



Ecological CALL: development of a self-location tool for attuning to the ‘chorus of voices’

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Abstract. This study reports on the development of *Parlure Games* and explores its pedagogical affordances. *Parlure Games* is a multi-dialectal listening and decolonial conversation tool created to address the absence of variable speech (including speech markers associated with native speaker status, regional dialect, age, and race) found in the audiovisual material of adult French learners in Montréal, Canada. *Parlure Games* enables instructors to curate audiovisual content inclusive of different social and regional dialects, and supports learners in understanding variable speech while self-locating themselves in the process of learning a colonial language.

Keywords: Parlure Games, ecological CALL, variability in L2 input, French L2 learning.

1. Introduction

Nested within layers of macro-sized (national cultures, institutions) sociocultural ecosystems, the classroom is a microsystem where technology can transport learners from local to international contexts via Computer-Assisted Language Learning (CALL; Ramirez, Lafford, & Wermers, 2021). For language learners in urban settings, the ability to attune to local and international speakers is an important communicative skillset to develop for their social inclusion (Otsuji & Pennycook, 2011). However, the well-documented lack of social and regional variation found in language classrooms reflects an assimilative and colonial mindset toward learning (Macedo, 2019). Language learning engages multiple modalities (visual, aural, and emotional; Hardison & Pennington, 2021), and is enhanced when multiple speakers and varieties are encountered (Pisoni, Lively,

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& Logan, 1994), meaning that classrooms should strategically curate a curriculum inclusive of local and international varieties to encourage multimodal interaction in the Target Language (TL).

Parlure Games was created to address these issues, particularly the ‘invariable’ social speech markers (related to age, race, native speaker status, and regional dialect) found in the audiovisual material (TV shows, movies) that characterizes adult French Second Language (FSL) classrooms in Montréal, Canada (Chung & Cardoso, 2022). *Parlure Games* is a multi-dialectal listening and conversation tool designed to expose learners to variable TL speech and prompt critical conversations about learning a colonial language. Situated within stages one and two of Cardoso’s (2022) chronological framework for conducting interactive CALL research, this paper (1) describes the development of *Parlure Games*, and (2) explores the tool’s pedagogical affordances.

2. Stage 1. *Parlure Games*: development of an ecological, variable CALL tool

Ecological perspectives do not view language as input or output, rather language provides opportunities for learners to attune to their sociolinguistic environment through interaction with human and non-human agents (i.e. technology, signs), either enabling or weakening linguistic relationships (Lafford, 2009). These multimodal interactions enhance the “chorus of voices” that constitute learners’ communicative repertoires (Tarone, 2007, p. 842), and proficiency is measured by performing increasingly complex interactive tasks (Lafford, 2009). Ecological learning, therefore, focuses on how language is used in the nested ecosystems, which means thinking both locally and globally about language teaching and learning. Drawing on ecological systems theory, van Lier (2011) outlined ten characteristics of an ecological language learning classroom (Table 1) which is principled on supporting learners’ agency development as they self-locate their identities in the nested ecosystems.

To explore the interconnected macro and microsystems of the linguistic landscape, learners require robust perceptual systems. Empirical evidence from laboratory-based High Variability Phonetic Training (HVPT) suggests that second language learning is enhanced when training includes: (1) multiple human voices; (2) natural speech; (3) at least five distinct talkers (e.g. each representing a unique dialect); (4) multiple exposures to the stimuli; and (5) immediate feedback using forced-choice identification tasks (e.g. choose answer A or B; Pisoni et al., 1994).

HVPT is consistently linked with greater perceptual acuity, more target-like TL pronunciation, and learning that generalizes to new speakers and novel linguistic features (Thomson, 2018). These five characteristics form the theoretical pillar for curating highly variable audiovisual content for the language classroom, and are operationalized in *Parlure Games*.

3. Stage 2. *Parlure Games*: pedagogical affordances

Variation is essential for robust language learning, and FSL classrooms are consistently criticized for the lack of regional and social variation in their curriculum, often favoring standardized varieties reflective of middle-class white speakers (Macedo, 2019). The use of mass media (e.g. TV shows, films) in the classroom contributes to monolingualism, as it often features invariable standardized speech from supposedly ‘unaccented’ speakers (Lippi-Green, 2012). Because invariability inhibits robust language learning, *Parlure Games* was designed to disrupt these monolingual orientations by sourcing its audiovisual material from non-mass media platforms (e.g. YouTube, TikTok). These online videos often offer captioning, which supports bimodal learning (i.e. simultaneously reading while listening).

Figure 1. Interface of *Parlure Games*



A *Parlure Games* expedition includes local ‘road trips’ within a region (e.g. province, city), or international ‘transatlantic voyages’ to previously or currently colonized territories within the *Francophonie* (see Figure 1 above). One expedition is comprised of five destination points pinned onto a Google map, each containing a hyperlink to a publicly available video. Following the characteristics of HVPT training, each video represents the natural speech of at least five distinct talkers, and the playback setting allows for multiple exposures to the stimuli. After listening to each video, learner groups collectively answer a hyperlinked quiz (with automated feedback) related to content and social speech markers. Finally, group discussions are posed, prompting critical conversations

about learning a colonial language, facilitating learner engagement with the macro and micro realities of learning French, thus supporting an ecological CALL pedagogy. Table 1 illustrates how *Parlure Games* can promote an ecological language learning classroom based on van Lier's (2011) framework.

Table 1. Promoting an ecological language classroom with *Parlure Games*

Ecological pedagogy	Definition	Parlure Games
1. Relationality	Examines the interconnectedness of linguistic systems from a micro/macro level	Online map features audiovisual material of local and international varieties of Francophonie communities
2. Context	Language use is specific to sociocultural contexts involving in/animate interlocutors	Geographical and sociocultural contexts are explored through online videos and discussed in groups
3. Patterns/Systems	Emerge from language use not prescriptive rules	Exposure to authentic (i.e. non-mass media) speech
4. Emergence	Multimodal communicative repertoire is constantly re-organizing itself	Audiovisual material and group discussions engage the multimodal communicative repertoire
5. Quality	Relevant to learners with real-world implications that engage both the intellect and emotions	Content and discussion questions enables learners to check their comprehension and express their opinions
6. Value	Cultivate a moral stance toward language learning	Discussing French's global reach raises ethical questions of learning a colonial language, cultivating a moral stance on users' FSL learning
7. Critical Perspective	Examining institutional structures and supporting transformative education	Supports learning how to perceive the language and critically discuss these perceptions with classmates
8. Variation	Encourages embodying a linguistic identity among the many varieties available	Spotlights non-standardized varieties enabling learners to choose which linguistic identity they wish to embody/reject
9. Diversity	Promotes multilingual learning over monolingual approaches	Reflects a multi-dialectal approach to learning over a standardized one
10. Agency	Inhibits or enables sociolinguistic movement through an ethical education	Learners traverse the globe listening to different speakers and discussing content, supporting perceptual learning and critical reflection

4. Concluding remarks

The goal of an ecological CALL curriculum is activity-based learning around, with, and through the use of technology (Cardoso, 2022), providing learners with opportunities to hone their attunement skills, cultivate learner agency, and socially engage with the TL (van Lier, 2011). *Parlure Games* enables language instructors to curate an audiovisual curriculum inclusive of speakers from diverse social and regional backgrounds, and supports learners in navigating their multilingual environment while connecting them to ecosystems greater than themselves.

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