Multimedia language learning histories[1]

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> We tell our lives as narratives, but we experience them as hypertexts.
> Jay Lemke

1 Introduction

Learning English is far from being an easy task in Brazil. Learners face contextual limitations, such as poor linguistic experiences at school and few opportunities to use the language in authentic contexts (see chapters by Barcelos; Miccoli; Dutra and Mello in this volume). In spite of this, it is surprising how some learners achieve a good mastery of English as we will see in some of the narratives in this chapter.

Investigating second or foreign language acquisition processes is a challenging enterprise as we can neither examine what happens in the learners' minds nor observe all their learning experiences. Nevertheless, language learning histories (LLHs) may reveal different aspects of the complexity of second language acquisition (SLA). The personal reflections in LLHs, framed by the "landscape of learning", encompass educational events, personal experiences, identity issues, beliefs, fears, desires, preferences, personal and institutional relationships. Learners' understandings on how languages are learned, besides revealing particular experiences, can also provide important insights into SLA.

In this study, I intend to look for recurrent patterns in learners' narratives which can help me answer the following questions? (1) What do learners' LLHs tell us about SLA

as a complex system? And (2) What kind of knowledge emerges from the interaction among text, hypertext, images and sounds in multimedia LLHs?

In Section 2, I discuss aspects of narrative research, multimedia, complexity and SLA as a complex system. The corpus of LLHs is described in Section 3 and, in Section 4, I analyse selected samples of the multimedia narratives. In the conclusion, I will argue that SLA emerges out of the interaction among different experiences with the language.

2 Background to this study

I have been working with narrative research (Paiva 2005, 2006a, 2006b), theoretically supported by Chaos/complexity theory in order to understand how learners acquire language in a non-English-speaking context. At present, I am particularly interested in multimedia narrative studies (Paiva 2006c) as much more information emerges through the combination of texts, hypertexts, images and sounds.

As pointed out by Larsen-Freeman (2000, p.169), language learners have been seen from an etic perspective. While working with LLHs and listening to language learners, we aim at changing the etic perspective into an emic approach. By 'etic' I mean the external researcher's interpretation and by 'emic' the learners' interpretation of their learning experience. The focus on learners' experiences helps researchers to make a shift from objectivism/subjectivism to experientialism and then get a better understanding of how languages are learned from the point of view of the learners. In

the experientialist perspective, man is seen as part of the environment, in constant

interaction with it. Man changes the environment and is changed by it.

Lakoff and Johnson (1980) see objectivism, subjectivism and experientialism as myths[2].

They consider that "like metaphors, myths are necessary for making sense of what goes

on around us. All cultures have myths, and people cannot function without myth any

more than they can function without metaphor" (Lakoff and Johnson 1980, pp.185-

6).The authors favour the myth of experientialism which does not oppose external and

internal aspects of understanding as objectivism and subjectivism do. In the

experientialist perspective, man is seen as part of the environment, in constant

interaction with it. Man changes the environment and is changed by it.

The study of LLHs reinforces the experientialist perspective because the narrators talk

about their constant interaction with different environments and the changes they

undergo.

2.1. Narrative research

LLHs give voice to learners who often talk about their learning experiences in different

contexts rather than in the traditional classrooms. The narrators freely expose their

memoirs and their emotions by giving their own explanations on how they learn or have

learned a second language. These reports enable us to understand certain aspects of

acquisition (e.g. fear, anxiety, family influence, etc.) which are not easily reached by

other research tools.

In order to understand learning experiences, several researchers have been making use of LLHs. Pavlenko (2001, p.213), for example, believes that this kind of narrative is a "unique source of information about learners' motivations, experiences, struggles, losses, and gains" and McGroarty (1998, p.598) considers that "autobiographies and memoirs of highly literate and reflective learners have provided additional poignant observations about the subjective aspects of the language learning experience".

The growing research interest in first-person accounts has given birth to important publications such as Benson and Nunan (2002, 2005). So far, researchers have been analyzing written texts, either already published autobiographies as Pavlenko (2001) or LLHs collected among students (see Murphey, 1997, 1998 and Murphey, Chen and Chen 2005). Some researchers use their own history, e.g. So and Dominguez (2005), or narratives collected by means of journals, e.g. Swain and Miccoli (1994) and interviews, e.g. Shoaib and Dörnyei (2005).

In my own work, I have been resorting to multimedia LLHs because it is my contention that pictures and sounds not only illustrate written texts, but also make up a larger network of meanings. In order to understand the ways in which images communicate meaning, I will use the grammar of visual design developed by Kress and van Leeuwen (1996). These authors understand that pictorial structures "have a deeply important semantic dimension" (p.45). I believe that the same can be said about sounds.

Gerard and Goldstein (2005, p.6) say that "[w]hen you add audio to pictures and text, that's worth a million words". In a clear reference to one of the characteristics of a

complex system – emergence – they point out that "words and images are much more than the sum of their parts". In fact, one can say that multimedia portray much more information than each individual medium does, as meaning emerges through the interactions among the different media employed by the text producer.

In Section 2.3, I present some characteristics of chaos and complex systems, including SLA, in order to help us understand the acquisition experiences portrayed in the multimedia LLHs.

2.2 Chaos/complexity

Chaos theory and studies on complexity have been influencing many different research fields, including education. Gilstrap (2005, p.57) points out that an understanding of chaos metaphors might help us understand complex educational environments and the paradoxes of complex adaptive systems, which, according to Velve et al. (2002, p.2) are open entities consisting of related elements. SLA can be understood as an example of a complex system. It is open to new information and interactions in a continuous flow which make it evolve into more complex stages. The next section presents an overview of SLA as a complex system.

2.2.1 SLA as a complex system

Larsen-Freeman (1997, p.141) was the first one to observe that "there are many striking similarities between the new science of chaos/complexity and second language acquisition". She understands that SLA shares the same characteristics of other complex

systems. They are dynamic, nonlinear, unpredictable and adaptive, to mention just some of their features.

In order for a complex system to evolve there are periodic attractors responsible for periodic or repetitive behaviours. Attractors are defined by Lewin (1992, p.20) as "states to which the system eventually settles, depending on the properties of the system". In spite of the stable factors or periodic attractors, the system is open and other elements will play important roles in SLA. As explained by Larsen-Freeman (1997, p.146), a complex nonlinear system exhibits "a 'strange' attractor because although its cycle repeats itself like the frictionless pendulum, no cycle ever follows the exact same path or overlaps any other cycle", in spite of being constrained by the limits of the attractor". At the same time that SLA is constantly changing, it also stays within the boundaries of what we call language acquisition. One cannot predict how SLA will develop, although one can tell it is fractal, a smaller copy of the whole, that is, a fraction similar to the whole linguistic system[3].

When we turn our attention to LLHs, we see that no matter how much teachers plan, teach, evaluate and give feedback, students will react in different ways and unforeseen events will inevitably be part of their learning experiences. Linguistic differences, cultural backgrounds, reasons for learning and many other components of the acquisition system affect and are dynamically affected by other components. Although SLA processes are similar, strange or chaotic attractors will constantly reconfigure its dynamicity, and even within its limits the outcomes will be different, no matter how similar the initial conditions are. Slight perturbations and unforeseen events can cause important positive or negative results. The seemingly orderly world of language

learning is in fact chaotic and chaos seems to be fundamental in such a process. SLA depends on the interaction among several elements and as the system is open, it is subject to continuous inflow and outflow of language experiences. Although it is self-organizing, it never reaches equilibrium, but only temporary stability.

2.2.2 The edge of chaos

Velve et al. (2002, p.2) point out that "phase transitions or the edge of chaos occurs when the system is operating at the border of order and chaos" and that it is at this point that the system is functioning at its highest level of creativity.

Order and chaos coexist in a dynamic tension. According to Ockerman (1997), the system is capable of remarkable things when operating in the narrow zone between order and chaos which is called "edge of chaos". He explains that the edge of chaos is a state between order and chaos and that is where "the greatest information processing takes place, where risks are taken and new behaviour is tried out" (p.222). He adds that

> There are five factors, or control parameters, that determine whether a system can move into the edge of chaos (or beyond it into disintegration): the rate of information flow, the degree of diversity, the richness of connectivity, the level of contained anxiety, and the degree of power differentials. In human systems, these factors combine into a kind of creative tension where people are linked to others in paradoxical relationships of cooperation/competition, inspiration/anxiety, and compliance/individuality (group initiative to illustrate the process). (Ockerman 1997, p.222)

In SLA, we can also consider some factors which move the system to the edge of chaos. They are: the amount of second language experience, the degree of input diversity, the richness of interactions, the level of contained anxiety, and the degree of autonomy or control of one's own learning. I take for granted that autonomy also implies the idea of power differentials (Ockerman 1997). Learners are differently empowered individuals and so their capacity to act has direct effect on their autonomy.

So far, I have presented the theoretical support for this study which aims at understanding SLA by means of experiences portrayed in multimedia narratives. The next section describes the context of this study.

3 The context

Thirty-eight multimedia LLHs were collected at the Federal University of Minas Gerais, in Brazil: twenty in 2005 and eighteen in 2006. The writers were prospective English teachers enrolled in two sixty-hour online courses which aimed at developing computer literacy and English language skills.

The courses[4] aimed at developing computer skills such as editing images; creating hyperlinks for texts and sounds; and using Microsoft *Word* tools. They used the new acquired skills to write their final papers in the form of multimedia narratives. There were no strict guidelines for the text. They were asked to describe how they had learned English and to include hyperlinks, images and sounds. The students and the teacher formed an online community and interacted through a discussion list hosted by YahooGroups. The students used the list to send their tasks, solve doubts, and discuss

any problems related to the course. Feedback was given by the teacher and the classmates and the students had the chance to edit their texts many times before having them published.

Thirty-seven students allowed me to publish their LLHs in the project homepage [http://www.veramenezes.com/narmulti.htm] and these texts formed the corpus for this study. I also included in the corpus my own LLH. One student was also interviewed by email so that I could understand why she had chosen some of her hyperlinks. In Section 4, I present some of the findings.

4 Data analysis

The LLHs were read many times so that I could select excerpts which would help us understand what learners' experiences reveal about SLA as a complex system and what kind of knowledge about SLA emerges from the texts. Some images were discarded because we do not have permission to publish them. I realized that openings and closings followed a general pattern and that the experiences could be divided into two main groups – inside and outside the classroom. The analyses will present an overall description of the way the texts open, present experiences and close.

4.1 Openings

Most of the narrators, inserted their own coloured photographs in the very beginning of the narratives, as in Figures 1 and 3, and one of them chose a manga[5] style (Figure 2).

PLACE Fig 1 HERE   PLACE Fig 2 NEXT TO Fig 1   PLACE Fig 3 NEXT TO Fig 3

Figure 1 Close-up	Figure 2 Manga	Figure 3 In a Conference

The images are in the close-up format and the narrators are gazing at the reader. As explained by Kress and van Leeuwen (1996, p.122) this visual configuration "creates a visual form of direct address. It acknowledges the viewers explicitly, addressing them with a visual 'you'''. Most pictures represent the students smiling which is also explained by Kress and van Leeuwen (1996, p.122) as the viewer being asked "to enter into a relation of social affinity with them". In Figure 3, the narrator decided to show her academic identity by publishing a photo taken in a conference setting. Her LLH also includes a lot of references to research projects and research groups at the university and image and text present a coherent dialogue around her academic life. It also shows that SLA is an open system and that experiences with the language are not confined to the classroom itself.

The way the narrators start their LLHs also vary. Some of them, especially the ones who did not include their own photographs in the very beginning of the text, introduce themselves by saying their names, talking about their childhood, or describing their early interest in learning English as in (1):

(1)

A long journey…

    Well, I dare say my interest in English was born on February 12, 1984 (oh yes, that's my birthday!). I say that because I remember very clearly the time when I would ask my <u>father</u> how to say such-and-such words in English. I don't know exactly how old I was then, but I'm sure I was very young. I also remember I had <u>loads of fun</u> turning my father into a walking-talking dictionary. As he himself has always been a language fancier, he would feel pleased to notice my interest in English and would always answer my plausible questions.

    One of the first phrases I learned was 'the end'. Can you guess why??? Just because of <u>The Woody Woodpecker</u> cartoon. This phrase would always appear at the end of the cartoon – which, still nowadays, is one of my favorites!

When talking about her father, the narrator inserted a hyperlink to the soundtrack for the movie "Legend of Zorro". When asked about her choice she explained that when she was a child she and her father used to watch the film together. If one clicks at *The Woody Woodpecker*, one can listen to Woody's trademark laugh. Both sounds are indices of how significant cinema is in her English learning experience. The link attached to *loads of fun* leads the reader to a baby's laugh and emphasizes her statement that she has been interested in English since her early childhood. This meaning is also present in the picture of a newborn baby. The choices of the pictures and their position on the page can be interpreted as representing periods of her initial 'long journey': from an illiterate baby to a child being introduced by her father to the realm of literacy. This excerpt demonstrates that learning events are experienced as hypertexts reinforcing Lemke's (2001, p.80) statement that "we tell our lives as narratives, but we experience them as hypertexts". The initial conditions of her SLA – her father's interest in English

and her early motivation – had a very positive effect in her late experiences. Her father enrolled her in a private English course and paid for a trip to the United States and she decided to be an English teacher.

We can see in this and in other LLHs that SLA is a complex system as it relates different elements – family, cultural industry, educational artefacts (books, dictionaries), school, teachers, classmates, etc. – in a dynamic non-linear process. In Section 4.2, I present some LLHs excerpts which can help us understand the complexity of SLA.

4.2 Presenting experiences

The experiences found in our corpus can be divided into two groups: inside the classroom – the ones which display periodic attractors, represented by explicit language teaching in school contexts – and outside the classroom – the ones whose dynamicity is constrained by strange attractors created by cultural experiences and unexpected events which put the SLA process into movement. In other words, classroom experiences are predictable and follow a common pattern and outside classroom ones yield disturbances which can change the acquisition route. Several LLHs present both kinds of experiences and we understand that the two are important for the acquisition process. The images associated with the different experiences can be identified as social actions, transactional reactional, mental and verbal processes (Kress and van Leeuwen 1996).

4.2.1 Inside the classroom

In the first group, we can find visual narratives of silent students

sitting at their desks and of teachers in front of their students

usually teaching traditional boring classes. These can be

described as predictable experiences. Boredom is usually

I'm so bored

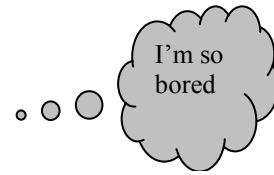represented in the written texts and in the photographs. Some of

Figure 4 Boredom

the images come along with balloons with a vector pointing at the bored student. In

Figure 4, we have the representation of a transactional reaction of a student[6] in the

classroom, and, as Kress and van Leeuwen (1996, p.67) point out, this kind of reaction

is not "represented directly, but mediated through a Reacter, a 'Senser' (in the case of a

thought balloon), or a 'Speaker' (in the case of the dialogue balloon)".

Images of teachers usually show predictable actions: teachers teaching grammar items

or isolated vocabulary, as shown in Figure 5, where the balloons represent the speech

process and the stick in the teacher's hand works as a vector. As defined by Kress and

van Leeuwen (1996, p.74), "the active participant in an action process is the participant

from which the vector emanates or which is fused with the vector". The teacher is the

actor, the one who speaks and makes movements. Although one cannot see the students,

one can infer that they might be sitting in lines repeating after the teacher the words

ceiling and *floor*:
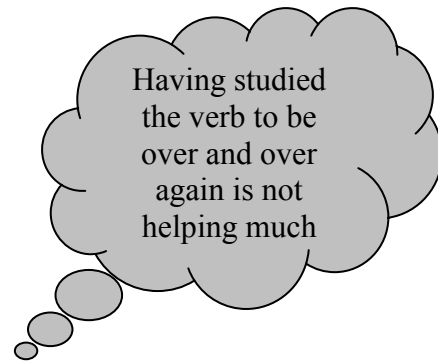
Figure 5 English teacher[7]
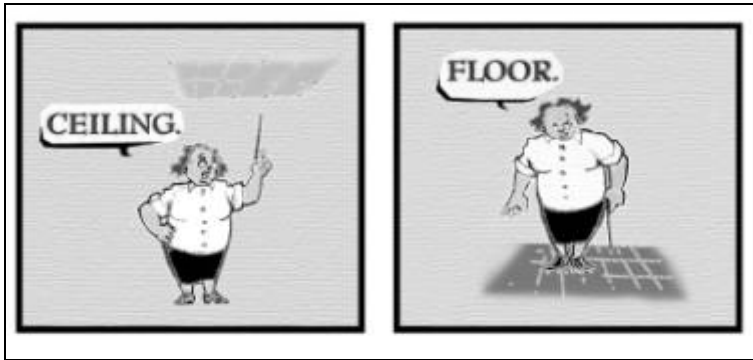
One recurrent complaint in our corpus is that the verb *to be* is over taught as in Figure 6. Again we have a reactional process, where the narrator evaluates her SLA. It seems that the students are aware that their SLA systems need something different in order to be put into movement.

Figure 6
The verb *to be*

Insert fig. 6 here

Having studied the verb to be over and over again is not helping much

Through both verbal and visual modes, some students represent themselves as members of a learning community undergoing poor experiences in their regular school classrooms (e.g. in Excerpt 2) as opposed to the rewarding ones lived outside school. Seldom do they report good experiences in elementary and high schools, although English classes at the university and at private language schools are often described as good exceptions.

(2)

During my two years of English at the High School I tried some private English
schools, but they are very boring with old fashioned teaching approaches, as
well the   High School itself, the type of   " Sit down…" or
"the   book is on the table" . The exercise
we   were supposed to do seemed
nonsense and tiring at all . Of course
I gave up those   classes in the first month'. .

In (2), the narrator remembers that different schools offered him boring experiences. His statement is reinforced by three images showing repetitive exercises. The first shows an active participant in the action of sitting down, as indicated by the vector. Repetition of tiresome activities is metaphorically represented by the other two drawings of people doing repetitive physical movements (walking and running). The sentences *sit down* and *the book is on the table* represent clichés in the aural oral method which seems to be the one adopted in these schools. They symbolize meaningless repetition which is not enough to move his SLA system.

This LLH and many others show that inside classroom experiences, in general, do not lead learners to the edge of chaos as they seldom offer a good amount of language experiences, input diversity, and rich interactions. When talking about school experiences, students usually show how anxious they were when forced to do boring activities which did not seem to contribute to their SLA. A good exception in the school context is the literature class as it deals with language as a social practice. Some

students point out how important literature has been in their SLA processes inside and outside the classroom. Our LLHs also reveal that most learners are in control of their own learning. The next section presents some of these autonomous experiences.

4.2.3 Outside the classroom

The second group of experiences shows that chaotic or strange attractors are the ones which make the most difference in the students' SLA processes. There is enough evidence to say that learners are led to "the edge of chaos" by strange attractors which do not appear in traditional learning contexts. They run risks, explore the language, and experiment with different language use situations. As Nelson (2004, p.102) had already realized "the classroom is not isolated from the world. Rather, students, and the knowledge they embody, cross classroom boundaries in networks that multiply and recycle that knowledge". SLA networks are formed by students' favourite foreign bands and songs as in (3) and (4) ; literature as in (3); TV shows; the web; video and computer games; RPGs (Role Playing Games); Internet chat rooms; travelling, studying or working abroad; interaction with other speakers of English as in (5); and experience abroad as in (6).

Excerpt (3) is followed by photographs of Radiohead, Led Zeppelin and The Doors. The subtitle for this part of the LLH shows how cultural production – literature and music – brings dynamicity to SLA. The underlined word are hyperlinks to lots of sites where the reader can see photographs, listen to songs, read more about several bands and singers and view the trailer of "The Princess and The Warrior". Several reading and listening

possibilities emerge from the unpredictable routes the reader can take and thus have a glimpse of the narrator's experience:

(3)

Literature and Rock'n'Roll: The Best

Literature helped me a lot. I learnt and am learning lots of English thanks to Literature. Including, of course, music!!! I always loved music, and by the time I started my course, I was falling in love with Led Zeppelin (see "In The Light" lyrics), Creedence Clearwater Revival (now "Revisited" – see "Sinister Purpose" lyrics), Metallica, The Doors, AC/DC, Radiohead, Tool, David Bowie, the craziest of all Iggy Pop, Leonard "The Master" Cohen (please listen to "Waiting For The Miracle" – the images are from the film "The Princess and The Warrior"), and others.

Music increases the rate of language input and it is not surprising to find out that almost every narrator talks about the role of music in their SLA processes. The same narrator in (2) talks about the value of music, referring to a Brazilian TV program aiming at teaching English with songs in (4). He explains that one could listen to songs and sing following the lyrics on the screen and then attend a lesson with grammar rules and vocabulary explanation. He uses an image to represent a mental process, the metaphor for one's insight, and both image and the statement in capital letters emphasize that the TV program changed his belief about his capacity to learn English. It was the turning point, the edge of chaos and changed the route of his SLA system.

(4)

And I'll always remember the day and the music that   opened up my eyes to the fact that *I REALLY COULD UNDERSTAND* this language, despite the classes on   the schools that were very less effective.

It was very fun because watching the program, the English rules and its words made sense, on the contrary, in the classroom it didn't. I still remember the phrases of it, like "No crisis arises my life goes along as it should … and at the time I found myself singing it and they are complete sentence that made me think about the language and its rules, because these rules had a superb explanation from the program presenter who seems to have an entire domain in the matter.

The next excerpt shows an experience which is rarely found in school contexts. The narrator in (5) practices *capoeira*[8] and this was a strange attractor which changed his SLA route. It was a good opportunity for him to speak English with foreigners:

(5)

When I was 16 years old I started practicing *capoeira*, and I also started to have contact with many foreign people. (..) Talking to these people was a great experience for me, because for the first time I was feeling that I could communicate with native speakers, in the target language!!

Excerpt (5) is a good example to show that SLA is open to unexpected experiences and that strange attractors (e.g. *capoeira*) can change its route. We can find similar examples where students' SLA systems were positively driven toward success by interactions with foreigners in sports and work contexts. Traveling seems to be another strange attractor. Several narrators talk about the importance of travelling abroad and included many photographs in their LLHs. One example can be seen in (6):

(6)

On the end of July 2005 something wonderful happened to me. I went to London with mum and there we met my sister that had already been living there for some time. Mum stayed only three months, I stayed eight months. **Amazing experience**. I could finally **experience English Language in its natural environment**… in a place where I would have to either SPEAK or SPEAK. There was no choice. In the beginning I was so ashamed of my English, it was horrible. Then one day, one guy from New Castle said to me, "You speak very good English," and I thought he just wanted to make me less uncomfortable, but later on I sometimes heard the same comment from other people and slowly I started getting more and more **confident**.

I and ballerina near Covent Garden, London.

The events outside the classroom seem to decrease the level of anxiety and to move the SLA system into "the edge of chaos" because they are responsible for a high rate of linguistic experiences, represented by a wide range of input, interaction diversity and autonomy. In (6), the narrator, ashamed at the beginning, becomes more confident as

she keeps getting positive feedback from native speakers. The photograph shows the confident narrator in Convent Garden. Using the terms of Kress and van Leeuwen (1996), the narrator's arms form vectors in a transactive action. She has a goal: to hold the ballerina who is in a non-transactive position. She is confidently gazing and smiling at the reader, a visual form of addressing (Kress and van Leeuwen 1996, p.122), and the image works as a metaphor of her *amazing experience* with the English language where her only choice was *SPEAK or SPEAK*. The embrace seems to symbolize her total integration with the culture and with the language. She also "embraced" the language and that decision was her edge of chaos, the turning point for her SLA.

Outside classroom experiences offer opportunities for learners to exercise their autonomy, choosing their own acquisition track. Each LLH is unique and the narrators seem to mark this uniqueness in their closing remarks. Let us see, in Section 4.3, how our narrators close their texts.

4.3 Closings

When closing their texts, students usually choose to reflect about SLA. As they have read many versions of other classmates' LLHs, they are aware that there are no similar histories. One of them stated: *I think it's fascinating to realize that the process of second language acquisition can vary so much from one person to another, and that it isn't predictable*. Others close their text by giving advice: one wrote *A piece of advice? Follow your dreams*, a second stated *Only you can write your history!*, and a third one concluded *One thing is very clear for me at this point: when a person really wants to*

learn another language, she will find a way to make it happen, no matter how hard it might be or how little help she might get.

Most of them seem to be aware that they are involved in a complex system always in movement by making statements such as *The learning process never ends*; *I do not think it is over or that it will ever be*; or *To be continued…* 😊. They understand that the system is open, as registered in one of the student's final saying: *each day is a new to day with new things to learn*, and non-linear as described by another narrator who says *I know that the way I studied English was not a "normal" one, or a sequential one like some people do in private English courses, but my English knowledge was built up as an "art-craft" with some different experiences and English accents.*

5 Conclusion

LLHs tell us that the participants' learning experiences oscillate between two phases – classroom activities which are shown as predictable and repetitive and a more creative phase where agency permeates their experiences, but they are interconnected and influence and are influenced by each other. The former is responsible for metalanguage and the prevalent concept of language is the one of a set of grammatical patterns and lexis. The latter is connected with linguistic social agency as learners use the language to do things: listen to songs, watch movies, read different kinds of texts and interact with English speakers. Language is seen as communication. Competing forces of the convergence and the divergence of the different experiences keep learners' trajectories within the region of the SLA attractor but a higher level of complexity emerges and

each state is different from the previous one. Changes and perturbations occur during the acquisition process and they make the system work. The multimedia LLHs show how the SLA process self-organizes itself and moves towards success[9]. There is temporary stability, but the system never reaches equilibrium.

The use of visuals, sounds and hypertexts were essential for representing individual identities, anxiety, happiness, discomfort and tensions students experienced during their SLA process. Some multimedia texts use a lot of visual material, others are more economical, but as I have already stated in Paiva (2006c, p.37),

> words, images and sounds together added up too much more than the sum of their parts. The multimedia texts enhanced the students' creativity and imagination and had profound and significant impact on our learning community, given that participants not only produced and shared a new kind of text, but reflected on their past and present learning processes while helping peers develop and improve language and computer skills.

The LLHs show that SLA is a complex system and that second language does not come out only as a product of formal learning contexts, but it emerges out of the interaction of different social networks (family, cultural production, school) with the individual cognitive and affective factors.

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[1] I am grateful to Paula Kalaja, Ana Maria Barcelos and Phil Benson for their insightful comments and review.

[2] They explain that they are not using the term "myth" in any derogatory way.

[3] Larsen-Freeman (1997, p.150) reminds us that language is also fractal because it is not different from other natural phenomena.

[4] The syllabuses can be found at http://www.veramenezes.com/call205.htm and http://www.veramenezes.com/literacy.htm respectively.

[5] *Manga* is the word for most Japanese 'comic pictures'.

[6] The image was not reproduced because I do not have permission for that.

[7] Drawing by Romulo Lagares, a former student of mine.

[8] Capoeira is an African-Brazilian fight-dance and martial art.

[9] It is worth mentioning that our data bank also contains narratives which describe SLA systems which did not evolve because they received no new energy either by the school system or by the learner's individual experiences. These are sad stories of unsuccessful acquisition.