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Expanding and contextualizing digital language learning

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Peer Commentaries

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The paper by Li and Lan (2021) introduces the concept of digital language learning (DLL) as an approach to characterizing the developments in technology in recent years that have led to new affordances for second language learning. The technological advances addressed focus on three areas: mobile assisted language learning (MALL), virtual reality (VR), and game-based language learning (GBLL). The authors argue that, while each of these areas has been studied by researchers in computer-assisted language learning (CALL), they can and should be grouped together as providing a new avenue for language learning that is informed by studies in first language acquisition, developments in adult education theory, and findings from scientific research in brain activity and language learning. I argue in this commentary that indeed this approach offers useful insights into the current relationship between technology and language learning. At the same time, grouping together the three areas of DLL brings with it potential dangers of generalizations and oversimplification. Furthermore, the paper does not address important areas of second language acquisition (SLA) theory that play a role in DLL, such as the rise of informal language learning and the integration of technology affordances into instructed language learning, such as virtual exchange.

The authors argue that "language learning is in a new era of pervasive digital applications." Many of those learning opportunities are now and in the future likely to be available through portable devices (MALL). The authors point out, correctly in my view, that the power of mobile devices for language learning will be enhanced through the incorporation into apps and services of data-driven advances in AI, especially in speech technologies. The paper is especially strong in its discussion of the second area addressed, VR. Here too, big data and AI are making VR tools more powerful. The authors point out that there are in fact a variety of approaches to VR that can be useful in language learning, with some more practical and more widely implementable. VR has especially strong potential in the third area of DLL the authors discuss, GBLL. As the paper points out, immersive environments simulate reality, and, in a game, can add significantly to the resemblance to real-world situations.

That discussion of game-based language learning in the paper points to one of the difficulties in linking together the three areas of learning activity under the rubric of DLL. The authors state, for example, that engaging in DLL "can lead to deeper cognitive processing" (p. 9). That may well be, but that outcome will likely depend on so many factors – the learner's context of learning (environment, goals) and the individual trajectory (proficiency level, learning style) – that generalizations are dangerous. That is a case as well with the affordances of gaming. To state that "GBLL produces positive learning outcomes" ignores the wide variety in gaming options (Reinhardt, 2019).

The paper is particularly informative in its integration of research in neural networks, cognitive processing, and language learning. The discussion of neuroemergentism is especially of interest, as the concept of "emergentism," as applied to the biology of learning in the brain parallels the importance that concept has generated in SLA theory, especially through ecological approaches such as complex dynamic systems (Larsen-Freeman, 1997). However, here too, generalizations can be misleading. The authors point to studies which show that DDL activities have a positive, measurable effect in the brain. One might question if that is specific to DLL or a consequence of second language learning generally.

The authors repeatedly contrast DLL to what they present as a typical language learning environment, seen as translation-based and teacher-centered. That may be the prevalent model in some contexts, but depending on location, what learners are experiencing in formal learning settings may be the communicative approach, which has become mainstream in many environments. It embraces task-based language learning and draws on real-world simulations for activities which are typically socially oriented through small group collaborative work. From that perspective, the social orientation of DLL, as highlighted in the paper, is not necessarily different from classroom practice. In CALL research as well, sociocultural learning has long been seen as the basis for effective second language learning, rather than a purely cognitively oriented approach.

The paper, in its discussion of particular examples of DLL, points to the authors' traditional orientation towards SLA, based largely on discrete grammar and vocabulary learning. Brief

mention is made of the usage-based language model, but the examples discussed in the paper of innovative language learning overwhelmingly target traditional vocabulary learning, rather than approaches that assume the inseparability of lexis and syntax. The repeated references to learning the word "spoon" is a case in point.

Finally, while the authors highlight DLL as "enabling contextualized and embodied language learning to occur in the real world", no mention is made of real-world exchanges for language learning through telecollaboration, one of the profound changes made possible by recent technology advances, especially videoconferencing on mobile devices (O'Dowd, 2020). No mention is made either of the rise of informal language learning through extensive viewing of videos (Sockett, 2014) or participation in social media (Kulavuz-Onal & Vásquez, 2018), both of which have been shown to offer effective approaches to second language learning. DLL examples the authors discuss are certainly important but offer only a partial picture of what digital and networked tools and services now make possible for effective language learning.

References

Kulavuz-Onal D and Vásquez C (2018) "Thanks, shokran, gracias": Translingual practices in a Facebook group. *Language Learning & Technology* **22**, 240–255.

Larsen-Freeman D (1997) Chaos/complexity science and second language acquisition. *Applied linguistics* **18**, 141–165.

Li P and Lan Y-J (2021) Digital Language Learning (DLL): Insights from Behavior, Cognition, and the Brain. *Bilingualism: Language and Cognition* 1–18, https://doi.org/10.1017/S1366728921000353

O'Dowd R (2020) A transnational model of virtual exchange for global citizenship education. *Language Teaching* **53**, 477–490.

Reinhardt J (2019) *Gameful second and foreign language teaching and learning: Theory, research, and practice*. Cham, Switzerland: Palgrave Macmillan.

Sockett G (2014) *The online informal learning of English*. Berlin: Springer.

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