

Potential of *The Sims 4* video game for English as a foreign language learning

Bachelor's thesis

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Tiivistelmä – Abstract <p>Tietokoneavusteinen kielenoppiminen on tietotekniikan räjähdysmäisen kehityksen myötä laajentanut ymmärrystä siitä, millä tavoin ja millä alustoilla kieltä on mahdollista oppia. Erityisesti videopelit ovat kielenoppimisen kannalta potentiaalisia alustoja, sillä ne usein sisältävät kielellisiä sisältöjä. Tutkimukseni onkin tarkoitus lisätä tietoa etenkin simulaatiokategoriaan kuuluvien pelien potentiaalista kielenoppimisessa. Tavoitteena on analysoida tarkemmin ottaen elämsimulaatiokategoriaan kuuluvan <i>The Sims 4</i>- pelin ominaisuuksia ja selvittää, miten ne voisivat edistää kielenoppimista.</p> <p>Tutkimuksen aineistonkeruussa pelikokemukseni pohjalta muodostunutta muistiinpanojen ja kuvankaappausten kokonaisuutta analysoidaan <i>affordance</i>-käsitteen (<i>affordanssi, mahdollisuus</i>), kielenoppimisen eri aspektien, sekä näiden kategorisoinnin kautta. Aineiston keräyksessä edetään kirjallisuudesta sovellettujen askeleiden mukaan, vastaten niiden asettamiin kysymyksiin pelin sisältöjen kautta. Tutkittavia sisältöjä ovat muun muassa pelin säännöt, mekaniikat, tarinankerronta, tavoitteet sekä vieraan kielen käyttömahdollisuudet.</p> <p>Tutkimuksen keskeinen lopputulos oli, että tarkasteltava peli tarjoaa mahdollisuuden kielenoppimiseen sisältöjensä avulla. Mekaniikat kuten hahmon ja maailman kustomointi saattavat tukea kielenoppimista, samoin kuin valintojen teon luoma osallisuuden tunne, erilaiset ilmoitusponnahdusikkunat sekä kuvaukset. Myöskin pelin hahmojen kanssa käytävä vuorovaikutus sekä sisältöjen kontekstuaalinen kielellinen sisältö ovat mahdollisia kielen oppimisen edistäjiä. Toinen keskeinen lopputulos oli, että varsinkin lukeminen ja kirjoittaminen ovat kielenoppimisen osia, joita pelin avulla on mahdollista kehittää. Sen sijaan kuunteleminen ja kielioppi olivat vähäpätöisessä roolissa, ja puhumista yksinpeliin ei sisälly lainkaan. Huomattavaa tutkimuksessa onkin siis se, että <i>The Sims 4</i> sisältää potentiaalia luoda englantia vieraana kielenä opiskeleville alustan kielen oppimiselle ja kehittämiselle sisältämiensä <i>affordanssien</i> kautta.</p>	
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1. Introduction

In this study, I will analyse the potential of *The Sims 4* providing affordances for improving areas of language learning proficiency by examining its language contents. The application of video games to language learning purposes has been studied previously (Peterson 2013; Reinhardt 2019), and from them it is known that gaming can be utilized as a platform for learning, but not so much which types of games and why. Research on different genres could help us understand the potential they hold, as well as making it easier to understand the key mechanics of the games that play a role in language learning. It would also be important to further our understanding of the varying of the effects that different genres of games might have on language learning. There is a gap in research on information about specific video games' potentialities in language learning contexts, and the present study aims to fill a portion of it.

Language learning and its proficiencies are seen in the study from the viewpoint of English as a foreign language (EFL), as the majority of Finland's and also the whole world's population are not native English speakers. The study aims to shed light on the areas of language proficiency the game has potential to afford improvement for. The mentioned areas of language proficiency include, for example, reading, writing, speaking and vocabulary skills. Categories are created from the areas of proficiency provided by the game and the game's potential affordances are categorized into these. In general, the main purpose of the present study is to locate and analyse the game's language contents that create a suitable platform for improving learners' English as a foreign language proficiencies.

2. Background

2.1 CALL and simulation games

As described by Laghos & Zaphiris (2009), computer assisted language learning (CALL) is most simply a process in which a person uses a computer and by doing so, their language skills improve. According to them, CALL includes a wide variety of options for how the computer may be used to acquire language competence, such as games, tests, exercises, and word processing. The technological advancements in the recent decades have enabled new ways of utilizing computers in language teaching; as an example of this, Laghos and Zaphiris (2009: 1) point out the transition from CD-ROM based CALL to Web-based CALL, and how it enables the learner to further connect and interact with their peers and teachers. According to them, other improvements the Internet's emergence has brought upon are the ability to use chat rooms and e-mail, communicate with native speakers, and have online conferences.

The ways to utilize computers in language learning have multiplied massively in a very short period of time, and the research on this field is changing constantly. The technological advancements of the past few decades have been examined by Blyth (2018), who focused on the use of immersion in language teaching and the technologies that it is used in. Their article discusses the rapid development from locally networked computers in the early 1990's to the 2010's VR (virtual reality) and AR (artificial reality) technologies and how language learning technologies are more immersive than ever. Lin and Lan (2015) discuss virtual reality environments and language learning by studying the research its trends using content analysis on the findings published in 2004-2013 by four top ranked computer-assisted language learning journals. Similarly to Blyth, their study aims to shed light on the ways the

use of VR and simulation in language learning has developed, and does so by categorizing the findings and coding them.

2.2 Gaming and language learning

There is plenty of research articles on simulation games and language learning, but not so much specifically on *The Sims*, let alone *The Sims 4*. Most of *The Sims*-related research (Ranalli, 2008; Miller & Hegelheimer, 2006; Lorenset & Tumolo, 2019) was done either on the basis of *The Sims* or *The Sims FreePlay*, which differ quite extensively from *The Sims 4* and each other as well, from the games and their language being from different time periods to the different opportunities of interactivity. However, the results from these studies seem to have quite many similarities; all of them report that the games were able to generate some level of improvement in vocabulary knowledge. Lorenset and Tumolo (2019) find this to be because of the game's inclusion of routine and familiar words in a virtual environment that offers contextual learning. Ranalli (2008) and Miller & Hegelheimer (2006) propose that the addition of theoretical guidance or supplemental materials to complement the game would benefit the learning experience. All three studies showed that the participants found the use of simulation games in language learning appealing and enjoyable, with Miller & Hegelheimer (2006) pointing out the value of using the games in group settings to promote communicative language.

Zainuddin et al.'s (2021) study on digital game-based language learning in the teaching and learning the Arabic language sheds light on teachers' perspective on the application of digital games to language learning. Their survey on 463 teachers around Malaysia concludes that applying digital game-based language learning to the Arabian classroom is well received by them. According to Zainuddin et al. (2021), the participants view the addition of digital games to benefit the students by helping them acquire Arabic vocabulary and give them motivation to learn the language. These results match with the studies of Ranalli (2008), Miller & Hegelheimer (2006)

and Lorenset & Tumolo (2019) on English language learning quite well, also pointing out the increase of vocabulary acquisition and motivational aspect of using digital games in the language classroom.

The only previous research on *The Sims 4* and language learning to my knowledge, by Qiao (2019), focuses on integrating the game into language classrooms using interventions. The research aimed to explore three different forms of classroom intervention to find out which has the most potential to be applied to language classrooms. The research included three interventions: teacher instruction, peer interaction and in-class activities. There were 11 weekly sessions which consisted of teacher instruction, autonomous gameplay, presentations, vocabulary tests and surveys. What was concluded from the study was that teacher instruction and in-class activities were the most suitable ways intervention, and that teacher instruction improved the learning outcomes the most. Compared to my approach to the subject, the study focuses more concretely on the applicability of the game to the actual language classroom. The main focus, however, is the same in both: how can *The Sims 4* be benefited from in an English language classroom.

2.3 Previous analyses on other games

Some of other research on CALL, affordances, and game-based language learning seemed to focus on MMORPGs (massively multiplayer online role play games) and language learning, examining games such as *World of Warcraft*. Two examples of these are Cornillie, Thorne and Desmet (2012) and Rama et al. (2012). In the former, the focus is more generally on DGBLL (digital game-based language learning), which is tied by references to MMORPGs and MMOs and their language learning properties, as the participants engage in authentic use of the target language in the game via speaking, reading, writing, and listening. In the research article, Cornillie et al. (2012) consider the rise of games used as language learning environments and the

way they are capable of doing so. In the latter, Rama et. al (2012) take a narrower perspective of *World of Warcraft* and study its affordances for second language learning. Their main focus is on the socialization that the game offers via interaction with other players online, and the affordances that this provides. In the study by Rama et al. (2012), the results show that participants were able to develop their socialization by playing, and that the game exposed them to authentic language experiences with the other online players in varying circumstances. The game offered an affordance for safe learning and languaging spaces by grouping the players, and also communicative competence from being able to reflect on their own language use with native speakers and teach and learn from each other. Therefore, the affordances that the game offered were able to improve the learners' language learning on multiple areas of language proficiency.

Parkatti (2021) discusses in their BA thesis the possibility of learning English extramurally while playing *Animal crossing*. They collected the data by analysing the game's contents and the affordances it provides for language learning. Their results showed that the game had variable possibilities for language learning, and that the main proficiencies playing the game could improve were vocabulary and reading skills (Parkatti, 2021: 29-30). These findings are quite similar to the ones previously presented, and also point out the vocabulary acquisition that the game is able to provide.

Autio & Takamaa's MA thesis (2020) discusses the possibility of MMORPGs facilitating language learning. Their study focuses on the learner's point of view, discovering whether playing MMORPGs is seen beneficial for language learning by the participants in their diaries. All of their participants in their study were agreeing to the fact that playing MMORPGs is beneficial for language learning, and Autio & Takamaa (2020: 79) summarize this to be because of three factors: diverse language exposure, multiple ways of using interactive language and the motivational aspect of using a digital game. The participants reported that they felt the sense of progression

aspect of games to be motivating and aid their language learning. It was also pointed out that they received repetitive language input while playing, and one of them found it to be helpful for passively learning English as they read and heard the same text multiple times. Once again, the results show similarities to previously presented studies, showing that using a digital game gives the learners motivation to learn and exposes them to an extensive amount of specific language and game vocabulary.

Similarly to the previous two, Eskelinen's BA thesis (2012) attempts to shed light on the possibility of applying video games to language learning by utilizing the online role-playing game *Kingdom of Loathing*. Their study also takes the learner's perspective into consideration, and the participants were interviewed after playing the game to share their experience. The results from their study showed that the participants were not sure whether the game could be implemented into teaching as a substitute for teaching, but it could be beneficial as an addition, or as one of the participants puts it, a "novelty" that brings change and variety to learning. According to Eskelinen (2012), the participants did however report learning new vocabulary that was both general and specific to the game, new grammatical structures and improving their skimming skills while playing. These findings mainly also match with the results from previously presented studies.

3. Research aim and questions

In my thesis, I will be focusing on a sub-genre of simulation games called social simulation games. In these games, the focus is on controlling and creating real-life social interactions using artificial lives. A prime example of these kinds of games is Maxis' *The Sims*-series, and its latest release *The Sims 4*. In the game, the player is able to control the lives of "Sims" and has to take care of their needs and fulfil their desires. In my study, I am hoping to find out which parts of *The Sims 4* are beneficial for language learning, and most importantly, why said parts specifically. Simulation games in general are a great source of contextualized language using situations, and these could be used as a way of learning grammar and vocabulary in possible scenarios and their natural contexts. I am essentially finding out whether this applies to *The Sims 4* and what use could it have in language learning.

With my thesis, I am aiming to evaluate the efficiency of the simulation game *The Sims 4* in language learning. I will do so by analysing the data I collect by taking screenshots and making notes of the game's content. This will show what kind of language content the game holds, and from there I will be able to discuss how it may be utilised.

The research questions of the present study are the following:

1. Which of the Reinhardt's learning affordances does *The Sims 4* provide to support English language learning?
2. Which aspects of language proficiency do the game and its affordances offer learning opportunities for?

My method of study will be qualitative content analysis. For the more specific type of analysis, I am going to utilise Reinhardt's (2019: 114-115) gameful affordances for L2 learning. They include a variety of different affordances, such as time and space, contextualized language learning and goal-oriented learning and feedback, as well as the ways and forms they might occur in the game and its mechanics. For gathering the data, I will be utilising Reinhardt's (2019: 100) work once again, this time their project steps for evaluating a game's second language learning potential by its affordances. These steps include a variety of questions that help the researcher examine the game's contents and mechanics in a way that helps them understand the way they might provide language learning. The steps aid with pinpointing the important aspects of the game for analysing its affordances.

I expect that the results are quite similar to the ones in previous research. There would likely be affordances in *The Sims 4* that will provide improvement to the learners' vocabulary and grammar skills. I hope that I will be able to use Reinhardt's affordances and steps for evaluating a game's potential in a way that provides me enough information to conclude a result from. I also hope that my results will be proof for me and other future teachers that *The Sims 4* can be a potential aid for language teaching purposes.

4. Data and methods

4.1. Materials

The Sims 4, Maxis' latest release of *The Sims*-series from 2013, is a simulation game, more precisely a social simulation game. In *The Sims 4*, the player is able to control the lives of "Sims" and has to take care of their needs and fulfil their desires, help them acquire jobs, manage their social life etc. The characters in the game do not speak English, but instead communicate by the game's own language, *Simlish*, which is mainly gibberish. Despite this, the game does include a significant amount of written English language in its contents, such as instructions and notifications.

The Sims 4 was chosen to be examined in this study as it has both meaning to the researcher and global success with a large player basis. It can be considered one of the most successful social simulation games. It was released in 2014 and its content has been continuously increased by the releases of purchasable downloadable content packs (such as expansion packs and kits) and free updates. Across all platforms, it has almost 36 million players worldwide as of 2021 (Electronic Arts reports Q4 and FY21 Financial Results, 2021: 1). *The Sims 4*, like its predecessors, focuses on character creation and house building, but has improved the tools of those majorly when compared to previous games. Also, the emotional and personality assets of the Sims have been remade for a more authentic and richer gameplay experience, alongside with more diversity in the game's contents for further relatability for the variable player base. Being more accessible, diverse, and developed than the previous *The Sims*- games, it is chosen to be examined in this study for these reasons as well.

The Sims 4 was chosen as the source of the data of this study for many reasons. First of all, simulation games in general are a great source of contextualized language

using situations and therefore have the possibility to generate language learning. *The Sims 4* is based on the everyday lives of *Sims* and their interactions with the surroundings, so it may provide the learners with contextualized language with its contents. Secondly, what I have experienced when playing the game is that there are features in the game that carry potential for multiple levels of language learning. There are more simple items, such as item names, that are self-explanatory and could assist in a lower level of language learning. The more advanced language that I have encountered in the game includes items such as instructions, notifications and item descriptions that carry more deep meanings and can be quite challenging as their contents may for example include puns and intertextual references. Generally, the game being as widely known and loved as it is, it could have the potential to offer a foundation for language learning that is both motivating and effective.

In my study, I hope to find out which parts of *The Sims 4* would be beneficial for language learning, and most importantly, why said parts specifically. Simulation games in general are a great source of contextualized language using situations, and these could be used as a way of learning grammar and vocabulary in possible scenarios and their natural contexts. I was essentially finding out whether this applies to *The Sims 4* and what use could it have in language learning.

4.2. Data collection

The data that I collected from the game consists of the observations that were made while playing, which include elements of the game's mechanics and language contents. The data was collected by taking personal notes during the gameplay, which are supported by related screenshots taken of the game screen. With the notes and screenshots, I was able to portray what kind of language content the game holds and from there I was able to discuss how it may be utilised for language learning purposes.

For gathering the data, I utilized Reinhardt's (2019: 100) project steps for evaluating a game's second language learning potential by its affordances. These steps include a variety of questions that help the researcher examine the game's contents and mechanics, such as its rules, narratives, L2 use and goals, in a way that helps them understand the way they might provide language learning. The steps aid with pinpointing the important aspects of the game for analysing its affordances.

4.3. Methods of analysis

As the method of analysis, I utilised qualitative data analysis, and more specifically categorization. The definition of deductive approach of categorization, provided by Bell (2009), describes it as a process in which the researcher poses existing theoretical system's questions to compare their data to. In this study, I mainly used the deductive approach, but also mixed in inductive approach to ensure the categories were fit for my data. I categorized my data by Reinhardt's (2019: 114-115) gameful affordances for L2 learning by figuring what parts of the game's contents generated language learning to which area of language proficiency. The gameful affordances for L2 learning include a variety of different affordances, such as time and space, contextualized language learning and goal-oriented learning and feedback, as well as the ways and forms they might occur in the game and its mechanics. I chose Reinhardt's methods for data collection and analysis because they centered my focus on the aspects of the game that can be important in a language learning context. As a set, they aided to create the study a cohesive structure and complemented each other in a way that made data gathering more linear. An important aspect to mention is that I considered coupling Reinhardt's data gathering method with Chapelle's (2001) criteria for determining CALL task appropriateness and therefore a mixed method approach, which turned out to be too time consuming and challenging for a study of this scale.

5. Analysis

In my analysis, I utilized Reinhardt's (2019: 100) project steps for evaluating a game's second language learning potential by its affordances. Whilst following the steps, I connected the findings to Reinhardt's (2019: 114-115) gameful affordances for L2 learning. Lastly, I categorized the main findings using the method provided by Bell (2009) and linked them to the found affordances and the aspects of language proficiency they are likely to offer learning opportunities for. Before starting, I removed all bought DLCs from the game, making it consist of the base game only. This was done to limit the amount of content that is analysed, and therefore make the study more coherent.

5.1. Overall evaluation of the game

Essentially, *The Sims 4* offers the player a gaming experience that is widely affected by their actions and choices. In my experience, the game has numerous strengths when it comes to its second language learning potential as well as the gaming experience it provides. In the latter, its key strengths are the seemingly endless possibilities of character and world customization that encourage creativity, storytelling, and the possibility of a deeper emotional attachment to the game. Another positive quality of the game is that it allows the player the option to decide on their own while giving optional instructions and end goals, such as careers and aspirations. When it comes to the game's second language learning potential, there are several factors that provide the player the possibility to gain language proficiency. Some of the key elements of the game are communication with other characters and interactions with surrounding objects and elements, in both written and nonverbal forms. It is majorly up to the player to dictate their own experience with the game.

In *The Sims 4*, the player is able to alter the time of the game by stopping it and speeding it up. By stopping the time, the player is able to comprehend the language contents in the game at their own pace. This also provides the player the chance to think of their options and consider their choice-making more thoroughly. In my view, this links the affordance of *time for L2 use and learning* (Reinhardt 2019: 120-122) to the game. The game's time is not linked to real-life time and instead runs its own course at a faster rate. However, some of the game's pre-made challenge scenarios are time-restricted and can only be started in the time period they are made accessible. An example of this is the 'Celebrate Carnaval'- challenge scenario, which can only be started until the eighth of March 2022, after which it disappears. There is a possibility for these scenarios to expose the player to a new kind of way of playing and therefore language content, as they give themed experiences for the player. These challenge scenarios could link the affordance of *time/place (in)dependent learning* (Reinhardt 2019: 132-135) to the game, as they may act as an agitator for the player to start the scenario before it is gone. Otherwise, the game is independent of the time it is played at, and dependent of the place, as it is available for non-portable platforms only.

5.2. Goals and rules of the game

The Sims 4 gives the player optional short-and long-term goals. The main goals in the game are to fulfil the sims' aspirations and career paths. The game's short-term goals include *whims*, which give the player satisfaction points that they can utilize to improve their sim. Neither of the goal types are necessary to follow in order to play the game, but they allow the player to access more resources and content in the game. They also provide the player a motivator to continue playing and chances to encounter more second language content.

To be able to play with their sims, the player's objective throughout the game is to make them survive and thrive as their needs deplete over time. Not meeting the sims' needs causes major consequences, and the player most likely first learns this through trial and error. For example, a sim will display being hungry by clutching their stomach or refuse to do certain actions when exhausted. The game tells the player both visually via *moodlets* and depleting need bars as well as in written form what to do in order to make the needs rise again. This ties the game to the affordance of *goal-oriented learning and feedback* (Reinhardt 2019: 124–126), as the player is given a sense of agency and control, even though the game gives them guidance.

Additionally, the game introduces new content to the player by their own terms, as they are able to restrict and choose with what and whom they interact when playing. This allows them to manage the pace at which they explore the game and the language it contains, making the affordance of *places for sheltered practice* (Reinhardt 2019: 122–124) connect to the game.

5.3. The game's designed narratives

The Sims 4 comes with premade households that have descriptions to make it easier to start off gameplay, being an alternative to creating one's own character and living space. These households also have existing skills, careers, relationships, and sentiments that create a structure for gameplay. Because *The Sims*- series has existed for over 20 years, there is an extensive amount of lore surrounding it, for example the Goth family that has been featured in every instalment of the series. *The Sims 4* includes a lot of the previous games' characters and their backstories, which are combined with the game's own characters to give the player a wide variety to choose from. These household descriptions contain the affordance of *contextualized language learning* (Reinhardt 2019: 117-120), as they are made to build narratives and describe the family. According to Reinhardt (2019: 119), vocabulary that is used to build

personal narrations could be retained longer and provide easier learning compared to language that is not.

5.4. Game mechanics and the language in them

There are many aspects of the game's mechanics that provide the player the interest to play and explore the language contents. First of all, when playing the game, the player is able to create an experience for themselves that is personal and can encourage creativity. This is provided by the player being able to customize their *Sim* to a large extent from their appearance to their likes and dislikes, as well as create a house from scratch, decorate it and terraform its surroundings. The players are also able to decorate their living spaces with items they collect while playing and exploring the world.

According to Reinhardt (2019: 132), in-game avatars can afford the player to explore different identities than their real-life ones, and experiment with for example gender, sexual orientation, age, personality traits and abilities, which may support the development of L2 identities. This connects *The Sims 4* to the affordance of *identity work and play* (Reinhardt 2019: 129-132), as the game allows the player to create a connection with their character and play through them, thus creating a sense of agency.

When playing the game, the player encounters second language in many forms. One of these is the feature of *pop-ups* that occur randomly when playing. The pop-ups come in a variety of forms, wherein some of them ask the player to advice their neighbours with career choices or relationships and others give the player the chance to affect how their character acts in school or at their job. They expose the player to second language and may allow them to empathize with their character through the

choice, which links the game to the affordance of *contextualized language learning* (Reinhardt 2019: 117-120).

Similarly to pop-ups, the notification wall exposes the player to a variety of contextualized second language. From it, the player can get written information about the game's occurrences, as most of the events that happen when playing create a notification for the player to read. The notifications function as a way for the player to find out how their actions affect their character, and through it they are also able to see some of the characters' communication in a written form.

Despite the characters not speaking a real language or showing most of their discussions in written form, the player is however exposed to written second language through the *interactions interface*. It can be accessed through clicking a character or an object, and from it, the player can decide how they choose to interact with it. When interacting with other characters, the player can choose, for example, to interact in a mean, friendly or romantic manner, which affects the relationship of the characters. The characters' reactions to interactions can be seen visually, verbally, and nonverbally, as they speak in *Simlish*, express emotions through body language and facial expressions as well as having thought bubbles with symbols in them. These interactions connect the game with affordances of both *identity work and play* (Reinhardt 2019: 129-132) and *contextualized language learning* (Reinhardt 2019: 117-120), as the player can both play with their identity in conversations as well as run into vocabulary that is designed for specific narratives.

Another instance of exposure to a lot of contextualized second language is in character creation, as the player assigns their character an aspiration, likes and dislikes and traits. These choices create the character new kinds of interactions and can alter the direction of gameplay. When choosing what traits and aspirations to give their character, the player need to read through a lot of contextualized second

language, which is paired with a corresponding image of the characteristic. These visualized clues may aid the player in learning new vocabulary, and thus connect the game to *contextualized language learning* (Reinhardt 2019: 117-120).

The game contains multiple occasions on which the player can write descriptions for their creations, such as coming up to a back story for a family or a house they built. This is one of the only times when in game the player is able to write, alongside with the functions of the *gallery*. In the gallery, the player is able to share their creations with other players, follow other creators, see their creations as well as give and receive likes and comments on them. It could be compared to a type of social media such as Instagram or Pinterest. In the gallery, the comment section can be used as a way to communicate to other players. I see this as a connection to the affordance of *linguaging and social collaboration* (Reinhardt 2019: 126), or at least the linguaging part, as the players are able to use second language to communicate and comment on others' creations.

Similarly to the traits and aspirations, the items in the house building all have descriptions that contain a significant amount of second language. They usually do not describe the item they are adjacent to exactly, but instead often have a humorous tone with hyperbolic made-up stories about the item. In these instances, the player is exposed to a great number of contextualized language and can pick up a plethora of new vocabulary as there are hundreds and hundreds of item descriptions to read through. This connects the game once again to the affordance of *contextualized language learning* (Reinhardt 2019: 117-120).

5.5. Categorizing the game's affordances that provide learning opportunities for language proficiency

The game presents many opportunities for the player to encounter second language content, and through my gameplay for the study I found that most commonly it was in written form. As for categorizing my findings, the first category set is *vocabulary acquisition*. The game's language content is contextualized to its narratives, and considers many themes related to daily life, such as animals, foods, furniture, and emotions. The affordance of *contextualized language learning* (Reinhardt 2019: 117-120) is set into this category, as the player may acquire new vocabulary by being exposed to the language content. In order to comprehend the game's language content and learn the vocabulary, the affordance of *time for L2 use and learning* (Reinhardt 2019: 120-122) comes to question, as the progress of the game can be paused in order to fully grasp . The last addition to the category, the affordance of *goal-oriented learning and feedback* (Reinhardt 2019: 124-126) is also linked to vocabulary acquisition as the language content the player reads is often in correspondence to their actions.

The second set category is *writing skills*, in which are located the affordances of *linguaging and social collaboration* (Reinhardt 2019: 126) and *identity work and play* (Reinhardt 2019: 129-132). The former encourages the player to write when communicating with other players on the gallery, which can afford learning writing skills in collaboration with peers. The latter allows for the player to explore descriptive language when creating descriptions for their creations, possibly enforcing a specific type of writing skill.

Grammar acquisition from the game's language contents is possible, as the majority of it is grammatically correct. What prevents the creation of this as a category is the fact that some of the game's contents are grammatically incorrect and the language used in the gallery is highly colloquial. While speaking does not appear in the game at all, listening is a minor part of it despite not being its own category. In the game, there are occasions on which its sound effects act as context cues for the player alongside with written language, and therefore are capable of affording language learning and incentivising the player to act accordingly. An example of this could be

the Sim's mood changing; alongside with the written information of the moodlet's name there is also music that matches the mood.

6. Conclusion

The present study was conducted in order to analyse the potentiality of using the contents of *The Sims 4* in English as a foreign language learning contexts. In order to disclose this, the gameful affordances for L2 learning by Reinhardt (2019: 114-115) were set as a focal point. The study aimed to identify which of them appear in the game and in what ways their associated features support language learning. In addition, the game's learning opportunities for language proficiency were assessed through the found affordances. The data used in the study was collected by taking notes and screenshots of gameplay features. The data collection process was structured by Reinhardt's (2019:100) project steps for evaluating a game's second language learning potential by its affordances. To analyse the gathered data, the study employed Bell's (2009) qualitative data analysis method of categorization concurrently with the above-mentioned affordances.

The first research question, 'Which of the Reinhardt's learning affordances does *The Sims 4* provide to support English language learning?', was answered by the findings locating the affordances in the game's contents and mechanics. The affordances found were *time for L2 use and learning* (Reinhardt 2019: 120-122), *time/place (in)dependent learning* (Reinhardt 2019: 132-135), *goal-oriented learning and feedback* (Reinhardt 2019: 124-126), *places for sheltered practice* (Reinhardt 2019: 122-124), *linguaging and social collaboration* (Reinhardt 2019: 126), *contextualized language learning* (Reinhardt 2019: 117-120) and *identity work and play* (Reinhardt 2019: 129-132). The results show that *The Sims 4*'s contents do contain many of the affordances and have the potential of affording language learning, proving that the research aim was met.

The second research question, 'Which aspects of language proficiency do the game and its affordances offer learning opportunities for?', was answered by creating categories from the aspects of language proficiency found in the game; *vocabulary*

acquisition and *writing skills*. The corresponding affordances were categorized into these, and their relations were explained. By this, the results of the study showed the proficiency aspects that were found and therefore reached the research aim.

Similarly to the present study, the results of previous studies on *Sims*-games (Ranalli, 2008; Miller & Hegelheimer, 2006; Lorenset & Tumolo, 2019) as well as the study by Zainuddin et al. (2021) generally reported games' ability to generate some level of improvement in vocabulary knowledge. This is said to occur due to inclusion of contextualized, familiar words and routine (Lorenset and Tumolo 2019), which could be an accurate statement of the present study as well. Surprisingly, the results from a study of the MMORPG game *World of Warcraft* by Rama et. al (2012), which pinpoint the interactivity with other players as the game's affordance for language proficiency, are rather similar to the ones presented in this study considering the gallery system. Despite differing majorly in genres, in both, the results find that using the target language in collaboration with other speakers allows for the players to reflect on their language use as well as creates the possibility of learning and teaching language coequally.

The most similar results to the present study are from Parkatti (2021), Autio and Takamaa (2020) and Eskelinen (2012). In the first, the findings show that *Animal Crossing: New Horizons* offers a wide variety of language learning affordances. From these, the study shows that vocabulary and reading skills were the most highlighted, which can also be seen in *The Sims 4* and the way it exposes the player to a vast amount of L2 content. Similarly, in the result of both Autio and Takamaa (2020) and Eskelinen (2012) there was an emphasis on contextualized vocabulary acquisition through repetitive language input and a sense of progression from game's goals, as well as learning new grammatical structures. In the present study, the sense of progression through the game's offered goals also plays a major part in vocabulary acquisition.

The findings of this study may be applied to the field of studies as a showcasing of *The Sims 4* and possibly similar simulation games' abilities to afford learning English as a foreign language by providing affordances in its contents. The results of the study can broaden the perception of using games in language learning and teaching in general, as the methods used are applicable to other games as well. This leaves room for future studies on simulation games and even the creation of educational language games that take example of commercial games to consider a variety of aspects of the game they key on. As well as other researchers, the results of the present study could also benefit English teachers in multiple ways as it seems to contain variable affordances for playful L2 language learning. Designing tasks and even full courses could be centered around the contents of the game for an elevated learning experience. A lot of the game's potentiality lies in its language contents, which could be further exploited in teaching.

One of the strengths of the present study is that it takes into consideration multiple different aspects of the game, such as mechanics, goals and rules and researches them thoroughly. This is in direct link to choosing a method of gathering data that gave the study a clear and varied structural basis as well as allowed for the researcher to find the necessary elements for analyzation. The study was also capable of answering the set research questions effectively and propose features from the game's contents to support its statements. Regarding the limitations of the present study, the major issue lies at the core of the research itself; it being qualitative analysis on matters relating to learning, which is highly impacted by real-life events in authentic language learning contexts, such as school. Therefore, it cannot provide a comprehensive view of the game's effects on L2 learning.

Another area of development in the study could be broadening the methods of gathering and analysing the data; although the current ones were suitable for a study

of this capacity, they also inhibit the researcher from exploring the game's contents even further. A possible solution for this could be to mix a few methods together, an approach that the present study was supposed to take with the addition of Chappelle's (2001) method but had to scrap in order to be accomplishable. As a more minor inconvenience, the study did not evaluate the game's language contents based on their grammatical correctness; this could result in the game providing incorrect and misleading information to language learners.

Alongside these possible improvements, future research on the topic could greatly benefit from applying the game with its contents into real life contexts, preferably in schools, in order to see its full potential in providing affordances for English learners. As the game's language contents hold a significant amount of contextualized language, it would be a worthwhile target for future research as it could inspire the introduction of more simulation games into the language classroom.

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