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(Digital) Narrow Streets of Cobblestone:
Video Game-Based Learning as a Preparatory Device and Simulation Strategies for Study Abroad Programs*
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Abstract

For decades now, video games have been a pervasive part of our culture (NBC-News.com, 2013). About half of all American adults play video games (Duggan, 2015), while 97% of teen boys and 83% of teen girls also play video games (Anderson & Jiang, 2018).

The potential for utilizing gaming in learning has been explored in a variety of fields, including language acquisition (e.g., Reinders, 2012). Some commercially available cinematic video games are fully-interactive multimedia experiences. Thus, including such games in the curriculum as *realia* (Spurr, 1942; Dlaska, 2003) can help students reinforce, and expand upon, materials they learn through traditional methods. *Realia* reinforce second/foreign language (F/L2) acquisition by developing specific personal interests. Cinematic games, similar in nature to movies, also add agency, which improves learning (Deters et al., 2014). They also involve problem-solving and critical thinking that can be applied to group interaction, all of which is particularly conducive to learning (Wenger, 1998) and F/L2 acquisition (Nunan, 1992). Video games can contribute to the goal of transforming our students into life-long learners of (a) F/L2 language(s), a process explored by CALL (e.g., Smith, 1997).

This article is a case study on teaching practices with video game-based learning, its benefits in the foreign language classroom and, in a more general sense, in second/foreign language and culture acquisition (F/L2). I argue that utilizing video games as part of F/L2 experiences, including the different phases of the study abroad experience (pre-departure, during the program, and post-depar-

ture), can enhance the learning of F/L2 language and culture. Video games are simulations that challenge, based on repetition, which involve players at a deep level, thus affording agency. In recent cinematic "AAA" commercial video game titles, the simulation aspect engages players in a dialogue-based, narrative context that can prepare students for real-life conversations. This article also serves as a practicum, by providing suggestions on how to use commercial video games to enhance language and culture acquisition as part of independent, autonomous students' learning that educators and administrators can foster, structured learning experiences such as study abroad (including pre- and post-departure), and courses.

Keywords: Game-based learning, CALL, CAI, gamification, foreign languages, second language acquisition, SLA, video game-based learning, VGBL, gaming, non-serious gaming, Italian as a Second Language, Assassin's Creed, Tomb Raider, Heavy Rain, Beyond: Two Souls.

For decades now, video games have been a pervasive part of our culture (NBCNews.com, 2013). The rise in popularity of gaming on consoles, computers, mobile devices, and even "casual gaming" on social networks, have contributed to make video games an integral facet of our lives. The Pew Research Center recently stated that about half of American adults play videogames, with no substantial differences between male and female players (Duggan, 2015). That percentage rises exponentially among teens, where 97% of teen boys and 83% of teen girls play video games (Anderson & Jiang, 2018).

Given the implication of such numbers, this article is a case study on teaching practices with video game-based learning (VGBL), its benefits in the foreign language classroom and, in a more general sense, in second/foreign language and culture acquisition (F/L2). I argue that utilizing video games as part of F/L2 experiences, including in the different phases of the study abroad experience (pre-departure, during the pro-

gram, and post-departure), can enhance the learning of F/L2 language and culture. Video games are simulations that challenge players, based on repetition, which involve them at a deep level, thus affording agency. In recent cinematic "AAA" commercial video game titles, the simulation aspect engages players in a dialogue-based, narrative context that can prepare students for real-life conversations. The article also serves as a practicum, by providing suggestions on how to use commercial video games to enhance language and culture acquisition as part of independent, autonomous students' learning that educators and administrators can foster, structured learning experiences such as study abroad (including pre- and post-departure), and courses.

As a professor of Italian language, literature and culture, I have been experimenting with VGBL since 1998. In recent years, I have found that some highly communication-oriented, cinematic, commercially-available video games are effective in my classroom as supplements to traditional teaching techniques, as tools to reinforce vocabulary and grammatical forms, as a means for presenting authentic cultural data, and as a challenge for students to problem-solve in their target language (TL). They are "AAA" big budget video game titles that can be purchased wherever video games are sold, such as the *Assassin's Creed* series (Ubisoft, 2007-2018), Square Enix's *Tomb Raider* series (2015-2018), and Quantic Dream's exclusives on PlayStation 4 (*Heavy Rain*, *Beyond: Two Souls* and *Detroit: Become Human*) to name a few of the more relevant ones. They are fully interactive cinematic experiences combining real-time animation, speech/dialogue, subtitles, writing (textual interaction) and even, in some cases, spoken interactions in the form of audio/video chats with other users. As a form of digital *realia*, artifacts in the TL that help enhance language acquisition, such video games can be used to reinforce and expand materials that have been previously learned through traditional methods (Bregni, 2018 & 2017).

My own experiences as a F/L2 learner have always played an essential role in guiding my pedagogical approach to the teaching of F/L2 and culture. Also, they supported the importance of *realia* that informed

my teaching. During the home computer revolution of the mid-1980s, I realized that playing text-based adventure games such as Activision's *Alter Ego* over extended periods of time would rapidly improve my foreign language skills. By experiencing narrative-oriented (text-based only, at the time) quests in video games, not only was I reading in a foreign language, I was also applying my reading comprehension to problem-solving and attaining goals and solutions.

It was with the advent of high-budget, more sophisticated, and fully voice-acted cinematic games released from 2007 onwards that my classroom experiences began producing more interesting results. In my teaching practices, the use of video games has proven to be an effective didactic tool for reinforcing linguistic skills (Bregni, 2018 & 2017).

"AAA" Video Games as Learning Devices

Can a video game motivate more than a lesson? Laurence Schmoll, professor of French as a Foreign Language (FLE) and researcher in foreign language acquisition at the University of Strasbourg, believes this to be true, as she argues in her article on integrating video games in the language classroom (Schmoll, 2017). In an interview with *Agence France Press* (Billing, 2018), she commented: "The fictional nature [of the video game experience with 'AAA' titles] makes it possible to forget the anxiety of learning [...]. The challenge is that students really think of it as a game and not as an exercise." Like other F/L2 instructors, including myself, Schmoll uses big budget, "AAA" commercial games rather than "serious games," which include software that is specifically created by educators for the purpose of language learning. Schmoll believes, like I do, that "AAA" titles are more fun, more engaging and more "polished" products than current "serious", educational games. "Video games are not here to replace the teachers," clarifies Schmoll (Billing, 2018). However, video games as *realia* provide exposure to the spoken language within the context of engaging digital narratives and have several additional positive features. In video games, "mistakes are not stigmatizing. They are just an invitation to try again," says Alexis Hassler, a young teacher

in FLE (Billing, 2018). American scholar Jonathon Reinhardt (2017) points out that several key principles of a well-designed video game find their equivalent in F/L2 acquisition. Interaction, which is essential in learning a new language, is also central to the player's experience in a video game, as well as the pursuit of goals (task-based learning), an engaging narrative context, and the presence of feedback systems.

A Foreign Language & Culture Course for Gamers

My experimentation with video games as a learning device in the F/L2 language classroom has led me to explore the option of developing a video game-based language course that utilizes "AAA" commercial video game titles. In fall 2016, as the recipient of a Saint Louis University (SLU) Reinert Center for Transformative Teaching and Learning Fellowship, I further developed language acquisition strategies, methodologies, materials (worksheets, projects and assignments), as well as assessment practices based on video games and related media (magazines, online and in print; websites; YouTube videos, etc.). In spring 2017, I utilized the SLU state-of-the-art learning studio to offer *Intensive Italian for Gamers,* a course that combines "traditional" intensive language instruction with game-based learning. Following the pedagogical premise that language acquisition is a process that involves, and benefits from, daily interactions with the language both in and out of the classroom, the course targeted the specific segment of the student population that self-identifies as gamers. Self-identified gamers are approximately 10% of American adults according to the 2015 PEW research (Duggan, 2015). Based on my teaching practices and experiences, I believed that a strong, shared interest/passion for gaming would stimulate and enhance the students' learning process, thus justifying the intensive nature of the course (Bregni, 2018 & 2017).

Why Video Games? What Interaction with the Research Literature Tells Us

Why should educators consider using video games either in their teaching or, in more general terms, as part of learning experiences, such as study abroad?

Video Games as Digital *Realia.* The potential of gaming in learning has been explored in a variety of fields, including language acquisition (e.g., Reinders, 2012). Literature on video game in F/L2 acquisition mainly focuses on "serious gaming," and is focused on the concept of player agency and the creation of specific games for F/L2 acquisition (Sykes & Reinhardt, 2012; Neville, 2009 & 2010, Sørensen & Meyer, 2007). Research on F/L2 acquisition in commercially available video games is gaining momentum (for example, Ye, et al., 2008; Chen & Young, 2013, Reinhardt, 2017). In my research and teaching experience (Bregni, 2018 & 2017), particular commercially available cinematic video games are fully-interactive multimedia experiences that show positive results in terms of F/L2 (and, in some cases, culture) acquisition. Including such games in the curriculum as *realia* (Spurr, 1942; Dlaska, 2003) can help students improve their skills. *Realia* afford F/L2 acquisition through development of specific personal interests. Cinematic games, similar in nature to movies (ones that include verbal and non-verbal communication), also add the additional layer of agency, which improves learning (Deters, et al., 2014). They also involve problem-solving and critical thinking that can be applied to group interaction, all of which are particularly conducive to learning (Wenger, 1998) and F/L2 acquisition (Nunan, 1992).

Additionally, video games as digital *realia* can contribute to the goal of transforming students into life-long learners of (a) F/L2 language(s), a process explored by CALL (e.g., Smith, 1997).

I have always combined traditional teaching methods (grammar; syntax; and, of course, the interactive method) with *realia*, authentic cultural artifacts in a foreign language that can be used to improve linguistic skills. Using realia in the second/foreign language classroom allows the reinforcement and expansion of vocabulary and grammar structures that have already been previously acquired through traditional learning methods. They also encourage autonomous, independent exploration and learning of the foreign language(s) and related culture(s). Thus, my students, from elementary through advanced, are exposed to literature, poetry, cinema, comics and graphic novels, TV series, songs, traditional

language-classroom word games, board games, learning apps on mobile devices, and "serious" games (that is, games specifically created for learning purposes).

Realia, including video games, cannot be used by themselves; that would be "flaky." But they can be effectively used to reinforce materials that have been learned through traditional methods. Reinforcing materials (grammar, vocabulary, syntax, and style) that have been recently learned through traditional methods are the most effective use of *realia*, as scholarship shows (Spurr, 1942; Dlaska, 2003).

Language learning is a complex reality that requires multiple investigations and multi-focused approaches. *Realia* enhance learning by providing opportunities for multi-focused approaches. I know that my students very much appreciate the fact that I constantly try new approaches and expose them to new challenges through *realia*. They also contribute to making my teaching more dynamic and interesting. I firmly believe that learning should be fun and that game-based learning is effective (Farber, 2017).

Video Game-Based Learning vs. Gamification. Is using video games in the foreign language classroom simply an instance of gamification? It is necessary to delineate a distinction between gamification and game-based learning (GBL), two concepts that are often confused. Gamification (teachers turning lessons into a game they designed) is merely a revamped reward system, not an actual teaching method. It is a motivational tool. Motivation is important to encourage learning, but it does not actually do the teaching. GBL is pedagogy, which is closely connected to play theory. In GBL learners apply critical thinking (Farber, 2017).

"Affinity Spaces," Learning Groups and Social Experiences. Why create a course specifically targeting self-professed gamers, as I have? Why should educators and institutions consider creating specific gaming spaces in our colleges and study abroad programs? With my Intensive Italian for Gamers course, I aimed to create an "affinity space." According to Gee, "An affinity space is a place or set of places where people

affiliate with others based primarily on shared activities, interests, and goals, not shared race, class culture, ethnicity, or gender" (Gee, 2004, p. 77). Affinity learning groups, whether formal or informal, as research indicates, enhance learning (Gee, 2005b). Such affinity spaces can also take place virtually, in online video games or online spaces (forums, groups, etc.) for gamers (Gee & Hayes, 2009). Playing games is often a collective experience. Our students typically gather to play together, or even just watch each other play. They communicate about the shared experience, exchanging tips and suggestions, expressing encouragement, disappointment or triumph. The creation of spaces specifically reserved for gaming in a learning institution, such as a campus and/or study abroad program can foster the natural development of such an "affinity space" for shared learning experiences and collective learning. In order to foster meaningful independent learning, specific guidelines should be established that encourage students to play exclusively in the TL, with subtitles in the TL, and accessing digital dictionaries such as Wordreference.com on their portable devices to identify unfamiliar words as they play (see "Autonomous Learning," below).

Narratives in Cinematic Video Games. Certain cinematic, highly communicative, commercially-available games (such as the Assassin's Creed series) are particularly conducive to foreign language acquisition because they include the important additional learning component of a detailed narrative. These games have fairly complex story lines involving a quest that unfolds as the player interacts with gameplay. Narrative approaches to F/L2 language acquisition research stem from the premise that human beings are storytellers (Polkinghorne 1988). Bruner (1991) states that people apprehend reality and organize knowledge by means of narrative structures. Narratives in F/L2 have the benefit of engaging the learner by adding an additional layer of context that challenges the reader to follow characters and events as they unfold throughout the story. In cinematic video games, such challenges are heightened by the interactive nature of the medium. While there is a solid body of research on nar-

ratives in commercially available video games (Juul 2001; Gee 2003 and 2005a; and several others in the publications of DiGRA, the Digital Game Research Association, http://www.digra.org), at present scholarship focusing on the role and use of narratives in commercial video games for language acquisition is limited (Chen & Young, 2013; Bregni, 2017).

The Challenge of Video Games. Video games are effective not because they are fun, but because they are challenging, says Uruguayan software engineer Gonzalo Frasca, creator of DragonBox School, a video game series designed to teach Math in K-12 (Rosario3, 2018). They are difficult, and the repetition enhances comprehension and memorization. Playing video games also involves the body at a physical level. This role of physical involvement in learning is analyzed in Total Physical Response theory (TPR) (Asher, 1996; Byram, 2000, pp. 631-633; Cook, 2008). Also, playing video games causes adrenaline production (Mitchell & Savill-Smith, 2004, p. 17). It modifies the perception of surrounding reality, which was taken into consideration in Flow Theory (FT) (Csikszentmihályi 1997), which states that the best learning happens when we become oblivious to the passing of time. Gamers often refer to "being in the zone" when they play effectively: "Time distortion indicates the degree to which a student loses the sense of time during a learning activity" (Lee, 2015). TPR, adrenaline production and FT, all point in the direction of video games being particularly effective for learning.

Video Games as Life Simulation. Video games are simulations (of fictional or real experiences and events, if not a combination of both) that are challenging, based on repetition, and that involve players at a deep level, thus affording agency. The simulation aspect engages players in an immersive, dialogue-based narrative context that can prepare students for real-life conversations. (Egenfeldt-Nielsen et al., 2016). For example, through observing Ezio Auditore engage citizens of Renaissance Florence in conversations on different topics (from casual chit-chat about everyday errands to elaborate political discussion with historical characters such

as Leonardo Da Vinci, Niccolò Machiavelli and Lorenzo de' Medici) students are afforded the opportunity to practice, in a simulation of real-life conversation, a variety of conversational forms, from basics such as salutations and take-leaves, to complex, advanced hypothetical structures.

Utilizing Video Games as *Realia* in F/L2 Acquisition

While similar in nature to movies, cinematic games such as *Assassin's Creed II* and *Brotherhood*, *Rise of the Tomb Raider,* and *Heavy Rain and Beyond: Two Souls*, possess additional interactive components. They contain materials diverse enough to contribute to reinforcing vocabulary, grammar and syntax through listening and reading comprehension, lexical expansion, and problem solving. They can be used at all levels, in one form or another, and as a lab or classroom activity. They present in-game text and subtitles in multiple languages, including Italian[1]. Games can also supplement the learning of culture. Particularly notable in that sense for Italian as F/L2, are two main chapters in the *Assassin's Creed* series set in Renaissance Italy, *Assassin's Creed II* and *Assassin's Creed Brotherhood*. The *Assassin's Creed* games, with their outstanding re-creation of everyday life and culture of the specific era and the setting of its geographical location, allow educators in languages and cultures to explore first-hand several aspects of life in various locations of Renaissance Italy in dynamic, immersive, and interactive ways. Thus, a "AAA" game such as *Assassin's Creed II* can also effectively enhance the learning of Italian culture in literature courses.

As I said above, in order for VGBL to be effective, there must be solid preliminary work done (such as the creation of vocabulary worksheets, listening and reading comprehension exercises complete with follow-up activities) before each video game-based class activity (Bregni 2018 & 2017). There are currently no textbooks (or scholarly articles, for that matter) that could provide a "data bank" of suitable games and exercises for

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1   Italian content, however, is available only in physical disc copies purchased in European territories. I typically buy games for my courses directly from Amazon Italy, which ships to the US.

F/L2 acquisition. I have had to create my own such materials for my *Intensive Language for Gamers* course, and other courses. The process was very time-consuming, and I would very much like to share my work with other colleagues (a game-based textbook is currently in the works, in co-operation with colleagues in the field of F/L2 and linguistics). Each gaming session was combined with preliminary and follow-up worksheets centered on scaffolding (Sawyer 2006) and task-based learning (Thomas & Reinders 2010).

Video Games in the Study Abroad Experience
        For all the reasons indicated above, I believe that fostering the creation of spaces in learning institutions, including study abroad programs (and also foreign language immersion spaces on US campuses), where students could explore gaming in the TL, could enhance their learning experience. Setting up a specific gaming space in a atudy abroad center would be relatively easy and inexpensive: one or two joypads, a large flat-screen TV set; a gaming system (I recommend PlayStation 4, which currently has the widest selection of cinematic narrative games, including the excellent exclusives by Quantic Dream.) Such a space can provide access to digital video game-based *realia* that can be utilized by informal groups of learners. While on sabbatical in spring 2018, I visited two study abroad programs in Italy and two in Spain. Some had large facilities, others had small but quaint spaces. A gaming area would be easy to set up in all of them, and I believe that it would contribute to turning even a relatively small room into a social shared space for out-of-classroom, continuous game-based learning. In terms of games, I believe that ease of access is the key for such shared social spaces in the Study Abroad experience. Since the more gamer-oriented products like *Assassin's Creed* and *Tomb Raider*, are also, typically, one-player games, the shared communal gaming space should also be equipped with multiplayer casual games that are easily accessible to anyone, including non-gamers. I recommend the fun and engaging casual party games in the Sony PlayLink series, such as *Dimmi chi sei!* (*That's you!*) and *Sapere è potere* (*Knowledge is Power*), which use mobile

apps (Apple or Android, tablets or cellular phones) instead of controllers, allowing up to six player groups to interact. These games are simple, fun trivia and "what if?" type of games, and they are very accessible when played in the TL, even at the elementary level.

We have created such a learning gaming space in the Language Resource Center in the Department of Languages, Literatures & Cultures at Saint Louis University. Students can access a specific study/relax room in the language lab that has been equipped with chairs, armchairs, a sofa, a PS4 gaming system and games in multiple languages. Besides Italian, we also have games in French, Spanish and German. Games for Italian were purchased online from Amazon Italy. Students in the department are welcome to use the space at any time during lab hours (from 9a.m. through 9p.m.) either individually or in small groups, informally or as part of a course. Additionally, the PS4 is relatively small and light, so it can be easily transported to the classrooms or language labs for course-based gaming activities.

Learning with Games – Autonomous Learning. Setting up a specific gaming space in study abroad programs (and also in foreign language immersion housing on US campuses) affords students the opportunity to explore informal, autonomous learning in the TL, on their own free time, individually or as part of a small group. Educators, for their part, can assist by guiding students to meaningful autonomous learning. For example, they can encourage students to do the following:

- Play the games in Italian, with Italian subtitles and menus. From the gaming console settings, the language can be set to Italian. Language options for each individual game are often set from within the game itself.
- Access Wordreference.com (as a website, or as an app) on their mobile devices when playing. When encountering words with which they are unfamiliar, guide them to look at the context. Are they capable of assigning a plausible meaning to that word from context? If so, then move on. Is that word, on the other hand, un-

familiar? If so, then check its meaning on Wordreference. As an alternative, students could access google.it on their mobile devices to access Google Images. Thus, for example, if the game asked players to look for a *ponte*, and the students were unfamiliar with the meaning of that word, a simple search on Google Images would reveal within a few seconds pictures of bridges.

Also, students who enjoy games could be asked to write reflections on, or discuss, their gaming experiences as part of a traditional course. Even at the elementary level, students are able to describe their experiences in short sentences or paragraphs.

Learning Italian with Video Games: Course-Based. Study Abroad courses, including pre-departure or post-departure courses, could easily include a video gaming component. At the most basic level, instructors could simply provide opportunities for students to discuss their passion for gaming and/or their on-site/at home gaming experiences. Student-driven gaming activities could be incorporated as part of written and oral assignments, as topics of compositions and conversations. For example, within the setting of an oral presentation, instructors could provide the opportunity for student gamers to present on their favorite game, by including primary and secondary sources in the TL (i.e., gaming websites; video game magazines; YouTube channels) and quoting them. This is a basic "show and tell" type scenario. Alternatively, a first-semester Italian language course could reinforce interrogative pronouns (*Chi, quando, cosa, dove, quale, perché*, etc.) by playing a ten-minute session of *Sapere è Potere* on PS4, or *Trivial Pursuit Live!* on the Nintendo Switch (set in Italian). The advantage of the PS4 PlayLink series is that they are easy-to-pick up, fun casual games with no learning curve for up to six players, or six small groups, can participate through a mobile app.

In pre-departure courses, (taught in either Italian or English), students who will be leaving for their study abroad experience in Italy could be invited to play (outside class), or view on YouTube playthrough videos from, *Assassin's Creed II* and *Brotherhood*, observe the digital re-creations

of Renaissance cities (Florence, Venice and Rome), and then research what the in-game locations look like today. While Ubisoft has taken some liberties, the digital re-creation of the Italian cityscapes and landmarks is convincing enough to provide students with a comforting sense of preliminary digital exploration of the places that they will soon explore physically. Although playing *Assassin's Creed II* would not teach students how to get from the Duomo to Ponte Vecchio in Florence, it would give them a general sense of their location in relation to one another (as distances have been "edited" for practical in-game purposes). Above all, though, it would show them the splendor that was Florence under the Medici. Such is the power of digital simulations, and game-based learning.

Learning Italian Literature & Culture with Video Games. The *Assassin's Creed* series is a convergent medium that generates interest about the Italian Renaissance. While not perfect, it is well-researched and, as a re-creation, it is appealing and engaging. For instruction at all levels, from the senior year of high school (according to the suggested ESRB and PEGI ratings of Mature/17) to university, the series lends itself to being used as a learning device, provided some general rules about using digital *realia* as supplements to standard instruction are followed (Bregni 2018 & 2017). As I mentioned, since 2013 I have been using the *Assassin's Creed* series in my Medieval and Renaissance Literature courses (taught in English and Italian) in a series of video game-based activities that are designed to enhance and expand upon traditional learning. Such activities involve selecting approximately ten to twenty minutes of gameplay from specific sections *Assassin's Creed II* or *Brotherhood* that are relevant to the topic (Leonardo Da Vinci, Niccolò Machiavelli, Girolamo Savonarola, Lorenzo de' Medici, etc.), and creating worksheets with preliminary and post-activity questions. Activities take place in a classroom that is equipped with a PS4 system and a projection screen. Like I do in all my language courses, I elicit volunteers. Each student volunteer will play for a few minutes, then pass the controller to another, while the rest of the class participates by providing advice on how to proceed and what actions to take in the game.

Each worksheet includes pre- and post-activity questions. In the pre-VG-BL activity section, the first set of questions aims at verifying students' already-acquired knowledge of the subject (for example, on the Medici's role in fostering the arts in the Renaissance) based on "traditional" learning conducted prior to this point (from lectures, PowerPoints and assigned readings); the second set aims at preparing students to observe specific elements of the video game narrative that they are about to access. In the post-activity section, exercises are designed to first verify what has been learned through the VGBL activity, and second require students to compare elements from the game narrative with actual facts, events, and data.

In my Survey of Medieval and Renaissance Literature course, we also use the video game *Dante's Inferno* (Visceral Games, 2010) as a means to explore visual re-creations of Dante's poem. While the storyline and visual interpretations often differ from the letter of the *Commedia* (but at the same time Vergil's authentic words from the poem are used), the game can effectively be utilized to assist students to reflect critically on the narrative choices that Dante makes, as the author, and how the game's interpretations can shed light on Dante's view of life and the afterlife in the poem. For example, the game's representation of those damned by love in *Inferno* V, with its emphasis on audiovisual representations of human sexuality, can be compared to Dante's choice not to focus on the carnality of their sin. Dr. Brandon Essary at Elon University has created an entire course centered on the convergence between Dante's *Inferno*, the poem, and the video game. Through VGBL, we both also teach our students about fact-checking. Dr. Brandon Essary has successfully incorporated the *Assassin's Creed* series in his courses at Elon University, including a study abroad pre-departure course, entitled "Renaissance Italy: Video Games versus Reality".

Learning Italian with Video Games: VGBL Courses. In creating the *Intensive Italian for Gamers* course, I was fully aware that I was exploring new territories, so to speak; but I also hoped that my pioneering efforts could pave the way for other Italian F/L1 educators to follow in my

footsteps, possibly utilizing my methods and the materials I was developing. While not for everyone, some instructors may have strong interest in the medium and would like to explore my methodology. That is why, in fall 2018, with the assistance of the SLU Reinert Center for Transformative Teaching and Learning, I created an effective VGBL hands-on workshop format that I delivered to several European institutions in spring 2018, and why I created a textbook proposal that is currently being evaluated by US publishers. My *Intensive Italian for Gamers* course is a mixed/hybrid course, connected to the textbook *Percorsi* by Pearson (Italiano & Marchegiani, 3ʳᵈ, 2015) and the online program *MyItalianLab*. Each of the fifty-minute periods (three times a week) is divided in two parts: thirty minutes for "regular" instruction, while the last twenty minutes are devoted to game-based learning. Each week, a game-based module is presented. Each module is centered around a section of a game that I select, which specifically allows me to reinforce the structures and vocabulary that students have just learned through their textbook and modeled in class (covering approximately one chapter of *Percorsi* every week; twice as many as in our traditional language core requirement courses). Games are played fully in Italian, with Italian subtitles.

Each gaming session is combined with preliminary and follow-up worksheets centered on scaffolding and task-based learning. My typical worksheet first presents general gaming vocabulary and a brief overview of the game in the TL, focusing on cognates, i.e., words that are similar among languages that share common roots. Pictures are used to introduce new vocabulary as presented in the game. The video cut-scene sections are used for fill-in-the-gaps and word-matching exercises, to guide students to identify new words, verbs and idioms in context. Additional exercises assist students' listening comprehension (with YouTube links to users' play-through videos that students can use for follow-up exercises). Through hyperlinks, students can learn more about the context (for instance, Renaissance Italy). The game can be paused at any time, and students can engage in answering questions, group repetition, and pair role-play exercises. All these exercises are designed to help student ac-

quire the new vocabulary, verbs, and idioms. The final creative phase includes follow-up exercises focused on the expansion of written and oral production, partially done in class and partially assigned as homework (Bregni, 2017).

Students take turns to physically hold the controller (for five-minute sessions each), while the rest of the class provides suggestions, approval or disappointment in the TL (*Jump! Turn right! Open that door!* and so on), using vocabulary and structures that were introduced on a preliminary worksheet. Task-based group interaction centered on problem-solving improves learning (Wenger, 1998) and language acquisition in particular (Nunan, 1992).

While we only cover the initial thirty to forty minutes of each given game, this provides students with the vocabulary and the context to continue playing the game on their own.

Is Video Game-Based Learning Effective?

I have performed outcomes assessment for the *Intensive Italian for Gamers* course using both direct measures (testing: initial test; midterm exam; and final exam) and indirect measures (an exit survey and an intercultural competence survey). The experience of teaching *Intensive Italian for Gamers* was (and is, since I am currently teaching the course in spring 2019), very positive. Although students came from very different backgrounds in terms of linguistic abilities, they all successfully attained second-semester competency in the language. With active, continuous involvement in the play mechanics all students in the course, by the third week of the semester, could effectively give commands and express success or disappointment, all of which are essential communicative structures normally acquired towards the end of the first/early second semester.

Most interestingly, all students autonomously continued to explore gaming in the TL outside the classroom, by playing their own games in the language, or meeting as a group to play in our language lab. As a result, by the end of the semester students were showing knowledge of the language and culture (including idioms, interjections and fillers, expressions

of joy, excitement and frustration – all markers of fluency in foreign language acquisition) that exceeded normative standards. While additional long-term research must be done, preliminary analysis does show some interesting facts that are worthy of further study. In the language course for gamers, the mid term grade approximates the final grade that students would achieve in the first semester of the two-semester sequence. Likewise, their final grade approximates the final grade that students would achieve in the second semester of the two-semester sequence. A perusal of our current data shows that students in the gaming course were almost four points lower, on average, when comparing the midterm grade with the final first semester student grades. When one looks at the final grades for the gamers, as compared to regular second semester students, the relationship reverses. Here the students in this new course rank two points higher, on average, than their counterparts in the regular program. What this seems to indicate is that the "initial shock" of the intensity of the course might well have a dampening effect on grades but by the end of the semester, the students are doing better than their counterparts in regular courses. The intensity and immersion may be confusing initially but can be overcome, yielding better results in the end.

Outcomes assessment performed in my Renaissance Italian Literature courses show positive results as well. Students commented that they appreciated the visual appeal and digital reconstruction of Renaissance Italy in *Assassin's Creed II* and *Brotherhood* (Bregni, 2018 & 2017). In the post-VGBL activity exit survey, students commented that the games helped them visualize Renaissance Italy not only in terms of famous monuments and historical characters, but also in terms of everyday life and society (Bregni, 2017). The *Assassin's Creed* series allowed students to experience, not merely observe, the Italian Renaissance through a visually-appealing, plausible digital scenario where they could place the historical figures of Leonardo Da Vinci, Niccolò Machiavelli and Lorenzo de' Medici.

In terms of study abroad experiences, the hands-on VGBL workshops that I delivered at undergraduate and graduate programs in Italy

and Spain in spring 2018 were very well received. I delivered workshops that included sample language and culture activities to students from the joint M.A. program in Spanish and English at NYU Madrid, and to undergraduate students in Italian at the elementary and intermediate level at the Spring Hill College program in Bologna. Post-activity surveys show that all respondents enjoyed the VGBL activities, including non-gamers (circa 94% enjoyed them very much. Respondents were approximately 40% of the total participants); they felt that the workshop provided them with an opportunity to learn about new approaches to the learning of foreign languages. Lastly, they felt that the workshop provided them with practical ideas and suggestions for new approaches/new materials to use in their own foreign language learning.

Students' comments also indicated an intention to further develop their Italian by continuing to explore the language autonomously, some with games, some in other ways:

> "I really enjoyed the opportunity to learn Italian through video games. I look forward to using the same technique on my own to continue my Italian studies after this semester."
> "[…] Such an interesting and new perspective on language! It makes me want to do more activities in Italian, as well as learn more about how video games are made."
> "Many don't consider learning a language through something they use every day, such as playing video games and I think this will be crucial for the evolution of language learning in the near future."
> "[…] It is definitely something that I will continue to research in the future in order to apply in my teaching style.

As such, this yields the desired outcome of turning students into life long learners.

I would like to take this opportunity to thank NYU Madrid and Spring Hill College in Bologna for the opportunity to share my scholarship and teaching practices with their students and faculty.

Conclusions and Future Study

Particularly interesting, and worthy of further study, are students' comments related to their feeling "safe" in expressing themselves in the TL in my video game-based courses. The "affinity space" of, and for, gamers seems to be producing positive results, in that sense.

Students also expressed feeling safe in exploring communicative modes in the TL in the video game simulation. For study abroad experiences, in particular, I believe that this element of feeling safe in the simulation of the digital exploration of physical spaces and dialogue plays an important role. Video games as simulations can assist our students in preparing them to not only "visualize" their future (pre-departure), present (while studying abroad and traveling around Italy) and past (post-departure) Italian experience, but also provide them with "survival" elements that can help them feel well-equipped for the experience. For example, when in *Assassin's Creed II* students see a young Leonardo da Vinci greeting his friend Madonna Lucrezia (the protagonist's mother) by kissing her on both cheeks, from left to right, with the lips not physically touching the other person's face, they are given the opportunity to "safely" observe a digital reconstruction of a striking cultural difference (and a potentially awkward one, in real life) at play. Do they not get similar opportunities to experience cultural differences at play from movies, also? Of course. But agency is what makes the difference. Agency, by putting the students/players in the protagonist's shoes, simulates the experience of actually being present in the specific situation.

Furthermore, interviewed students mentioned that they continued to play games or exploring other media in Italian even after the course had finished. Their motivation continued beyond the end of the course.

While more long-term research must be done, initial results of this course do, in fact, provide an answer to the question of whether the use of video game *realia* improves language acquisition. Given those preliminary results, I do believe that video games are an effective didactic tool for reinforcing linguistic skills, thanks to the immersive nature of the medium (TPR; FT); agency; and, last but not least, to the fun component of the me-

dium itself, when it is represented by engaging, high-budget "AAA" commercial gaming titles, such as the *Assassin's Creed* series, the Quantic Dream games, and the more recent entries in the *Tomb Raider* series, all of which involve gamers at a deep level, engaging them to complete these quests.

Video games are a pervasive part of our culture; they can offer many advantages to learners. Among such benefits, I believe, is turning that which, in some cases, is a substantial part of our students' extra-curricular activities into an out-of-classroom/continuing (and ubiquitous, thanks to mobile gaming) learning experience.

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