

Interview

ILHA DO DESTERRO

INTERVIEW WITH MARTA GONZÁLEZ-LLORET AND
VILSON LEFFA

BUILDING AN INTERFACE BETWEEN SLA AND
TECHNOLOGY

Marta González-Lloret is an Associate Professor at the Spanish Division of the Department of Languages and Literatures of Europe and the Americas and Cooperating Graduate Faculty at the Department of Second Language Studies at the University of Hawaii, Manoa. Her main areas of interest are the intersections of technology and TBLT and technology and L2 pragmatics; Conversation Analysis for L2 interaction; teacher training; and L2 program assessment. She has published in numerous academic journals and shared her work all over the world. Her most recent publication *Technology-mediated TBLT: Researching Technology and Tasks* is an edited volume with Prof. Lourdes Ortega by John Benjamins.

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Grande do Sul and is currently teaching at the Catholic University of Pelotas. His main research interests include the teaching of reading and writing in L1 and L2 contexts, from an early psycholinguistic approach to a socio-cultural perspective; foreign language teaching policies, as a result of his involvement in many university and national-level committees and representational positions in scientific associations, including presidency of ALAB (Applied Linguistics Association of Brazil) for two terms; computer-mediated learning and distance education, starting with a book chapter on the teaching of concepts in the “Atari Collection”, published in 1985; research articles on electronic dictionaries, published in the 1990’s; and more recent work on Activity Theory and Complexity, such as the article, “Defining a CALL activity”, published in 2005; and the chapters “CALL as action” and “Authorship in Materials Design for Language Teaching”, both published in 2009.

Raquel Carolina Souza Ferraz D’Ely (UFSC) & Maria da Gloria Guará-Tavares (UFC)

Gloria and I would like to thank both researchers for promptly and kindly accepting to take part of this *e-interview*¹, whose ultimate objective is to deepen our understanding on the intersection between SLA and technology. More specifically, the questions posed here intend to unfold, from the lenses of these two experts, their perception on the role technology has been playing for theory building in SLA and language pedagogy. By means of their answers, moreover, we might also have the opportunity to perceive the extent to which the contexts in which they are inserted in impact upon their views and perceptions on this matter.

Invited Editors² (IE): *So, to start with, we would like to know a bit about your motivation to investigate the relationship between SLA and technology and, also, on how you perceive this relationship.*

Marta González-Lloret (MG-L): When I started research using CALL (Computer Aided Language Learning) in my language teaching, technology was not very advanced but I always saw the great potential that technology had to communicate learners with other speakers, to offer them more authentic materials and to get them closer to the target culture. Today, all of those functions of the Internet are given for granted, but 20 years ago there was very little use of the Internet and we were using very “primitive” technologies. As technologies advanced they opened new possibilities to put in practice those principles of second language acquisition that were being investigated and proposed as promoters of language acquisition.

For me, technology and SLA right now are inseparable in today’s world. When you learn another language, the chance that you will have to use some form of technology through that L2 is very large. Being digitally literate is as important as being literate. Also, in order to use some technologies or engage with other speakers through technology a second language is essential. Research (i.e. Warschauer, 2003) has proved that being able to use technologies is a big motivation to learn another language. People want to get to information, play games, connect through Facebook... and many of these require another language (English mostly).

Vilson Leffa (VL): My motivation to investigate the use of technology in SLA can be traced to many aspects: in my opinion, technology is fun, inclusive, empowering, cheap and essential to language

learning. I think it is very difficult to learn a foreign language without technology support. Let me expand on these two last ideas: low cost and relevance to SLA.

People do not seem to have realized how cheap technology has become. In the 1970s, I had to sell a car to buy a telephone line, apart from a fixed monthly contract; today telephone lines are free and you can choose from different contracts, including prepaid plans on less than fifty cents a day. On a monthly basis contract, you have a chance to get a free smartphone and be connected with the world.

In terms of information storage, the price drop is even more dramatic. Hard drives with a three-terabyte capacity are available for less than a hundred dollars. Considering only text, this would be the equivalent of two million books the size of the King James Bible, typically with more than a thousand pages, depending on how it is formatted. Very few libraries in the world would have space for so many books. Technology, however, can put it all in a box the size of a small pocket book... in case you are interested in keeping two million books for yourself.

In terms of relevance to SLA, we can say that learning a foreign language without technology support is possible, but it is much more difficult for the student, especially if he or she lives in a country where the target language is not spoken in the community, as is the case, for example, with students learning English in Brazil. In the Brazilian context, access to the foreign language, spoken or written, is typically mediated by technology, from printed media, to audio, video and Internet. Obviously, technology is present in everything we do in our daily lives, including work, study and leisure, but it is more so in SLA.

We use language to interact with other people and the further we are from our interlocutors, either in space or in time, the more important technology becomes. We need technology if we want to hear

what somebody said some time ago; without a recording device that captures the words, the rhythm, the prosodic elements of the utterance, a lot of the message is lost and cannot be learned by the student. We need technology if we want to talk to somebody in another country. Face-to-face interaction is very important in language learning and very difficult for many students in Brazil, but it is becoming feasible through live video resources like Skype and Hangouts.

IE: To which extent do you think the research on the interface between SLA and technology can inform both theory building and language pedagogy?

MG-L: For me it is difficult to see a division between the use of technologies in classroom and the pedagogical choices made to effectively use them (for language learning or any other field). Although this is not the case everywhere in the world, technology is slowly but steadily becoming part of the classrooms (much like books or pencils) and how to learn to use it effectively is as essential in teacher training as the methodology/pedagogy of teaching.

Task-based language teaching for example is the perfect methodology in my opinion to understand this symbiosis. According to TBLT, we learn a language by “doing things with the language” (Long & Norris, 2000; Norris, 2009), things that are practical and useful for the learner, things that she/he will need to use in the real world. Learning to use any technology is very much a “learning by doing” process. Someone can explain to you how to create an avatar and walk around Second Life Virtual environment talking to people, you can even read about it in a manual, but until you actually “do it” (try, fail, try again until you succeed) you will not learn it. Learning language and learning technology is very much the same in my opinion, and

therefore it makes sense to combine both. Some of the existing theories of language learning were proposed when people communicated face to face and by phone mainly. That is not the case right now. Email and other forms of computer-mediated communication have surpassed phone communication in daily interactions in the world, including for L2 speakers (Herring, 2010). Investigating how L2 speakers engage in these new forms of communication can help us understand, build and reshape learning theory.

VL: Considering the theory-versus-practice dichotomy, we have two choices in language pedagogy: either we use theory to explain practice or we use practice to build a theory.

In CALL (Computer-Assisted Language Learning), we have preferred to use existing theories to explain what we do, considering both proto-theories – such as Complexity (Morin, 2011; Larsen-Freeman; Cameron, 2008), Chaos (Lorenz, 2001; Larsen-Freeman, 1997;) and Activity (Leontiev, 1981; Wertsch, 1998; Cole, 2003) – and more applied models – such as Connectivism (Siemens, 2004), Flow Theory (Csikszentmihalyi, 1990) and ANT (Actor Network Theory) (Latour, 2005).

No matter which direction we go, from theory to practice or vice-versa, we can see technology as either mediator or agent. As we think of mediation, we have to consider that this implies that something is standing between two other things, such as a text between writer and reader, or a computer program, such as Skype, between teacher and student. CALL has traditionally seen technology as a cultural artifact that mediates learning, helping the student reach his or her goals in terms of target language development. What is fascinating here is that technology can also be seen as agent in its own right, standing not in the middle of interaction, as mediator, but at one end, as agent.

This is what happens, for example, when we are corrected by a spell checker or have our credit card automatically validated by a machine. These are non-human agents performing tasks that for many years were exclusively reserved for humans.

Some people may find this scaring, although for the wrong reason, believing that we run the risk of being replaced by machines, or that we may end up by acting like them, as if machines would dehumanize us. I do not think this is the problem; technology just empowers us to do more effectively what we really want to do, deep inside in our human nature, be it to kill people, to save lives or to learn a new language. We will never imitate machines; what we may do is to make machines imitate us. Machines cannot dehumanize us, but, maybe, one day, we will be able to humanize machines.

IE: What would be the most challenging aspects in conducting research on the interface between SLA and technology?

MG-L: First, technologies change very fast so one needs to design research studies that look at the essential, the core, of the technology, that will remain through the time. New technologies appear every day and researchers are attracted by different aspects of them. This makes aggregation of research and results very difficult. We need a lot more research and research that builds up knowledge, rather than disperses it. When you research technology you have to be updated on what is new, read new research constantly and always think ahead so, by the time you start researching, your research has not become obsolete.

Another challenge is to find professionals that are trained both in SLA and in CALL and to produce quality research that is grounded on SLA theory.

VL: We tend to see technological artifacts as our obedient slaves, but this is just a theoretical possibility, not a practical guarantee. Technology responds to our actions not to our inactivity. It does not speak for us, create for us or think for us; it just reacts to something we do. If we are idle, it remains idle. For technology to be our slave, we have to do three things: (1) to appropriate it, in the sense of taking possession of it; (2) to command it, in the sense of exercising control over it; and (3) to master it, in the sense of ruling over it. Like a slave, technology is something we buy, control and put at our service.

Appropriation, command and mastery involve the development of both skills, knowledge and attitude, covering the psychomotor, cognitive and affective domains. We usually take years to acquire the necessary knowledge to read a book proficiently, to speak a language fluently or play tennis like a professional. Most of the time we fossilize at an intermediate stage because we do not have the necessary motivation to go on. We have to practice reading, speaking and tennis, if we want to read a book, speak a language or play tennis. With technology, it is not different. We need to develop some basic skills, knowledge and favorable attitude to learn how to use it to our benefit. I feel this is our challenge. There is a lot of resistance to overcome on the part some teachers who are reluctant to abandon their zone of comfort with more traditional ways of teaching. Some even try to use new methodologies but soon give up when they find the first obstacles. Technologies have limitations and possibilities, and they tend to ignore the possibilities—what technology can do – and emphasize the limitations—what technology cannot do.

In order to command, master and appropriate a technology we have to develop the three domains, from psychomotor skills, by synchronizing fingers and eyes, for example, to cognitive aspects, such as learning how to explore effectively the resources of a given

application, and on to a receptive attitude towards technology use, as something to be enjoyed. In many materials production courses I have conducted with teachers, I found that not all of them are able to reach the pleasure of authorship, when, empowered by the machine, they may produce something interesting, with a good chance of being appreciated by their students. For a good use of CALL, as an obedient slave, all three domains have to be developed. Whenever one is missing, only part of the program potential is used, which is a pity.

IE: Considering your research experiences in the field, what would be some of the unresolved issues that, in your opinion, merit further scrutiny?

MG-L: There is so much that still needs to be investigated. In the area of technology-mediated TBLT for example we are starting to scratch the surface of research. We are still investigating what makes a task more or less complex so that we can sequence tasks in a curriculum. We still have competing theories of task complexity: The Cognition Hypothesis (Robinson 2001, 2003, 2005) and the Trade-off Hypothesis (Skehan, 1998; Skehan & Foster, 2001). To this, we are now adding the complexity of the technologies employed. Does the complexity of a task change when it is done through a different media? Is a task affected by the complexity of the technology? We suspect it does but we don't have research to prove it yet. See Adams and Nik Mohd Alwi (2014) for an example. How does the technology affect the language task and how does the level of language affect the use of the technology? These are all very important questions if we want to create task-based materials that are technology-mediated.

Lots of unresolved issues in the field of CALL! To me, one of the essential ones is the real use of second language acquisition

theory when we explore CALL. Some research on CALL seems to be descriptive in nature and does not really use much of a theoretical background. SLA has been a discipline longer than CALL, and CALL should benefit from the theoretically grounded research that happens in SLA. This is a great field of research for anybody who likes to work in pioneering work.

VL: There are many unresolved issues here, but I am going to concentrate on three of them. Briefly: (1) how to embrace technology as support for social practice; (2) the lesson to learn from the world of business and work; (3) how to harmonize language pedagogy and technology.

We have to learn how to use technology for the benefit of education as they do it in the world of business and work. No excuses here, such as claiming that education is different, that we are dealing with human beings, and so on. In other areas, they are also dealing with human beings. Language learning is essentially social practice and there is absolutely no incompatibility between technology and social practice; quite on the contrary, they feed one another. Technology can even foster social practice, as we see with the dissemination of social networks that have occurred all over the planet.

I feel that we should explore technology for educational purposes in a more profitable way than we have done so far, but apparently we do not know how to do it. Simply importing social networks procedures into school does not seem to guarantee student involvement: the moment we institutionalize something, it kills the fun (Irala, 2009). There may be many reasons for failure: what was done spontaneously suddenly becomes mandatory; the freedom the user had to choose his or her partners is lost; studying a language may not necessarily be an interest to be shared with your classmates.

Another issue is how to harmonize language teaching pedagogy with technology. In language teaching theories, for example, we are light years beyond the emphasis on the system of the language, with a focus on lexis, syntax and translation (Kumaravadivelu, 2003). If, however, we examine a language teaching system like *Duolingo*, for example, which is by far the most popular language course on the Internet at the time of this interview, with more than fifty million users, we will see a total emphasis on vocabulary, disconnected sentences and translation; nothing faintly resembling what we understand by language teaching pedagogy. Nevertheless, they have been able to build a very attractive system; they were so good at it that many people would probably be glued to their tablets even if they were sure that there was nothing to be learned from it. There must be a way to put good use of technology and pedagogy together.

IE: If you wish, to close this interview, make reference to any other aspect you consider worthwhile mentioning.

MG-L: I think that as a SLA researcher, it is very important not to let the technology “blind” your research. So many “new shiny” technologies appear that it is very tempting to focus on the technology itself rather than in the language learning. This is the same for teachers, curriculum developers and administrators. Bringing technology in the language classroom has to be a decision made based on SLA research and conscious pedagogical choices. The technology should follow, or better “accompany” the language teaching methodology and pedagogical choices.

VL: It is OK. I found the questions interesting and challenging. We can always add something, but there comes a time when we have to stop... or interrupt.

Thank you very much for the opportunity.

Interview given to Raquel Carolina Souza Ferraz D'Ely (UFSC) & Maria da Gloria Guar Tavares (UFC)

Notes

1. This interview is called an e-interview because it was conducted by email. The choice for this technological tool was made due to two reasons: 1) time constraints and the difficulty of scheduling a Skype session with all the participants, and 2) the need to ensure that the mode of the interview would be the same for both interviewees.
2. IE - Invited Editors: Raquel Carolina Souza Ferraz D'Ely & Maria da Gloria Guar Tavares

References given by Marta Gonzlez-Lloret

- Adams, R., & Nik Mohd Alwi, N. A. (2014). "Chapter 3. Prior knowledge and second language task production in text chat". In *Technology-mediated TBLT: Researching Technology and Tasks*, M. Gonzlez-Lloret, and L. Ortega (Eds.), 51–78.
- Herring, S. (2010). Computer-Mediated Conversation: Introduction and Overview. *Language@Internet*, 7. Available at: <http://www.languageatinternet.org/articles/2010/2801>.
- Long, M. H., & Norris, J. M. (2000). Task-based teaching and assessment. In M. Byram (Ed.), *Encyclopaedia of language teaching* (pp. 597–603). London, UK: Routledge.
- Norris, J. M. (2009). *Task-Based teaching and testing*. In M. H. Long & C. J. Doughty (Eds.), *Handbook of language teaching* (pp. 578–594). Malden, MA: Wiley/Blackwell.

- Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*, 22, 27–57.
- Robinson, P. (2003) The Cognition Hypothesis of adult, task-based language learning. *Second Language Studies*, 21, 45–107. Skehan, P. (1998). *A cognitive approach to language learning*. Oxford, UK: OUP.
- Robinson, P. (2005). Cognitive complexity and task sequencing: Studies in a Componential Framework for second language task design. *IRAL*, 43, 1–33.
- Skehan, P. (1998). *A Cognitive Approach to Language Learning*. Oxford. Oxford University Press.
- Skehan, P., & Foster, P. (2001). Cognition and tasks. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 183–205). Cambridge, UK: CUP.
- Warschauer, M. (2003). *Technology and Social Inclusion: Rethinking the Digital Divide*. Cambridge, AM: MIT Press.

References given by Vilson Leffa

- Cole, M. (2003). *Cultural Psychology: a once and future discipline*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Csikszentmihalyi, M. (1990) *Flow: The psychology of Optimal Experience*. New York: Harper & Row.
- Irala, V. B. *A Reinstitutionalização como prática: entre o jogo de rir com e jogo de rir do professor*. Pelotas: Universidade Católica, 2009. [Tese de doutorado]
- Kumaravadivelu, B. (2003). Critical language pedagogy: a postmethod perspective on English language teaching. *World Englishes*, v. 22, n. 4, p. 539-550.
- Larsen-Freeman, D. (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics*, v. 18, n. 2, p. 141-165.
- Larsen-Freeman, D.; Cameron, L. (2008) *Complex systems and applied linguistics*. Oxford: Oxford University Press.

- Latour, B. (2005) *Reassembling the social: an introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Leontiev, A. N. (1981). The problem of activity in psychology. In: WERTSCH, J. V. (org.). *The concept of activity in Soviet psychology*. Armonk, N.Y.: M.E. Sharpe, p. 37-71.
- Lorenz, E. N. (2001). *The essence of chaos*. Washington: University of Washington Press.
- Morin, E. (2011). *Introdução ao pensamento complexo*. 4 ed. Trad. Eliane Lisboa. Porto Alegre: Sulina.
- Siemens, G. (2014). *Connectivism: a learning theory for the digital age*, 2004. Available at: <http://www.elearnspace.org/Articles/connectivism.htm>. Retrieved on: June 20.
- Wertsch, J. V. (1998). *Mind as action*. Oxford: University Press.