series of 15 reports from Ana's diary are presented below, in which are analyzed the aspects that characterized her learning process as an expression of the emergentism theory (LARSEEN-FREEMAN,

2006) and the complex thought (MORIN, 2003).

Ana's first report in her diary class expresses that her learning process, as she perceives it, affects her at two levels: socially and psychologically.

Example 1:

*Eu estou gostando muito das aulas de inglês. São muito divertidas e fazem bem para a mente. Gosto do seu jeito de ensinar porque nos deixa muito à vontade, e as pessoas participam nos deixando muito à vontade.*

She takes an active role as a subject, observing, reconstructing and thinking reality by the identification of the elements that make a nice environment for her learning, *gosto do seu jeito de ensinar* and *as pessoas participam*.

She formulates an understanding for her learning which involves the conjunction of more than one gain by identifying the benefits of learning to her health, mind and cognition, by saying, *faz bem para a mente*, and by highlighting the importance of the social interactional aspect in creating a nice atmosphere for learning, when she says, *são divertidas, gosto de jeito de ensinar, deixa muito à vontade*.

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<sup>1</sup> Ana is a fictitious name for the subject.

<sup>2</sup> Ana was a member of a group of 12 students, whose instruction consisted of a class meeting once a week, during one hour and a half, in a 50-hour English course for beginner students, in 2007. The methodology applied was the communicative methodology by the application of the task-based approach and I was the teacher of the class.

In example 2, Ana identifies the benefits of using prior knowledge in learning the new language, like in, *despertam coisas que vivemos*. In this report, similarly to example 1, she points out the importance of the social interaction between the teacher and among her classmates.

Example 2:

As aulas com música são ótimas, pois despertam coisas que vivemos há muito anos. Frank Sinatra foi um grande cantor e é ótimo aprender com suas músicas. *O grupo é legal e a teacher é muito interessante com a maneira de ensinar.*

According to her words, her learning process is triggered by the interrelation with the others. Her learning is not individual, but supported and constructed among the teacher, *a teacher é muito interessante*, she says, and her classmates, *o grupo é legal*, she states . The *other* seems to be indispensable.

A series of examples are presented below, emphasizing the importance that social interaction plays in Ana’s process of language learning, with classmates,

Example 3:

*O estudo em grupo ajuda muito nessa fase da vida porque participamos mais.*

Thank you!

And,

Example 4:

A aula de hoje foi ótima porque aprendemos algo que tenho dificuldade, os verbos. *Mas fazendo as frases em conjunto consigo gravar melhor.*

And with her husband,

Example 5:

[...] utilizo pois acho que assim assimilo melhor o que aprendi. Por exemplo, *converso em inglês e canto para o meu marido. E ele se diverte muito.*

In example 6, Ana reveals the nonlinearity of the process of language learning by making explicit that learning is sometimes more and, other times, less challenging.

Example 6:

*A aula de hoje foi puxada e mais difícil, mas para aprender é assim mesmo. Os comentários são os mais variados: você*

está estudando língua inglesa? Que chique. Mas onde melhor me relaciono é com a neta de 6 anos quando usamos o computador.

Moreover, this report shows the importance of the social interaction, the otherness, in this process, especially with friends, as in, *você está estudando inglês? Que chique*, and family members. Moreover, she points out her role as an agent, by saying, *mas onde melhor me relaciono*, and the benefits as an agent's environment, like in, *com a neta de 6 anos quando usamos o computador*.

Ana stresses the importance of studying input that is related to her family and everyday life in example 7.

Example 7:

A aula de hoje foi muito boa. Iniciamos comentando as figuras dos personagens (atividade de vídeo) como a hora que levanta, almoça, janta e se deita. Depois brincamos com o jogo da memória com perguntas e respostas do que aprendemos até hoje. Depois, formulamos perguntas e respostas: Where is Sofia from? She is from balneário Camburiú. *A aula foi bem positiva e acho que grava bem usando*

*coisas que são da nossa família ou do nosso dia a dia.*

In example 8, Ana states again that involving special people to her in the activities for learning seems to be a nice way approaching the language.

Example 8:

A aula de hoje foi interessante, pois mostrou os perigos que podemos prevenir com acidentes na nossa vida e das crianças. *Gostei da idéia dos cartões, dobraduras para mandar para as pessoas que gosto e que amo. Acho interessante participar da Unati porque além de aprender me divirto muito e fico mais feliz.*

Ana states that making an interrelationship between language and her friends and family members, make learning easier to happen, according to her report in example 9.

Example 9:

Eu procuro fazer esse tipo de *relação porque é mais fácil de gravar o que aprende. Ex. cantar a música para alguém, mandar cartas com as*



*dobraduras, presentear pessoas queridas com as flores dos cartões que fizemos, mandar mensagens em inglês via internet para amigos, neta e filhos.*

Examples 1 to 9, presented above, emphasize the importance of the social interaction in the process as individuals who motivate (friends, family, teacher, classmates) and those who help each other in the learning process (classmates).

The benefits for cognitive activation are identified in Ana's writings presented in the examples below.

Example 10:

*A oficina de língua inglesa é muito interessante principalmente pela forma que você nos ensina. Acho que é muito bom para o cérebro, pois nos ajuda na memorização e concentração. E para mim, está fazendo um bem enorme. Esses momentos alegres e descontraídos. Thank you!*

In the following example, Ana gives some details about the way she process input that she is exposed to in class. She uses some learning strategies, like reading several times a text and interacting with classmates.

Example 11:

*A maneira que eu mais guardo o que aprendo é lendo e relendo várias vezes ou olhando as figuras e conversando com outras pessoas. As aulas são interessantes por isso; porque são bem ilustradas e comentados os assuntos com os colegas. Thank you!*

Again in the following example, Ana talks about some of the strategies which help her learning process, like working with pictures, making posters and video recording their dialogues in class, which are related to visual activation. She emphasizes that this type of activity is good to her learning, as follows.

Example 12:

*Hoje a aula foi muito interessante com a colagem de figuras e a gravação das coisas que mais gostamos. O raciocínio flui bem e aprendemos a gravar mais as palavras e assim aprendemos melhor.*

In example 13, Ana describes the activities done in class, a series of them, which are varied, involving lexical exercises, functions of the language, a biography and some grammar explanation.

Example 13:

A aula de hoje foi muito interessante. Primeiro corrigimos o caça palavras. Depois contamos a música do maravilhoso Frank Sinatra. Em seguida frases na lousa. Depois um jogo de perguntas e a biografia minha e da S3. e por último a frase: Loving God, thank you for your peace and mercy. Vimos também as palavras (genitivo) que mudam: pets of Ana; Ana’s pets. A aula está ficando diferente porque estamos aprendendo.

Ana says she feels the class different because she says she can perceive that she is learning. It seems that learning a language means approaching the language from different angles.

In the next example, Ana talks about the importance of recalling and ordering the input that has been studied in class and the benefits to her learning.

Example 14:

Sim, a maneira como foi comentado o que aprendemos. As frases de amor e de carinho. Os exercícios que falam das comidas de soja, as fibras e frutas que são muito saudáveis. *Recapitulamos todos os exercícios de um a nove e*

*colocamos tudo na ordem numérica para saber mais*, pois sabendo o exercício do um a nove podemos relacionar o assunto e assim gravar na memória com mais presença do assunto.

Ana identifies that learning is excellent to her in this class because she says that besides learning the linguistic aspects of the language, she also learns content to be applied in her real life. In her words,

Example 15:

A aula de hoje foi ótima porque além de aprender palavras novas aprendemos que devemos comer comidas com menos gordura. E que devemos trocar as frituras por alimentos naturais e sucos.

**Conclusion: the theory behind Ana’s reports**

From an analysis of Ana’s reports, it can be identified elements like: the benefits for learning for health, the improvement of cognitive aspects, the social benefits of interacting with others and of having encouragement for learning from classmates, teacher, friends and family members, the adequate methodology which made her feel comfortable in class, the formal study of the

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linguistic aspects of the language, the use of strategies for recycling input and the language material which included subjects of interest to their everyday life. It seems, therefore, that, according to Ana's writings, her language learning process occurs at several different levels, involving psychological, socio-interactive, affective, linguistic and meaningful content-based aspects.

The multiplicity of aspects described by Ana in her diaries seems to characterize the complex thought as described by Morin (2003) for language and the underlying theory of emergentism for language learning, as described by Ellis and Larsen-Freeman (2006) and Larsen-Freeman (2006).

Finally, the data presented in this study attempted to bring into discussion the complex picture which constitutes foreign language learning for a later adult language learner who is exposed to and deals with complex, dynamic, nonlinear variables which diverge and convey to different directions along the process. Studies with other later adult learners can confirm the data showed in this study as well as describe other features reemphasizing the complexity involving language and learners.

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