Diane Larsen-Freeman

A Successful Union: Linking ELF with CAS

Abstract:
ELF research has become a major field of study. However, it seems to lack theoretical tools. I suggest that Complexity Theory can provide a suitable theoretical framework and inspire a way of thinking that would be useful to ELF researchers. The paper then briefly discusses qualities of complex adaptive systems and some resonances between them and the study of ELF. Some additional benefits from linking ELF with CAS are discussed, not the least of which is having a common discourse that would facilitate engagement among researchers.

Introduction

In the twenty years or so that it has been on the Applied Linguistics scene, researching ELF has made remarkable progress in establishing itself as a major field of study (Jenkins, 2012: 350). Indeed, the study of English as a Lingua Franca (ELF) enjoys an enviable vitality today. For instance, this paper appears in the proceedings from the 6th International Conference on ELF (Italy), a 7th has recently taken place (Greece), and planning for an 8th (China) is underway. Furthermore, the field has its own new journal, Journal of English as a Lingua Franca, and, importantly, it has inspired Ph.D. student research. This interest in ELF today is a tribute to the energy and commitment of its founders, its growing number of adherents, and to its power as a critical enterprise.

I am not an ELF researcher, although I have been challenged by, have learned from, and have admired the development of the field. At the same time, I have noted the absence of a theoretical framework for informing ELF research agendas and for making possible a coherent explanation for its research findings. I am not alone in this observation. An ELF researcher has recently pointed out «in a period where intercultural English is used on a global scale, it is high time for us to try and find more appropriate theoretical tools to come to grips with this fact» (Hülmbauer, 2013: 69).
I think such theoretical tools lie with a view of language, its learning, and its use that I have been attracted to and have been advocating for some time (Larsen-Freeman, 1997), i.e., language as a complex adaptive system (CAS), a view inspired by Complexity Theory (CT) (Larsen-Freeman and Cameron, 2008; Ellis and Larsen-Freeman, 2009). In this paper, I propose that CT also offers ELF researchers a discourse for connecting with others who are thinking about and studying language development and use, and given the theme of this conference, intercultural communication, too. While the qualities of fluidity, variability, creativity, and local negotiability are all qualities foregrounded in ELF research findings, they are also characteristics consistent with viewing language as a complex adaptive system. It is not surprising, therefore, that CAS views have attracted some attention among ELF researchers.

Here is a sampling:

Seidlhofer (2011: 99):

«They [ELF speakers] draw on ELF as a complex adaptive system that, in the words of Cameron and Larsen-Freeman (2007), is “continually transformed by use”».

Mauranen (2012: 44):

«[…] if we view language as a system, it is perhaps best seen as a complex system showing many features typical of complex (or ‘chaotic’) systems in general. Language systems influence each other in multilingual cognition, and in addition to this mutual influence, they act like other complex systems in interaction with their environment (Larsen-Freeman and Cameron, 2008).»

Dewey (2013: 347):

«The need to systematically analyse English in ELF settings is directly connected to a realization that when we speak about English in ELT, this is often in an idealized, abstracted way. By contrast, ELF research sees language as an adaptive, complex system (cf. Larsen-Freeman and Cameron, 2008).»

Without naming CAS as such, Sewell (2013: 3, 6) invokes similar themes: «It is important to appreciate that all language use—whether by native or non-native speakers—is variable, emergent, contextual, and subject to hybridity and change.»

And in keeping with the focus of this ELF6 conference, ‘Intercultural
Communication’, a CAS view extends to culture, too: «[…] many of the participants viewed cultures as mixed, hybrid, and open, and saw the need to adapt, interpret, and mediate between different cultures» (Baker, 2009: 585).

Hülmbauer (2013: 52): «[…] one can only come to the following conclusion: Language has to be treated as a dynamic system (Cameron and Larsen-Freeman, 2007).»

Perhaps I should be satisfied with these statements. However, I believe that CT can be plumbed for additional insights. And with them, one could go even further in contesting conventional understandings of language, its use, its development, and its learning. Moreover, CT also has the potential, at least partially unfulfilled, to challenge traditional language teaching practices. As I have written, I am not an ELF researcher; doubtless more is under way in these areas than what I am aware of. Nonetheless, sometimes it is helpful to hear from someone outside the community. It is in this spirit that I offer the following, which is based upon my appropriation of CT to understanding second language development (SLD).

1. A way of thinking

Let me first make a preliminary comment about the nature of CT. After all, as Widdowson (2012: 7) has remarked: «It needs no chaos or complexity theory to tell us that natural phenomena, including human behavior, are unpredictable [elusive of conceptual control].» While I wouldn’t disagree, I think that beyond unpredictability, CT encourages a way of thinking that that can prove helpful to ELF researchers.

For instance, in the same article, Widdowson states that he is drawn to the metaphor that Sampson (2007) adopts regarding grammaticality. Sampson wrote: «The grammatical possibilities of a language are like a network of paths in open grassland. There are a number of heavily used, wide and well-beaten tracks. Other, less popular routes are narrower […]» (Sampson, 2007: 10-11). While Widdowson’s central question is asking whose tracks count, I note that a similar spatial metaphor has been used to illustrate a way of thinking that CT inspires. In fact, those discussing CT have pointed to the landscape architect’s futility in setting down paths on a university campus. Such efforts are futile because shortcuts quickly develop despite ‘keep off the grass’ posted warnings. Instead, no concrete should be poured, no asphalt laid down until paths are created by those walking across the campus. This is the signature ‘bottom-up’ way of thinking that CT stimulates when applied to SLD. No textbook, no
instruction, no well-intentioned teacher’s laying down of paths will obviate learners’ creating their own developmental paths.

Consistent with this metaphor, Complexity Theory invites us to conceive of our objects of concern topographically. For instance, Todeva and Cenoz (2009: 270) understand the power of this way of thinking by writing «if one embraces a CT perspective, language should not be seen as an entity but instead as a space in which an infinite number of possible trajectories may be realized.» They go on to cite Larsen-Freeman and Freeman’s (2008: 161) observation that «none of these trajectories comes into being until language is used in a specific context. Context, in this sense, does not mean just the physical space; it includes the intentional or inter-subjective space between users…in a dynamic view, there is no such thing as a uniform, homogeneous, static entity that can be called “Spanish”, “Urdu”, or “Japanese” […]]. Language users “soft assemble” their language resources in the moment to deal with the communicative exigencies at hand; by so doing, they not only adapt their resources to those of their interlocutor, but also the communicative partners together transform the language system they are using (Larsen-Freeman and Freeman, 2008: 161).» (cited in Todeva and Cenoz, 2009: 270-271).

Let me now go beyond introducing this way of thinking in order to inventory a selection of the theoretical concepts (or ‘tools’ as Hülmbauer put it – the abstractions that Widdowson points out are so necessary for our understanding) available in CT that an ELF researcher might find of value. I start with emergence and self-organization. I then go on to briefly consider other qualities of CAS: that they are open, adaptive/feedback sensitive, dynamic, unfinalizable, inseparable from context, and variable.

2. Theoretical concepts

Emergence

Emergence is the spontaneous creation of new patterns that arise in a system when components of the system interact. Emergence is not a one-time operation. Patterns or performance stabilities that emerge are transformed with further usage. The claim is that language is a CAS, which emerges bottom-up from interactions of multiple agents (learners/users) in and across speech communities through iterated soft-assemblies (Larsen-Freeman, 2011).
**Self-organization**

Self-organization «refers to any set of processes in which order emerges from the interaction of the components of a system without direction from external factors and without a plan of the order embedded in an individual component» (Mitchell, 2003: 6). In other words, there is no need for preformationism. In the complex adaptive system, which is language, there is spontaneous emergence of order (Schmid and Lowie, 2011) without the need for linguistic innatism, provided that the system remains open.

**Open**

An open complex system is open to the flow of new information, energy, or material (depending on the type of system), constantly in process, and consequently, never fixed. Novel complexities can arise, given the initial state of the system and the environment with which it interacts. Think of an eddy in a stream. An eddy is a relatively stable pattern whose elements (water molecules) continually change. Yet, as long as the contours of the stream bed, the rate of water flow, etc. do not change appreciably, a stable pattern within motion is displayed.

**Adaptive/Feedback Sensitive**

Admidst all the flux, a complex system maintains its stability through continuous adaptation (Larsen-Freeman and Cameron, 2008). The soft-assembled patterns arise from the dynamic adaptation of the system to a specific context. As applied to language use, the adaptation to a context includes the process of co-adaptation in which each individual in an interaction adapts to, not necessarily converging with, the language of another, with each response constructing a feedback loop between participants.

**Dynamic**

A CT-inspired view of language rejects the notion of language as something that is taken in—a static commodity that one acquires and therefore possesses (Larsen-Freeman, 2002). Instead, language can be construed as much a process as a product. Because language is a dynamic system, continuously changing, its potential is always being developed, and it is never fully realized.

**Unfinalizable**

«An ecological approach to language education does not seek dialectical unity, or bounded analyses of discrete events, but on the contrary
open-endedness and unfinalizability» (Kramsch, 2009: 247). From the perspective of CT, there is no need for finality in language education because with language learning «there is no end, and there is no state» (Larsen-Freeman, 2006).

**Inseparable from Context**

Furthermore, there is a different sort of relationship with the environment. The context is not a backdrop to the main action. Biologist Lewontin (2000: 54) observes «[O]rganisms not only determine what aspects of the outside world are relevant to them by peculiarities of their shape and metabolism, but they actively construct, in the literal sense of the word, a world around themselves».

Extending this insight from biology, I note that learners do not reproduce their linguistic world – they actively transform it, and that language use cannot be usefully segregated from its ecology (Larsen-Freeman and Cameron, 2008). Locating language use in the interstices between people and context, rather than only within tasks or only within individuals themselves, requires a different approach to thinking about and studying language from that of traditional ones.

**Variable**

In a complex system, there is «massive variation in all features at all times» (Kretzschmar, 2009: 8; see also de Bot et al., 2007). As applied to language use, the variation is attributable to the fact that language users dynamically adapt their language resources to the context, and the context is always changing. Because of the dynamic interplay between a language user and context, the separation between the two, while possible for analytic purposes, requires the untenable assumption that the two are independent (van Geert and Steenbeek, 2005).

As I have noted earlier in this paper, perhaps I should be content with the attention a CAS view of language has received from ELF researchers. However, there is more to connect researchers in both fields, ELF and SLD, from a CT perspective. I have put these connections in the form of a list of 8 resonances.

3. **Further connecting ELF and CAS: 8 resonances**

1. **Variability**
   
   I have just written about the variability inherent in a complex system.
Variability is characteristic of ELF also. House (2012: 2) makes it clear that

«ELF is characterized by great variability; it is NOT a fixed code, and cannot be defined by its formal characteristics. Rather, it is an open-source phenomenon, a resource available for whoever wants to take advantage of the virtual English language. ELF is negotiated ad hoc, varying according to context, speaker group and communicative purpose. It is individually shaped by its users and can fulfil many different functions ranging from simple small-talk to sophisticated arguments. While of course based on English, ELF is also full of interlingual and intercultural adaptations, typically containing elements from different linguacultures.»

2. Dynamics
From what House has written, it is easy to see the dynamics of ELF at play. Here is how Larsen-Freeman and Cameron (2008: 198-199) relate the dynamics in SLD and ELF.

«Language as a separate entity [fixed system] is a normative fiction[…]; it only exists in the fluxes of language use in a given speech community. For the language classroom this implies that what has previously been taken as the goal of learning, the ‘target language’, ceases to exist in any simple form […]. Inside the language classroom, the dynamics of language-using by teachers and students leads to the emergence of individual learners’ growing language resources and of classroom dialects, and, beyond the classroom, to the emergence of lingua franca varieties.»

3. Focus on Process(es)
In his review (2012: 127) of Seidlhofer’s (2011) book on ELF, Baker observes the following:

«Furthermore, Seidlhofer recommends that the focus should be on how what has been learnt not how much has been learnt, in other words that the process of learning is a viable object of study in itself.»

As I mentioned earlier in this paper, adherents of a CAS perspective conceive of language as a process, as they do its learning. In fact CT allows us to connect both processes. A CAS view rests on Gleick’s observation (1987: 24) that «the act of playing the game has a way of changing the rules.»

4. Overcoming Dichotomies
CT invites the interrogation of dichotomies (Morin, 2007). It recognizes
that dichotomies can be useful when used heuristically, but like all heuristics, they are simplifying moves. Baird (2012: 10) has written the same about ELF:

«Dichotomising along the lines of ‘standard’ vs. ‘non-standard’, ‘ENL/normative’ vs. ‘ELF/expressive’ or perhaps worse ‘creative’ vs. ‘conforming’ is to vastly oversimplify the linguacultural landscapes in which language is performed, the backgrounds and roles of the interlocutors, and the contextual identification processes involved in interactions.»

5. Innovation or Error?

In relation to creativity and conformity, when language is perceived to be a closed system, a fixed target, then no matter what they do, language learners and ELF users are disadvantaged to a certain extent. For example, a new linguistic form that a learner/user creates would likely be considered an error, rather than an innovation. The goal, although never explicitly stated, is conformity to uniformity. But, such a goal, even if it is desirable, is not achievable. Here is an example from ELF research to illustrate this point:

«…communication is so all-embracing a concept like air that we are breathing» (Information Society Seminar; Senior Faculty, Finnish) (Ranta, 2006).

Ranta observes that the ‘attention-catchingness’ of the [progressive] form is the factor that makes ELF speakers utilize it frequently. In other words, there is a reason for the use of the progressive, and because it makes sense and is communicatively felicitous, it is likely to endure. From an ELF perspective, Jenkins (2000: 160) argues: «There really is no justification for doggedly persisting in referring to an item as ‘an error’ if the vast majority of the world’s L2 English speakers produce and understand it.»

Indeed from a CAS/SLD point of view, there is a certain degree of both conformity and creativity in learners’ linguistic performance, just as there are with other language users. Second language learners/users adaptively imitate the language of the environment selectively (Macqueen, 2012) while at the same time having the capacity to create their own forms with meanings and uses and to expand the meaning potential of a given language (Larsen-Freeman and Cameron, 2008); learners do this through reference to extant forms, in the ambient language and in other languages they know, through recombination – by blending and analogizing (De Smet, 2013).
6. Fighting the Myth of Monolingualism

Both ELF researchers and SLD researchers can unite to counter the myth of monolingualism. Already some researchers (e.g., Cook, 1991; Seidlhofer, 2004; Ortega, 2005) have rightly asserted that the monolingual native speaker is not a legitimate model for L2 learning. Yet, despite this assertion, it can still be said that many researchers, misguided, continue to apply monolingual norms.

«...when conducting research on bi- and multilingualism, which means that, among other aspects, native-speaker language proficiency is still used as the yardstick for all the languages of the multilingual person and the multilingual subject and their languages can be investigated without taking all the languages in contact into consideration […]» (Herdina and Jessner, 2013: 755).

7. Cultivating a Non-Teleological View of Language

A problem, it seems to me, with which both ELF and SLD researchers have to contend, is that language is conceived of teleologically (Larsen-Freeman, 2012). I am using ‘teleological’ to mean having an end point. Deacon (2012: 24) writes «we recognize teleological phenomena by their development toward something they are not, but which they are implicitly determined with respect to…It is the end for the sake of which they exist…».

The view of language as a complex adaptive system (Ellis and Larsen-Freeman, 2009) counters the tendency to portray learner language as being an incomplete and deficient version of native speaker language. Indeed, as I mentioned earlier, implicit in this understanding of language as a self-modifying, emerging system is that the developmental change process is never complete and neither is its learning.

The system develops from experience (Ellis and Larsen-Freeman, 2009), afforded by the environment. The ambient language does, therefore, have a role in its shape. But the point is that it does not determine it, nor does it define the learning trajectory. If it did, there would be no way to account for the individual developmental paths that learners take.

Larsen-Freeman and Cameron (2008: 158) put it this way:

«Embodied learners soft assemble their language resources interacting with a changing environment. As they do so, their language resources change. Learning is not the taking in of linguistic forms by learners, but the constant adaptation [, creation,] and enactment of language-using patterns in the service of meaning-making in response to the affordances that emerge in a dynamic communicative situation.»
8. Native speaker model?

Currently, in discussions of ELF, a question concerning the appropriateness of a native speaker model for instruction (Sowden, 2012; Cogo, 2012; Sung, 2013) has been raised. While it is not my prerogative to intrude in such internecine matters, it seems to me that ELF proponents would be more persuasive if they can help teachers reconcile the normative conception of language that they have inherited (Dewey, 2012) with an acceptance of the fluidity of language. In other words, how can a view of language be entertained that helps learners/users extend their linguistic worlds, all the while making possible learners’/users’ membership in the discourse communities to which they desire admission?

The following are three possible moves to reconcile the two (Larsen-Freeman, 2012):

1. Set the overall goal of language teaching as developing capacity (Widdowson, 1983), the ability to create meaning with language. Capacity is that which enables learners/users to move beyond speech formulas in order to innovate. Indeed, capacity is «an active force for continuing creativity» (1983: 27).

2. Within this overall goal, identify particular contexts of use, contexts in which norms for local ‘success’ can be established in keeping with learner goals. Illustrations offered by ELF researchers include Business English in Jenkins with Cogo and Dewey (2011), academic English in Mauranen (2012) and I-registers in Hall (2013).

3. What we should be teaching is not only language, but also the process of adaptation: Teaching learners/users to take their present system and mold it to a new context for a present purpose (Larsen-Freeman, 2013b).

For after all, «adopting an ELF perspective on teaching does not mean that norms and standards are no longer required, but that these are mutable concepts and that learners need to be introduced to language variation as soon as they are ready» (Sewell, 2013: 7).

4. Research methods

An additional way that CT might be of use to ELF researchers is offering some innovative methods of research (Verspoor et al., 2011). Among these, are computer modeling (Ellis and Larsen-Freeman, 2009), the use of non-Gaussian statistics, such as Pareto distributions (Larsen-Freeman, 2013a), and retrodictive qualitative modeling (Dörnyei, 2011).
5. Reciprocity

Finally, a successful union needs to be reciprocal. To this end, I believe ELF provides a clear test case for a CAS-inspired emergentist view of language and its development (Larsen-Freeman, 2011). As Seidlhofer (2011: 94) has written of ELF «...due to its extremely widespread use by speakers from a vast number of first language backgrounds, it affords us the opportunity of observing these processes [of variation and change] happening in an intensified, accelerated fashion.»

This is an exciting time in the evolution of the study of ELF. I am an outsider. It is up to you to decide on the merits of CT. However, besides offering a coherent theoretical frame, one other advantage in adopting a broad theory is that it features a discourse that makes it possible to transcend one’s field of interest and to enter into genuine dialogue with others. We know, contrary to stereotypes, that science is a social enterprise. It is my contention that as the discourse of CT is increasingly taken up, it can facilitate engagement with other scholars to mutual benefit.
REFERENCES


House, J. 2014, English as a global lingua franca: A threat to multilingual
Larsen-Freeman, D. 2012, Another step to be taken. Rethinking the end point of the interlanguage continuum. Paper presented at the 40th anniversary of the publication of ‘Interlanguage’. Teacher’s College, Columbia University, October.
Larsen-Freeman, D. 2013a, Discussant comments at Colloquium on Motivational Dynamics in Second Language Acquisition, American Association for Applied Linguistics, March.
Cambridge, MA: Harvard University Press.
Widdowson, H.G. 2012, ELF and the inconvenience of established concepts. 