Research Article

I spy something #invisible: Using Instagram to help learners understand second language invisible culture

Géraldine Blattner [1] (iD), Amanda Dalola [2*] (iD), Stéphanie Roulon [3] (iD)

[1] Florida Atlantic University, Boca Raton, FL, USA
[2] University of Minnesota, Minneapolis, MN, USA
[3] Portland State University, Portland, OR, USA
*Corresponding Author: adalola@umn.edu

ARTICLE INFO	ABSTRACT
	French-language textbooks have long faced criticism for their limited use of authentic resources and their failure to meaningfully incorporate cultural elements into language teaching, letting foreign language learners struggle to grasp the non-literal aspects of language, known as the "invisible culture." These hidden cultural components encompass beliefs, values, social norms, and non-verbal cues, influencing communication and language use. Experienced language users may take these elements for granted, making them challenging for learners to grasp without adequate exposure to French. Understanding these hidden cultural elements is essential for successful language acquisition and cross-cultural communication, enabling learners to genuinely and authentically interpret and express themselves. Without positive evidence of a concept's culturally specific values, learners must rely on cultural knowledge from their first language/culture, which results in the direct transfer of cultural assumptions which hinders their ability to make authentic sense of the target language. Taking inspiration from the Cultura project, this study uses the multiliteracies framework to bridge the gap between first and second-language intercultural representations, helping learners develop semantic aspects of cross-cultural literacy through visualization tasks using Instagram, a photo-based social media platform. Intermediate-level French students provided written impressions of three culturally specific word pairs: snack/goûter, suburb/banlieue, and freedom/liberté. They searched for these concepts on Instagram, selected images that best represented their understanding, and created e-posters. Participants then analyzed and compared these e-posters across languages, refining their definitions during discussions. This approach successfully developed certain semantic aspects of the invisible culture within the target language, highlighting the benefits of exposing learners to diverse text types.

INTRODUCTION

In recent years, digital technologies have transformed the landscape of communication, offering dynamic and interactive platforms that transcend traditional mediums such as paper and film. The advent of social media, in particular, has revolutionized how individuals interact, exchange ideas, and access information on a global scale. This evolution in communication technologies has not only reshaped social dynamics but has also provided language learners with unprecedented opportunities for authentic language input (Kern, 2015). However, amidst this digital revolution, one crucial aspect often overlooked is the nuanced interplay between technology and culture, particularly in the context of language learning.

As Kern (2015) posits, technology does not operate in isolation but is intricately intertwined with cultural practices, shaping and being shaped by social conventions, situational contexts, and material constraints. This symbiotic relationship between technology and culture underscores the importance of incorporating cultural elements into language education, especially concerning the "invisible culture" embedded within language use. Invisible culture encompasses the subtle nuances of beliefs, values, social norms, and non-verbal cues that significantly influence communication and language comprehension. Yet, traditional language textbooks have often neglected to address these cultural dimensions adequately, leaving learners grappling with the intricacies of language beyond its literal meaning, or worse, ignoring them altogether.

Recognizing the indispensable role of cultural competence in language acquisition and cross-cultural communication,

this study endeavors to bridge the gap between technology, culture, and language learning. In particular, it seeks to explore the potential of leveraging Instagram, a visually-centric social media platform, to enhance learners' understanding of the invisible culture inherent in the French language. By integrating multiliteracies pedagogies into an updated, social media-based version of the Cultura project (Furstenberg et al., 2001), this research aims to empower intermediate-level French students to decipher and interpret the cultural nuances embedded within the language.

Central to this study is the acknowledgment that language learners must not only develop linguistic proficiency but also cultivate cross-cultural literacy to navigate the complexities of intercultural communication effectively. By engaging with Instagram's diverse text types and visual representations, learners are able to gain insights into the cultural connotations, contexts, and ideologies conveyed through culturally charged vocabulary. Through guided visualization tasks and collaborative discussions, students explore culturally loaded word pairs, such as "snack/goûter," "suburb/banlieue," and "freedom/liberté," and analyze corresponding images to refine their understanding of these concepts within the French cultural context.

This research endeavors to showcase the transformative potential of integrating digital technologies like Instagram into language education, not merely as a tool for communication but as a medium for cultivating cultural awareness and sensitivity. By harnessing the interactive and immersive nature of social media platforms, educators can provide learners with authentic and rich language experiences that transcend the confines of traditional classroom settings. Moreover, by elucidating the intricate interplay between technology, culture, and language, this study aims to furnish educators with a model for effectively incorporating digital media into language pedagogy, thereby equipping learners with the skills and competencies necessary for meaningful intercultural communication in an increasingly interconnected world.

Teaching Culture

Teaching culture is a crucial aspect of language instruction, yet in traditional second language textbooks, cultural transmission often focuses solely on factual knowledge of visible culture. Invisible culture in language learning refers to aspects of a culture that are not immediately apparent or visible but play a significant role in communication and acquisition. These cultural elements are often deeply ingrained in the language and can affect how it is spoken, understood, and used. It may include elements such as nonverbal communication, social norms and etiquette, humor, or cultural references. Understanding and navigating these aspects of invisible culture is crucial for effective communication and cultural competence in second language learning. It goes beyond simply learning vocabulary and grammar and involves developing an awareness of the cultural context in which the language is used.

An oversimplified understanding of a language's cultural information can lead to the misrepresentation of culture and/or the perpetuation of stereotypes (Liaw, 2006). A narrow portrayal of the culture of the target language (L2) confines learners to a limited understanding of L2 reality and sociocultural norms and hinders the development of intercultural competence, the faculty through which language learners are able to gain insight into their own culture and the culture of the L2 by making firsthand comparisons between them. For this reason, it is imperative that the teaching of cultural awareness should not ignore the role of the learner's own culture. As Liaw (2006) explains,

> "the learner's interpretation of the target culture happens through the lens of his/her own cultural background and knowledge. Culture learning is not merely learning the target culture, but gaining insights into how the culture of the target language interacts with one's own cultural experience" (p. 50).

The relationship between language and culture is closely intertwined (Chun, 2014). Culture, as a dynamic and constantly evolving process of expressing individual and collective identities, worldviews, ethics, morals, and values, cannot be fully captured in traditional classroom teaching without allowing learners to experience it firsthand to develop what Byram (1997) calls intercultural communicative competence (ICC).

The symbolic dimension of ICC requires an approach to research and teaching that is discourse-based, historically grounded, aesthetically sensitive and considers the actual, imagined, and virtual worlds in which we live (Kramsch, 2011, p. 354). Byram (1997) defines ICC as the ability to see the relationship between different cultures and to understand one's own and other cultures' perspectives critically or analytically. ICC is culturally determined rather than innate (Byram, 2000, p. 10), and is a necessary skill, especially in the current global electronic social landscape. As Kramsch (2011) notes, it is the responsibility of educators to provide language learners with opportunities to develop this intercultural sphere, and it is their job to "cultivate such [interculaturally aware] individuals." Language learners are not simply assimilating into the culture of the target language, but rather creating a unique cultural identity that is shaped by their own experiences and the cultural influences of the target language. As such, language educators must be aware of and sensitive to this invisible culture when working with language learners.

The Cultura project (Furstenberg et al., 2001) is a two decade-old project, which focused on the development of language learners' understanding of intercultural differences via online interactions. The project emphasized cross-cultural literacy and the discovery of invisible culture by encouraging partner pairs to compare and contrast languages/cultures to uncover cultural differences between their target language/culture and the ones of their partners. Following an analysis of the exchanges between partners, the authors concluded that language learners could benefit from a networked and visually-based environment and that understanding invisible culture occurs in multiple stages of discovery and reflection (Byram, 1997; Kramsch, 1998; Zarate, 1996). Although the present study shares the same objective as the Cultura project of raising learners' awareness to intercultural differences, it features no direct virtual intercultural communication task, eliminating the added pressure of learners needing to use their developing

communication skills in order to make intercultural comparisons. O'Dowd and Ritter (2006) noted that engaging in virtual exchanges with native speakers can be problematic and result in failed communication. Our goal is that this Instagram experience was to primarily promote intercultural development by having learners interact with input from authentic social media, without the added complication of intercultural exchanges, negative transfer, or the anxiety of insufficient proficiency in an L2 production context.

Social Media in Second Language Teaching and Learning: Instagram

The emergence and rapid growth of Web 2.0 technologies has captured the attention of second language educators and applied linguists among other professionals (Barrot, 2021). These technologies, often referred to as social networking sites (SNSs), have transformed the internet landscape by enabling users to extend their horizons through virtual interactions. The ubiquity of SNSs, with Facebook alone boasting over two billion monthly users (Ruby, 2023), has prompted a need for further exploration of their potential in second language teaching and learning. Previous research has highlighted several positive aspects of SNSs in language acquisition. SNSs offer students a flexible and non-threatening space for communication and collaboration beyond formal class hours, encourage more open expression of opinions compared to face-to-face interactions, and create a virtual extension of the classroom environment (Baralt & Morcillo, 2017).

Solmaz (2018) review of SNSs studies underlines the potential of SNSs to enhance second language learning experiences through authentic interactions, cultural engagement, and multimodal content creation. It emphasizes the importance of aligning SNS integration with pedagogical goals and addressing potential challenges to create meaningful and effective language learning environments. In addition, it highlights the dominance of Facebook as the most extensively studied SNS in L2 contexts, followed by Twitter. It revealed that the majority of research was conducted in the United States, with English being the most studied language. Methodologically, the studies employed diverse approaches including content analysis of online interactions, interviews, surveys, and social network analysis.

Similar to Solmaz's (2018) comprehensive analysis, Reinhardt's (2019) work also endeavors to amalgamate existing research, providing a contemporary overview of the integration of social media in the realm of second language instruction and acquisition. Reinhardt's (2019) review encompasses a broad spectrum of digital platforms, encompassing blogs, wikis, and SNSs, meticulously categorized into sections that delve into aspects like language use, pedagogical strategies, and the dynamics of social platforms. Specifically, his review focused on blogs illuminates the dynamic evolution of insights, portraying their potential as conduits for intercultural exchange, self-representation, and the cultivation of profound knowledge construction. The synthesis of research findings culminates in a comprehensive depiction of the evolving role of social media within the context of second language education. This illumination extends to delineating prevailing trends, addressing associated challenges, and offering a visionary trajectory for future investigations in this multifaceted domain. However, Reinhardt's (2019) review omitted an important and widely used platform: Instagram.

Since its creation in 2010, the social platform Instagram counts over two billion members (Ruby, 2023) who avidly post and edit pictures and videos that contain anchored cultural representations of their daily lives. Despite the popularity of this visually-based social media, language educators have yet to find pedagogically robust ways to integrate this tool in their classrooms.

Gonulal (2019) found that Instagram boosted English-language learners' language skills overall, especially vocabulary and written communication (Gonulal, 2019). From a learner perspective, Lailiyah and Setiyaningsih (2020) reported that Instagram is perceived as effective for learning language because it provides a new method for learning language that accelerates interactive vocabulary enrichment via its visually rich functionalities. The visual-centricity of Instagram seems to be a key component to the tool's success, but not its only one: Lee (2022) cites its multimodality, mobility, instantaneous participation, and interactivity as equally essential functionalities, because they collectively enable multimodal communication through instantaneous participation in content creation and sharing, which implicates the current phenomenon of social networking in the shift towards image-based social media, as compared to earlier text-based platforms.

One Instagram study investigated how 20 learners in a Middle Eastern university used the tool in their intensive English class (Al-Ali, 2014). Learners were asked to post pictures and captions and to provide attitude ratings of the activity. Results found that posting on Instagram helped in the formation of a community within the group of students and motivated their curiosity to further explore the platform.

In another study, Zarate and Cisterna (2017), used Instagram to support the production of written short stories. While learners did show evidence of having improved their writing skills, they did not perceive the use of the social platform to be a determinant element in their progress. This reinforces our earlier assertion that Instagram should be used strategically in language learning in ways that exploit its multimodality, authenticity, and visual representation of the world, rather than in ways that make use of just some of its modalities.

Aloraini (2018) investigated whether the type of Instagram post a learner made had an effect on their EFL output (vocabulary or grammar), accuracy, or the amount of feedback they received. His results showed that post type did not have any influence on learners' output accuracy or the amount of feedback they received, which led him to conclude that Instagram creates language practice opportunities that can be used as a source of extra input outside the classroom.

Similarly, Gonulal (2019) conducted a study in which he investigated how English language learners (ELLs) used Instagram for language learning purposes on their own. The results found that based on the participants' perceptions, Instagram has the potential to help ELLs improve their overall language skills, vocabulary, and communication skills in particular, as they were asked to engage in meaningful

language exchanges and collaborative learning with native speakers or fellow learners. Further, ELLs' experiences in using Instagram as a tool for informal language learning were largely positive. It is important to note that this study did not investigate the benefit of the fundamental visual nature of Instagram, and that the participants were simply asked to write about their beliefs and perceptions of how exposure to this media may affect their linguistic development and the networking potential of this medium.

More recently, Lee (2022) examined creative uses of emerging image-based social media for informal language learning. Adopting the ecological concept of affordances, it investigates new technological features on Instagram and TikTok and how they are utilized as resources for language learning. Using public data of Instagram photo/video and TikTok video posts, the study is based on 200 posts from each application collected over two months. A qualitative content analysis was conducted based on four key dimensions of technological innovation: multimodality, mobility, instantaneous participation, and interactivity. The findings show how language learners' use of the new technological features employed on the two platforms are related to these dimensions, and how they use agency and creativity to perceive affordances for language learning in features not originally designed for this purpose. It also highlights how these new features distinguish themselves from earlier platforms like Facebook, particularly concerning image sharing. The findings showcase how these features facilitate multimodal communication within mobile applications, enabling immediate participation in content creation and sharing. This aligns with the prevailing trend of image-centric social media. The study unveils how individuals exercise agency and creativity to repurpose these affordances for language learning. This underscores the necessity of investigating the realization and accessibility of new technological features for language education, thus unraveling the learning process within emerging platforms. This study builds upon prior research, extending Barton and Lee's (2013) multimodal analysis of media-sharing platforms by discerning traits of posts that convey meaning through images. The findings on TikTok align with Benson's (2016) observation of intricate multimodality embedded in technology, showcasing diverse modes and semiotic resources in production. This study uniquely examines visual practice as the content itself, incorporating various modes including text. Ultimately, the study provides valuable insights into the innovative repurposing of resources for language learning within platforms not initially designed for educational use. It underscores user agency in leveraging affordances for learning and aligns with theoretical concepts of affordances, emphasizing user-driven application. This study also has implications for teaching, facilitating a better understanding of contemporary social media trends and their integration into language classrooms.

Aside from Lee (2022), this highlights that research on social media in second language teaching and learning has mainly focused on virtual exchanges (using video and videoconferencing) and textual examinations (Kern & Develotte, 2018), which in the case of Instagram, obviate its primary focus: visual representations. This might explain why Instagram is an "under-recognized language learning resource" (Wagner, 2021). Wagner (2021) focuses on the visual social media Instagram in L2 teaching and learning, in which he notes that there are very few studies investigating the potential of this specific media as a learning tool, and all of which focus on EFL or ESL. He also argues for the validity of the multiliteracies approach in the context of Instagram's multimodal "texts" and their non-linguistic codes.

Overall, the research on the use of social media in language classrooms suggests that it has the potential to support language learning and development in meaningful and authentic ways, but we strongly believe that these media should be strategically deployed to take advantage of their platform-specific functionalities and with consideration of the unique needs and abilities of the learners to best exploit their pedagogical potentials for language teaching and learning.

Multiliteracies

Intercultural competence was not one of the foci of the communicative language teaching (CLT) approach, which focused on oral communication as the goal of language learning. However, it has a natural home in the later multiliteracies movement, which argues that language is used in socially complex multimodal contexts that cannot be ignored, and thus, should recognize social and contextual predictors. The concept of being multiliterate is important in today's globalized world, where people need to be able to communicate across genres and modalities, as well as across visible and invisible cultural and linguistic boundaries.

The theory of multiliteracies proposes a framework for understanding how people communicate and make meaning in the world. Created in the early 90s by New London Group (1996), the theory posited that traditional literacy skills were no longer sufficient for the complex and diverse world we live in, and that we needed to develop new ways of thinking and learning in order to be able to communicate effectively in this environment. This theory emphasizes the importance of developing a range of skills, such as the ability to read and write in multiple languages, to communicate using visual and digital media, and to engage with a variety of cultural and social practices. Multiliteracies paves the way for learners to become successful critical thinkers and problem solvers in the context of their community, society, and culture (Kalantzis et al., 2003). Language learning seen through the lens of the multiliteracies framework has even more pertinence today where people are constantly bombarded with information in a variety of modalities. Developing a critical awareness could, therefore, help language learners become active designers of meaning not only in their L2 but also in their native language. These are skills that are not limited to the learning of a language, but that we should all develop to be informed citizens in a global world (Phillips, 1978, p. 281).

Much of the literature on multiliteracies has focused on helping learners make connections between reading and writing as facilitators of language learning but recognizes the need for more holistic approaches (Paesani, 2016; Paesani & Allen, 2020). We argue that actively visualizing non-verbal and non-written modes also contributes largely to language development, specifically in today's society which relies heavily on online visual interfaces, like Instagram. In the style

of Phillips' (1978) article "reading is communication, too!", we argue in parallel that "visualization is communication, too!" and is an act of meaning construction. In our study, we employ a multiliteracies pedagogical framework to highlight the interrelatedness between social media, culture, and language use, and the ways in which they contribute to language development.

As Allen and Paesani (2010) argue, a pedagogy of multiliteracies represents a means of keeping the introductory FL curriculum relevant to students as well as to the broader intellectual mission of the university. In addition, such a pedagogy of multiliteracies (Gee, 1990; Kern, 2000, 2004; New London Group, 1996; Swaffar & Arens, 2005) offers a way to narrow the long-standing pedagogical gap that has traditionally divided what we do at the early levels of language teaching and what we do at the advanced levels. That is, it offers a way to reconcile the teaching of "communication" with the teaching of "textual analysis" (p. 43).

This study uses multiliteracies as the methodological framework to bridge the gap between language learners' own cultural backgrounds and the culture of the target language that they are learning, specifically in grasping the semantic differences of lexical items by investigating their visual representations in the social platform Instagram. Language education should focus on a more holistic and culturally-oriented approach to highlight crucial sociocultural principles that determine the norms of appropriate language use and behavior within the framework of the language community (Hall, 2012). We firmly believe that through the multiliteracies approach, learners can transcend their own cultural biases and gain a better understanding of the linguistic and sociocultural norms of the target language. Social media, being widely utilized as a socializing tool by the new generation, plays a significant role in this endeavor. By leveraging social media platforms, learners can authentically experience language use in diverse cultural contexts, enhancing their ability to navigate intercultural concepts with confidence and understanding.

Research Questions

The research questions of the present study are as follows:

1. Can visually-based digital platforms like Instagram be used to facilitate the development of intercultural competence by helping to make certain aspects of invisible culture more readily visible?

2. Which aspects of invisible culture are learners able to perceive via this kind of platform?

3. Which aspects of invisible culture are learners not able to perceive via this kind of platform?

METHODS

Our study draws inspiration from Cultura, a project initiated two decades ago that aimed to enhance language learners' understanding of intercultural differences through online interactions (Furnstenberg et al., 2001). In our approach, we utilize Instagram to facilitate cross-cultural comparison, build knowledge of target values and concepts, and develop awareness of invisible cultural elements. By employing a comparative methodology, language learners engage in searching, observing, comparing, and interpreting cultural concepts from their own and the target culture via Instagram, thereby gaining insights into their cultural beliefs relative to others (Kern & Develotte, 2018, p. 29).

The side-by-side viewing of similar concepts/items from different languages and cultures on Instagram allows participants to confront similarities and discrepancies in connotation and usage that are challenging or impossible to discern in printed materials. Instagram's visual and interactive nature provides access to cultural dimensions beyond text, enhanced through student observation and teacher mediation of unfamiliar cultural artifacts in posts.

Through analysis, participants compare and reflect on images posted in both cultures. This process enables them to experience the target culture and evaluate their own culture through an external perspective using authentic Instagram content. In the final pedagogical activity, students create meaning by revisiting and revising their initial interpretations, thereby deepening their understanding of cultural terms in both their first and target languages.

Participants

33 undergraduate students of French at two public American universities participated in the task using Instagram to explore invisible culture: 25 were enrolled in third-year French and eight in fourth-year French (intermediate level). All participants were first-language speakers of American English. 24 participants reported regular use of Instagram in their personal lives; 7 reported little use; 2 had never before used the platform.

Procedure

Participants were presented with three pairs of culturally-loaded target words from continental French culture (France) situated along a continuum of abstractness: goûter/snack, banlieue/suburb, and liberté/freedom (Hu, 1999). The English equivalents were derived from the Wordreference.com French-English dictionary (Wordreference, n.d.a, n.d.b, n.d.c). These words were selected due to their common crosslinguistic equivalence in language learning materials, which often treat them as semantically interchangeable despite significant cultural differences.

Participants began by writing definitions and cultural associations for the English counterparts from an American perspective. They then searched Instagram using the English word as a hashtag, selected two images that best embodied the word for American English speakers, and uploaded these images to a padlet, a digital poster application, with captions in English. The instructors, one a native French speaker and the other a native American English speaker, assisted with the logistics of the task without influencing content.

Next, participants repeated the procedure with the French equivalents, creating a second digital poster with captions, which they examined and discussed together. In the final step, participants revised their French definitions based on their observations, searched Instagram for the French terms again, and selected two new images that reflected the cultural nuances they had learned. The task was self-paced, with the group completing each stage together before moving on.

Figure 1. Visual search results for #goûter on Instagram dated April 15, 2021

In a post-task activity, participants compared their final digital posters for the French terms with a poster that had been compiled by native speakers from France. They discussed any remaining differences, allowing the researchers to localize the task content to France, given that French-language hashtags on Instagram can pull content globally.

Data and Analysis

Learners' digital posters (padlets) and written definitions of the French counterpart of each wordpair (goûter/snack, banlieue/suburb, liberté/freedom) were examined pre- and post-task for similarities and differences in their associated semantic and cultural themes. The pre-task definitions are defined as the written answers, selected images, and captions that participants provided for each word prior to participating in the Instagram activity for the French counterpart in each pair; the post-task definitions are defined as the written answers, selected images and captions they provided following the completion of the Instagram activity with each French counterpart. Keywords were compiled manually from participants' written answers and by "translating" their selected images into a series of identifying content words (i.e., an image of a baguette covered in Nutella is translated into keywords as "baguette," "Nutella," "sweet"), following information provided in the post's caption and hashtags. This was an extension of the methodology employed in the Cultura project, with adaptations made to accommodate not just the information encoded in learners' written definitions, but also that in the images they selected via Instagram for each one's illustration. Once the complete list of keywords was assembled for learners' pre- and post-task definitions, the researchers compared the two lists with an eye for the following details:

1. how many of the learners believed the crosslinguistic pairs to be semantic equivalents,
2. defining characteristics of what the concept is,
3. defining characteristics of what the concept is not,
4. examples of the concepts, and
5. target language synonyms of the concept.

Two researchers participated in the translation of images into keywords, and only items that appeared in both lists were retained. The items in the finalized lists were then examined for their cultural and pragmatic value.
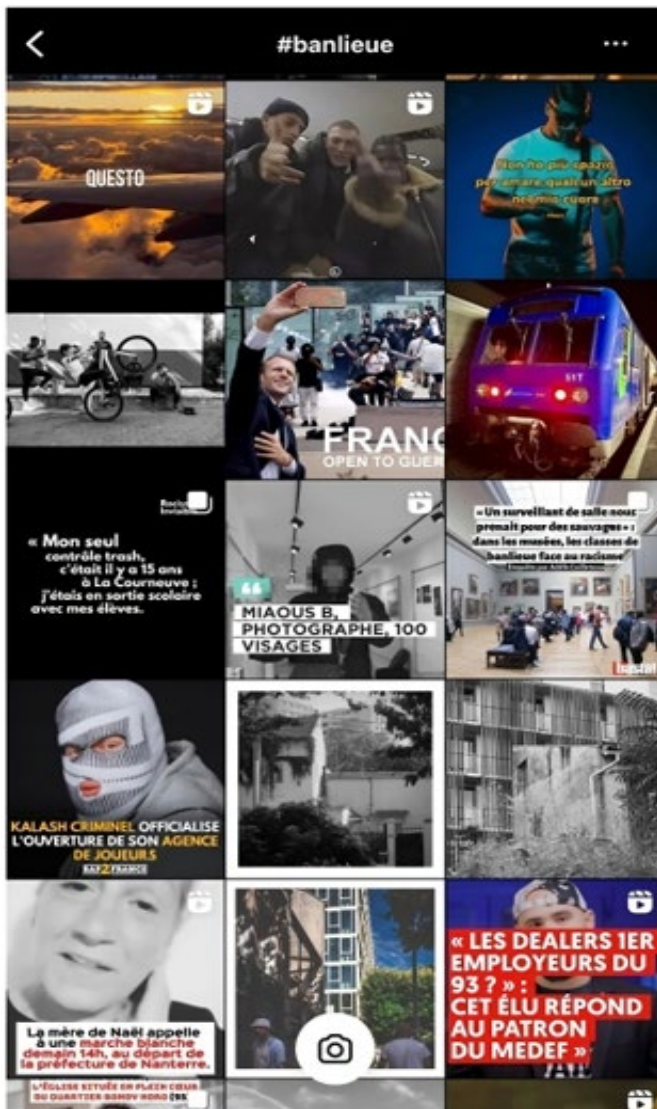
RESULTS

Concrete Pair: *goûter/snack*

Learners' pre-task definitions of the concrete pair suggested that many believed the French word to be a straight translation of the English equivalent (18/33 or 55%), indicating they had never suspected that there were additional or different cultural implications entailed in the French term. Post-task, this was no longer the case (0/33 or 0%). For those participants who did believe there to be semantic nuances between the English and French terms pre-task (15/33 or 45%), they only listed features of what they believed the concept to be; they did not also indicate any restrictions on what it could not refer to. Examples of the concept that participants gave included all types of food and drink. No synonyms in French were provided for the target word goûter.

Post-task, we saw the emergence of features that align with an experienced French user's cultural understanding of the concept, namely that a goûter refers to a small and enjoyable sweet treat that children eat in the after-school hours (usually around 4 pm). We also saw the emergence of restrictions on the concept (i.e., explicit statements of what the term may not refer to (e.g., something salty, savory or in a large quantity), although these were not true for varieties of French spoken in North America). Participants also contextualized their revised definitions in a long list of cultural snack icons in France/Europe and the brands that produce them (i.e., BN, Prince, Petits Écoliers [all cookie brands], Pom'Potes (applesauce brand), Toblerone [chocolate], Orangina (soda) and Nutella [chocolate hazelnut spread]). See **Figure 1** for a collection of the types of visual examples learners reviewed and used to analyze their reflection. In addition, participants

Table 1. Pre- and post-task semantic themes for concrete wordpair *goûter/snack*

snack/*goûter*	Pre-task definition	Post-task definition
English word = French word	18/33 learners	0/33 learners
What *goûter* is	+to taste, +to sample, +elegant, +formal, +smaller, +eaten outside, +healthier, +2pm, +before a meal, +after a meal, +dessert	+children, +4pm (after-school), +sweet, +baguette, +small amount, +delight
What *goûter* is not	NA	-salty, -savory, -large amount
Examples given	chips, cheese, meat, French fries, pâté, coffee, wine, candy	BNs, Prince, Petits Écoliers (cookie name brands in France), Pom'potes (applesauce name brand in France), Toblerone, Orangina, Nutella, biscuits, chocolate, macarons, baguette/bread, ice cream, yogurt, fruit, juice, pastry
Synonyms given	NA	*une collation* (old-fashioned in France; widespread in other French varieties)

Figure 2. Visual search results for #banlieue on Instagram dated April 15, 2021

also identified the word *collation* (une) as a synonym of goûter–a word used widely in the francophone world outside of France but considered old-fashioned within France–because they often saw the word in lists of hashtags at the end of each post, along with the target word #goûter they had searched for.

See **Table 1** for the full bouquet of semantic themes and examples identified by learners.

Between Concrete and Abstract: *banlieue/suburb*

Learners' pre-task definitions of the midway between abstract and concrete pair banlieue/suburb suggested once again, more overwhelmingly this time, that many believed the French word to be a straight translation of the English equivalent (29/33 or 88%). Following the task, no learner conceived of the two lexical items as semantic or cultural equivalents (0/33 or 0%). Pre-task definitions of the concept listed only attributes common to American suburbs (e.g., +shopping, +middle class, +big houses), and none gave any indication of characteristics the French term specifically could not refer to. Only a single example of the term was offered in the pre-task: the Charles de Gaulle airport. No synonyms in French were provided for the target word *banlieue*.

Post-task, we once again observed the emergence of features that align with an experienced French user's cultural understanding of the concept, namely that a *banlieue* refers to an overpopulated, ethnic neighborhood, usually of immigrants, that is marked by tall, spartan, rent-controlled apartment buildings and commuter trains which access the larger city. We also see the emergence of restrictions on the concept (i.e., explicit statements of what the term may not refer to (e.g., a space that does not contain much greenery and is not chic)). Participants also contextualized their revised descriptions via a series of explicit examples: some mapped it to the concept of 'inner city' or 'ghetto' in the urban American context, while others referenced settings in well-known French films like La Haine 'hate' and Bande de filles 'girlhood'. See **Figure 2** for a collection of the types of visual examples learners reviewed and used to analyze their reflection.

See **Table 2** for the full bouquet of semantic themes and examples identified by learners.

Abstract Pair: *liberté/freedom*

Learners' pre-task definitions of the abstract pair liberté/freedom suggested that many believed the French word to once again be a straight translation of the English equivalent (24/33 or 73%). Following the task, no learner conceived of the two lexical items as semantic or cultural equivalents (0/33 or 0%). Pre-task definitions of the concept listed many attributes common to mainstream American notions of freedom (e.g., +self-expression, +equality, +choice). For the first time at the pre-task stage, learners also indicated restrictions on what the concept could refer to in addition to what it typically did refer to (e.g., -uniformity, -government,

Table 2. Pre- and post-task semantic themes for mid wordpair *banlieue/suburb*

suburb/banlieue	Pre-task definition	Post-task definition
English word = French word	29/33 learners	0/33 learners
What *banlieue* is	+around a city, +shopping, +big houses, +rich, +families, + middle class, +cookie cutter houses	+poor, +immigrants, +dirty, +graffiti, + crime, +negative, +neglected, +HLMs, +gray, +ruined, +dangerous, +old, +compact, +ethic shops, +overpopulated, +violence, +RER
What *banlieue* is not	NA	-greenery, -chic
Examples given	CDG airport	Setting in *La Haine*, setting in *Girlhood*, inner city, ghetto
Synonyms given	NA	NA

Note. CDG: Charles de Gaulle (airport outside of Paris); HLM: habitation à loyer modéré (rent-controlled apartments); RER: réseau express régional (commuter train)
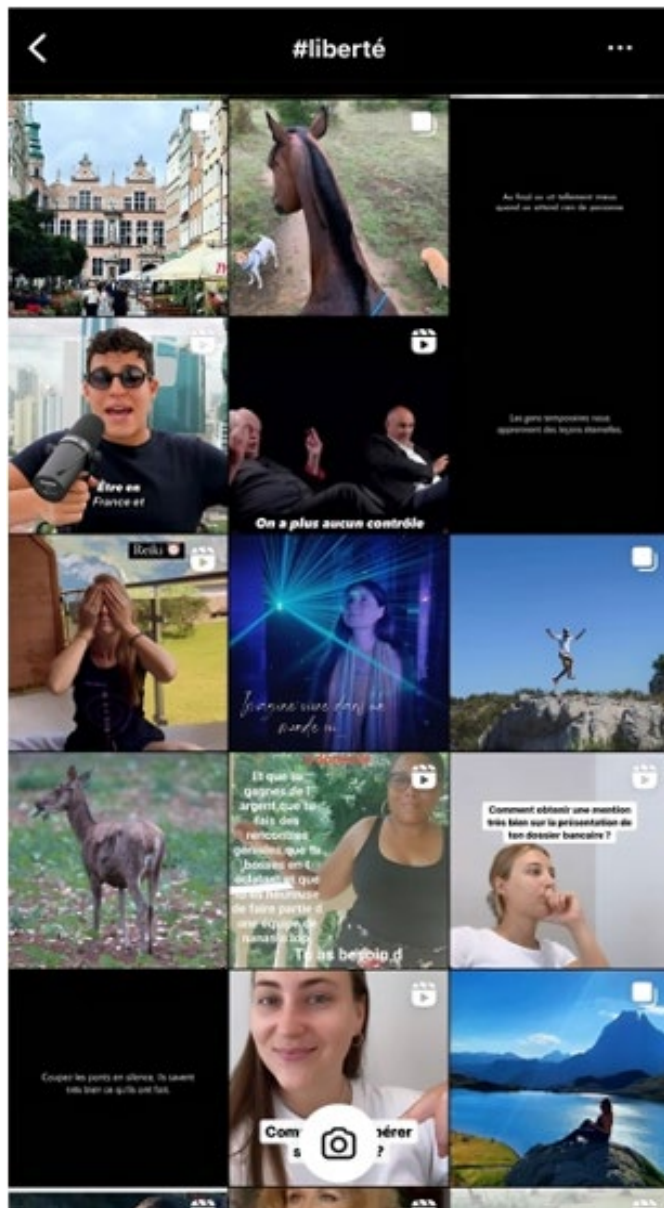

Figure 3. Visual search results for #liberté on Instagram dated April 15, 2021

and -constraints). Several examples were offered pre-task that referred directly to mainstream American displays of freedom (e.g., flags, individual rights, and armed forces), while others referred to patriotic events (e.g., Bastille Day [the French national holiday]), or artistic representations of war and celebration (e.g., Les Misérables). No synonyms in French were provided for the target word liberté.

Post-task, we again observed the emergence of features that align with an experienced French user's cultural understanding of the concept, namely that *liberté* refers to the societal protection of human rights, self-expression, social benefits, and patrimony. We also see a longer list of restrictions on the concept than in the pre-task (e.g., - monarchy, -tyranny, -fundamentalism, -worries, -working). Participants also contextualized their revised descriptions in a series of explicit examples: some mapped it to the concept of the French motto which contains the target word (Liberté, égalité, fraternité), while others referenced other well-known cultural icons in France (e.g., Marianne, the French flag, the rooster, the 35-hour work week, protests, and the painting Liberty leading the people).

See **Figure 3** for a collection of the types of visual examples learners reviewed and used to analyze their reflection. See

Table 3 for the full bouquet of semantic themes and examples identified by learners.

Post-Task Activity: Localizing the Task to France

In a post-task activity, participants compared their final digital posters for the French terms with a digital poster that had been compiled by native speakers from France, then discussed any remaining differences between the natives' understandings and their own. The purpose of this activity was to allow the researchers to localize the content of the task to France, given that French-language hashtags on Instagram pull content from anywhere within the francophone world. The responses students gave were verbal and noted by the researchers.

A few notable differences emerged. In the case of the goûter/snack wordpair, some learners did not fully grasp the culinary restriction on goûter referring to only +sweet items until they saw this construct reflected back to them in the native French digital poster that mentioned only sweet items like chocolate, pastries, cakes, etc. Multiple participants had been successful at authentically defining and exemplifying goûter through other descriptors without explicitly commenting on whether the food items it referred to had to be sweet or savory. While the general #goûter search on Instagram results were similar to those found in France, the searches were also tempered with the appearance of an occasional savory item like guacamole, nachos or cheesesticks,

Table 3. Pre- and post-task semantic themes for abstract wordpair *liberté*/*freedom*

freedom/liberté	Pre-task definition	Post-task definition
English word = French word	24/33 learners	0/33 learners
What *liberté* is	+equality, +self-expression, +nationalist, +political, +social mobility, +safety, +acceptance, +assimilation, +state of being, +choice	+abstract, +democracy, +statues, +pride, +security, +tranquility, +creativity, +social benefits, +stronger, +personal, +*patrimoine* (heritage), +government assistance
What *liberté* is not	-constraints, -government, -uniformity	-monarchy, -tyranny, -fundamentalism, -worries, -working
Examples given	Les Misérables, Bastille Day, Armed Forces, flags, individual rights	French Revolution, French motto: *Liberté, égalité, fraternité* (liberty, equality, fraternity), Marianne, French flag, rooster, Bastille Day, République, La Marseillaise, *Liberty leading the people* (painting), personal freedom, human rights, 35-hour work week, paid vacation, protests, different opinions, *joie de vivre* (zest for life), wine, pride, nature, birds
Synonyms given	NA	NA

as is common in North American (Canadian) francophone communities.

In the banlieue/suburb wordpair, although banlieue has a similar meaning to suburb in American English in varieties of Canadian French, there was no uncertainty among the learners in their perception of what banlieue meant for French speakers from France before consulting with the native speaker poster. This was because most images tagged with #banlieue on Instagram were those depicting life in parts of metropolitan France, not North America.

For the liberté/freedom wordpair, consultation with the native speaker poster helped learners to attach specific names to some recurring icons of France they had seen in the Instagram searches (e.g., the bust of Marianne, the painting of Liberty leading the people), but the abstract nature of the word made collective results difficult for learners to generalize from further.

DISCUSSION

The goal of this series of visualization tasks was to see if learners could make meaning in the style of the multiliteracies framework that would enhance their intercultural competence, by guiding them to compare their own cultural background(s) with the culture of their target language, to grasp semantic differences in lexical items whose visual representations they researched on Instagram. The processes of reflecting on the denotation and cultural connotations of so-called lexical equivalents–first through written definitions, then through images from visually rich Instagram–suggests that participants were able to uncover various subtle meanings attached to a word, as well as the social conditioning factor that predicted them (i.e., age, gender, geographic region, educational background of the original poster, etc.) (Barton & Lee, 2013; Benson, 2016; Gonulal, 2019; Lee, 2022; Wagner, 2021). However, it is important to point out that invisible culture includes many additional concepts (e.g., register, time perception, taboos, etc.) that this study was not designed to address. We tested lexical items across the concrete/abstract spectrum, however, the data do not suggest that learners had a better understanding of more concrete nouns versus abstract ones pre-task. On the contrary, we found that learners' initial

assessments of the more concrete items (e.g., goûter, banlieue) were more likely to be those of incorrectly assumed equivalency. One subtle difference we did observe across the concrete/abstract continuum was learners' pre-task ability to state constraints on what a concept could refer to, which we observed only in the most abstract wordpair liberté/freedom. In addition, only the most concrete wordpair goûter/snack had an identified synonym proposed. We suspect this is because Instagram features a predominantly North American crowd, and the synonym proposed–une collation–is a common designation in Canadian varieties of French.

A true indicator of the task's success lies in the finding that no learners (0/33 each time) believed the wordpairs to be semantic or cultural equivalents following the task, even though an overwhelming majority of them did prior to the task (55%, 88%, and 73%). This is significant, given that the French words they were researching were not unknown to them, but were rather high-frequency words found in a first-year curriculum. We interpret this as further evidence that these particular words get treated as crosslinguistic translations rather than unique cultural constructs.

In the case of goûter/snack, learners' eyes were opened to the culinary restrictions (only sweet), the temporal restrictions (only after school/4 pm), and the size restrictions (only small quantities) on the concept, while in the case of banlieue/suburb, their awareness was raised to the ethnic (mostly immigrant populations), compositional (mostly stark high-rise apartment buildings) and socioeconomic trends (mostly under-resourced populations) associated with the term. For liberté/freedom, the largest conceptual gain that learners made was the reframing of freedom in the American setting as a display of dominance and national icons, like flags and symbols of war and destruction, to one of national human rights in the French setting, which guarantees individuals certain protections allowing them the freedom to lead their lives in ways that resonate with them individually. In each case, participants' face-to-face contact with these images and captions allowed them to become aware of the different underlying social, cultural, and political realities between France and the U.S.A. and highlighted the presence of conceptual representations transferred from the L1 culture behind the words. Furthermore, it provided opportunities for learners to express views on their own culture and challenge

their sense of self, their cultural identity, and their world views (Barton & Lee, 2013; Benson, 2016; Gonulal, 2019; Lee, 2022; Wagner, 2021).

To return to the study's research questions:

1. Yes, visually-based digital platforms like Instagram can be used to facilitate the development of intercultural competence, by helping to make certain aspects of invisible culture more readily visible.

2. In particular, learners were able to perceive a variety of aspects of invisible culture, including culinary, temporal, and size restrictions, as well as ethnic, architectural and socioeconomic tendencies.

3. An aspect of invisible culture that learners had difficulty perceiving from the general Instagram search was identifying which region in the francophone world certain cultural tendencies were representative of when searching via French-language hashtags more broadly. In the case of the concrete wordpair, this was resolved through post-consultation with a native speaker poster. In the case of the abstract wordpair, there were too many options for learners to be able to generalize from, even in consultation with native speaker users.

This project offered a unique opportunity for participants to contrast their own cultural norms and practices with those in their target culture. Collectively, the task began the process of exposing learners to their own lexical misunderstandings and showed them how they can use a visual platform like Instagram to develop their intercultural competence via a structured and autonomous search for information in an authentic learning space that helps them find their 'third place' (Kramsch, 2011). To that end, Instagram was particularly well suited to this task due to its visual richness (Barton & Lee, 2013; Benson, 2016; Lailiyah & Setiyaningsih, 2020; Lee, 2022; Wagner, 2021), but the general takeaway from this experience should be that technology more broadly can meet the changing aspirations of future generations of learners on the hunt for increasing levels of autonomy, agency, collaborative learning, and distributed creativity (Blake, 2013).

Kern (2000) defines literacy as the use of socially-, historically-, and culturally-situated practices of creating and interpreting meaning through texts, which entails at least a tacit awareness of the relationships between textual conventions and their contexts of use, and the ability to reflect critically on those relationships. This is exactly what learners carried out during the course of this series of visualization activities. Literacies of the image are key to literacies of the word. If language learners cannot interpret images, they will not be able to know what meanings to apply to words that illustrate similar visual representations (Kern, 2015, p. 12).

In addition to the cultural enrichment that this type of exercise brought to the classroom, as Kern (2015) highlighted, the proliferation of new vocabulary is often influenced by social media, where many terms initially appear and further impact our uses of language and how we share knowledge. In other words, such linguistic changes do not only influence language and literacy, but cultural practices, and ultimately create new conventions of this adaptive human practice. This perspective highlights the importance of social media in a learning context, as Kern (2015) rightfully said: "… language

never signifies on its own. It always signifies in relation to the specific contexts in which it is generated and interpreted" (p. 3). We argue in the same vein that this is precisely why social media provides rich, authentic learning contexts for second language learners that language textbooks regularly fail to provide. Furthermore, this specific activity enabled learners to comprehend the significance and cultural diversity offered by the image-based social media platform in enhancing their comprehension of both tangible and intangible concepts in the French language. It also enabled participants to appreciate this SNS as a medium that provides opportunities for them to improve their literacy skills.

Cross-cultural literacy goes beyond knowing the social etiquette and the silent language of proxemics (Hall, 1966). Understanding the semantic networks that organize both language and culture is essential to developing communicative competence in an L2, and the results of this study highlight the fact that when L2 learners reach an intermediate level in a second language, they have yet to realize basic cultural differences between their L1 and L2 cultures. We strongly believe that this gap remains rather large until students spend time abroad or are immersed in native languaculture, as textbooks do not provide much support in the area of dynamic elements. Many foreign language instructors follow the manual they have adopted and do not question the content. However, language learners in higher education will continue to have an extremely naïve outlook on various cultures unless educators start implementing this type of small cultural investigation, allowing learners to observe other cultures on social media. Put simply, educators must fill this gap to allow their students to reach communicative competence in an L2.

We do not advocate for the exclusive use of tasks involving social media as a replacement for other text types, but rather as a way to integrate new tools as a way of rethinking current practices in language classes that often lack authenticity. Educators must recognize that social media provides new opportunities for implementing socially enriched pedagogies, as it allows for diverse means of facilitating student interaction and effective ways of managing collective knowledge (Seo, 2012).

CONCLUSION

The use of Instagram in a language teaching context is still relatively young and will require a variety of experimental measures to understand its full bouquet of affordances for learners. In this series of tasks, intercultural competence developed through the visual dimension was the targeted skill, but one could easily imagine exploiting another dimension of the social platform, like captions, combinations of hashtags, or emojis, to draw learners' attention to other linguistic and cultural norms relevant in the target culture. Overall, the research on social media use in language classrooms suggests that it has the potential to positively support language learning and literacy development, but that to do so in meaningful ways, it must always be used authentically and with consideration for the unique needs, abilities and identities of the learners.

We believe that cultural awareness is a long and complex process that should be introduced to second language learners at an early stage to allow for the progressive understanding of cultural similarities and differences. We, therefore, advocate for comparable tasks to be initiated at the beginner's level, mediated by a higher level of instructor support, to begin sensitizing learners from the very first day to the myth of crosslinguistic lexical equivalencies. In this way, we envision learners becoming highly skilled users of visually-centric social media platforms as a step toward becoming global citizens aware of "hidden dimensions of culture" (Hall, 1966).

Limitations

In this study, we only explored the possibilities of a visually-oriented social media platform in enhancing learners' understanding of semantic references for both concrete and abstract words. Our initial focus was on observing how learners would utilize this media's potential and recognize its efficacy. Future work will investigate larger linguistic expressions like phrases, paragraphs, and full-length texts, while considering various aspects of invisible culture, such as register and the use of temporal concepts and compare and contrast elements from various parts of the francophone world. Although our sample population did report variable experience with social media, their results did show evidence of having been impacted in any measurable way because of it. Future work may choose to consider this parameter more closely, although since the task was centered on the observation and interpretation of pictures whose form is not unique to the social platform, we did not see it as necessary. Additionally, three of the learners had had firsthand cultural experience in France in the form of short-term study and travel abroad, and that gave them a small advantage in the initial round of this task, without impacting their global responses.

Ultimately, we anticipate that engaging in such activities will motivate teachers and learners to leverage Instagram as a tool for uncovering the semantic nuances of diverse vocabulary in longer texts, much like users often do with a Google images search.

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