SINGLE-PLAYER INTERACTIVE STORY VIDEOGAMES AND NARRATIVE DECISION MAKING'S CORRELATION TO ENGLISH LANGUAGE LEARNING:

Views and experiences of English majors who play videogames regularly

Bachelor's thesis
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Työn nimi – Title Single-player interactive story videogames and narrative decision making's correlation to English language learning: Views and experiences of English majors who play videogames regularly	
Oppiaine – Subject Englannin kieli	Työn laji – Level kandidaatin tutkielma
Aika – Month and year toukokuu 2020	Sivumäärä – Number of pages 22

Tiivistelmä – Abstract

Videopelien ja vieraan kielenoppimisen yhteys on suuresti tutkittu aihe, mutta yksinpeli videopelien tutkimus on ollut alalla hyvin vähäistä. Viimeisen kymmenen vuoden aikana on ilmestynyt monta menestynyttä yksinpeli videopeliä, jotka pohjautuvat pelaajan vuorovaikutukseen pelin maailman ja juonen välillä, kuten Skyrim, The Witcher 3, Life is Strange. Näissä peleissä pelaaja tekee päähenkilönä suuria ja pieniä valintoja, jotka muokkaavat pelin tarinaa pelaajan tekemien valintojen mukaisesti. Tätä aspektia ei ole tutkittu tarkasti aiemmin kielenoppimisen näkökulmasta.

Tässä tutkimuksessa tutkin interaktiivisten yksinpeli videopelien vaikutusta englannin kielen omaksumiseen ja millä keinoin juoni valinnat edistävät englannin kielen oppimista. Tutkimuksessani hyödynnän Reindersin (2012) kertomaa kielen omaksumisteoriaa, jossa vierasta kieltä opitaan olemalla sen ympäröimänä. Hyödynsin tutkimuksessani kyselyä, jonka lähetin Jyväskylän yliopiston englannin pääaineopiskelijoille, jotka pelaavat säännöllisesti videopelejä. Tutkimuksen analyysissä hyödynsin teema analyysiä, jossa jaoin löytöni teemoittain. Analysoin löytöjäni myös aiemmilla tutkimuksilla aiheesta.

Sain selville tutkimuksessani, että interaktiiviset yksinpeli videopeleillä ja juoni valinnoilla oli suuri positiivinen yhteys vastaajien englanninkielen omaksumisen kanssa pelatessaan videopelejä. Tärkeimpiä löytöjä oli, että interaktiiviset yksinpelit pohjautuvat paljon rikkaaseen englannin kielen käyttöön, jonka ymmärtämisen apuna videopelit hyödyntävät paljon auditiivista ja visuaalista apukeinoja, jotka edistivät videopelien kielellisten kontekstien käsittämistä pelaajalle. Yksi tärkeä päätelmä oli myös juonipohjaisten valintojen luoma immersio. Immersio sai vastaajat motivoituneemmaksi pelata kyseisiä videopelejä, koska he kokivat vahvasti olevansa osa videopeliä itseään. Korkea motivaatio sai aikaan vastaajien pelaavan videopeliä paljon säännöllisemmin ja täten omaksuen englannin kieltä passiivisesti olemalla englannin kielen ympäröimänä pelatessa.

Toinen tärkeä löytö interaktiivisten yksinpelien ja juoni valinnoilla oli niiden luoma tarve oppia englantia, että pelaaja voi jatkaa pelaamista. Pelin tekemät valinnat vaativat pelaajaa tarkasti lukemaan ja kuuntelemaan englannin kieltä ja ymmärtää valinnat mitä hän aikoo tehdä. Kielen tarkka seuraaminen tuo paljon englannin kielen omaksumista, koska pelaajan tarvitsee keskittyä puhuttuihin konteksteihin, että hän pystyy jatkamaan.

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1.Introduction

Language learning in digital games is one of the newest subjects in L2 learning research field. Videogames are one of the most common used mediums in the world and its popularity has been growing exponentially for the past 30 years. It has become a worldwide phenomenon and its abilities to inflict foreign language (L2) learning to millions of L2 learners, including me, by incidental means, has created new L2 research methods that are made specifically for studying the game's L2 learning capabilities from a pedagogical and a theoretical angle. According to Cornielle, Thorne and Desmet (2012), there has been a lot of research done on how multiplayer videogames enhances the players L2 learning through communication with other players (Cornielle, Thorne & Desmet 2012: 243). However, according to Satu Eskelinen (2019) there is a big gap in research regarding singleplayer videogames' correlation to L2 learning (Eskelinen 2019: 5). This study focuses to bring more research in that gap in the field of Digital Game Enhanced Language Learning. This research field according to Reinders (2012) specifically focuses on applying theories of second/foreign language (L2) acquisition and learning theories to digital game-mediated environments and to demonstrate what kind of in-game contexts, configurations and game structures may afford L2 learning (Reinders 2012: 32 – 36).

This study focuses on a very common singleplayer videogame genre called interactive story videogames and its key element narrative decision making. The aim of this study is to discover the possible correlation between narrative decision making in SP interactive story videogames and its effect on L2 learning from the perspective of individual gaming experiences. I chose this topic because I find that SP interactive story videogames bare great potential for diverse L2 acquisition and learning opportunities, for their rich and versatile use of L2 and for the interactive element that lets the player interact with the language personally. I will reach that aim by finding data for these questions; does playing SP interactive story videogames that utilize narrative decision making enhance English language learning; in what ways does narrative decision making enhance English language learning. This study focuses on finding features, occasions and elements from this genre that has a positive impact on a player's L2 learning. In this study, I used a questionnaire to find authentic gaming experiences of people who play videogames regularly and major English in the University of Jyväskylä who use English as an L2. The data collection method will be discussed in section 3.1.

In this study, I will first go through the background theory of videogames and its correlation to L2 research, with example studies e.g. Eskelinen (2019), Reinders (2012), Reinhardt (2019), Dehaan et

al. (2010), Erkkilä (2017). Then, I will discuss the research and analysis methods that I will use in this study, which are questionnaire and thematic analysis. Then I will show my findings and interpretations of my gathered data in the analysis and discussion section. Lastly, I will go through my findings and further research suggestions from this research.

2.Background theory

In order to study videogames' correlation to language learning, it is important to know the definition of a videogame and the required research theories. In this section, I will go through my own definition of an interactive story videogame, which is the genre I will be focusing on this study. After that, I will focus on the theory that is based on studying videogames' correlation to learning languages. I will delve in the research field of *Computer Assisted Language Learning* (CALL) and focus on its sub-category *video-game enhanced language learning*, which this study is based on. Lastly, I will go through several studies that show how English can be learned through videogames to exemplify the correlation between learning English and playing videogames.

2.1. Definition of an interactive videogame

My definition of an interactive videogame consists of the physical definition of what is a videogame, as well as what features does it must contain to be classified as an interactive videogame. My definition of a videogame is based on Frasca's (2001) description of a videogame and the features that define an interactive videogame is based on Juul's (2005) systematic theory and Laurel's (1991) narrational theory. With these, I can create a definition of a videogame that suits the study's description of the targeted videogames. This is not a broad classification of what a videogame is, but a specific categorization of elements that can be found in videogames that utilize interactive storytelling.

2.1.1. The common characteristics of a videogame

Frasca (2001: 4) describes a videogame as "any forms of computer-based entertainment software, either textual or image-based, using any electronic platform such as personal computers or consoles and involving one or multiple players in a physical or networked environment". Thus, a videogame can be recognized as something that is played via an electronic device such as a computer, a gaming

console as well as a smartphone. Reinders (2012) discusses Presky's (2001) ideas about what is a videogame. They describe the common characteristics that are involved in most videogames which are; rules; goals and objectives; outcome and feedback; conflict, competition, challenge and opposition; interaction; the representation of a story (Reinders 2012: 2). A videogame is something that the player can interact and immerse with via an electronic platform. It has a keen emphasis on the digital aspect where videogames are played digitally, thus separating them from games that are played physically, e.g. cardboard games.

Videogames can also be divided into two categories Singleplayer (SP) videogames and Multiplayer (MP) videogames. (SP) videogames are a type of videogame where the player interacts only with the game world and not with other players. For example, a SP videogame world can be set in a digital environment that consists of one or many playable characters that the player is in-control-of and the other people the player meets in the digital environment are non-playable characters (NPC) which are controlled by a computer. Whereas, multiplayer videogames can have these same attributes but also include multiple human players in the same digital environment.

2.1.3. The features of an interactive story videogame

My view on the features that define an interactive story videogame is based on a combination of two different videogame definitions, the systematic and a narrational definition of a videogame. I chose these two definitions because they both compensate to a more accurate definition for interactive story videogames, than they would solely. For the systematic theory, Juul (2005) describes that a videogame is considered a videogame when it consists of at least one of these features: A rule-based formal system; With variable and quantifiable outcomes; where different outcomes are assigned different values; Where the players exert effort in order to influence the outcome; Where the player feels emotionally attached to the outcome; And the consequences of the activity are optional and negotiable (Juul 2005, as cited in Peterson 2013: 13).

For the narrational definition, Peterson (2013) discusses Laurel's (1991) narrational theory. Laurel (1991) sees games as an interactive drama where the player can play in different roles as a performer and play as the audience member (Laurel 1991 as quoted by Peterson 2013: 17). Jonathan Reinhardt (2019) in his book *Gameful Second and Foreign Language Teaching and Learning: Theory, Research, and Practice* argues how games as a narrative may include elaborate plotlines that create narrative-evoking elements in a game. When the player interacts with those narrative-evoking elements, they create their own unique personal narratives (Reinhardt 2019: 82). For example, it is very common that interactive story videogames have a main storyline with different endings that are

linked to the choices the player makes in the game. Therefore, two players can have totally different stories and endings caused by the in-game decisions the players make individually.

These two theories create a balanced contrast of the interactivity of a videogame, as well as the physical constructions of a videogame, which creates a game description for interactive story videogames that I agree with. These theories describe how an interactive videogame can create decisions where the player has to apply in order to succeed. This defines the videogame types that uses decision-making as a key feature within the videogame. From these theories, I chose to focus on a specific narrative-evoking element that I call narrative decision making which refers to the narrative decisions the player makes in interactive story videogames. Reinhardt (2019) exemplifies this by highlighting how interactive games are based on a systematic premise, for they involve doing something and making consequential choices that influence the game's story's outcome. The gameplay thus features as a rule-delimited action, but because it involves representation, because the player is participating in the story, it is experienced as a narrative (Reinhardt 2019; 83). This means that the game has both the systematic and narrative elements that merge with one another in various ways inside the game, creating the gameplay experience. This description of a videogame fits the genre of interactive videogames, which this study focuses on.

The combination of these two definitions do not create an overall description of what is a videogame, but specifically what is an interactive story videogame, because this study focuses only on that genre of videogames. This combined definition is my own view of portraying the qualities that interactive story videogames are consisted of. In previous mentioned definitions (Laurel 1991 as quoted by Peterson 2013: 17), (Juul 2005, as cited in Peterson 2013: 13) the focus has been in creating the inner concepts and elements that creates a description for a videogame overall. This definition focuses on a specific genre, for they have more recognizable patterns and contents that are more universal than labelling the whole medium of digital games.

2.2. Digital Games and language learning

In order to study videogames' correlation to learning languages, it is necessary to know about the research field that studies it. CALL research is the main research field that studies the relations of videogames and learning languages. Peterson (2013) summarizes CALL as the field of computer assisted language learning, where all theories that use computer technology to aid language learning

is referred to as CALL research (Peterson 2013: xii-14). Peterson (2013) claims how CALL researchers have drawn attention to the fact that videogames harness a potential to be used as educational tools since the 1980's (Peterson 2013: 35). CALL research has many subcategories that specifically focus on videogames' correlation to language learning. Two of these theories are called Digital game-based-language learning (DGBLL) and Digital game-enhanced-language learning (DGELL). The studies' use of "Digital game" works as a synonym for videogame.

2.2.1. Digital game-based-language learning

DGBLL emphasizes learning L2 through a video game that is made for educational purposes. Hung, Yang, Hwang and Chu (2018) describe DGBLL as using an educational videogame in a school setting to achieve L2 learning outcomes with the help of the educational videogame (Hung, Yang, Hwang & Chu 2018: 90 – 92). Hung et al. (2018) define an educational game as "a playful activity that is structured by rules for the pursuit of quantifiable outcomes" and that "incorporates educational objectives" (Hung, Yang, Hwang & Chu 2018: 90). For example, an educational game can be an English vocabulary learning app that helps the player memorize different English vocabulary and rewards the player with in-game trophies when succeeding in the exercises.

One DGBLL research field focuses on assessing educational game's usage in a school setting and its capabilities to teach L2. Berns, Montes, Duarte and Dodero (2016) studied a hybrid game-based app for enhanced language learning for students. They used the app in their teaching to see its impact on the students' motivation as well as learning vocabulary. The study showed positive results for using a videogame-based language learning task inside a school setting which had a positive impact for the students' vocabulary learning (Berns, Montes, Duarte, Et al. 2016: 18-20). DGBLL thus is used to see in what kind of ways videogames can teach language in a formal academical setting.

2.2.2. Digital game-enhanced language learning

DGELL emphasises on the language features the player can learn while playing a commercial videogame. Lacasa, García-Pernía and Núñez (2014) describe commercial videogames as digital products which are commonly used in people's lives, but which are not used as common tools in the school environment. (Lacasa, García-Pernía and Núñez 2014: 103). In other words, commercial games are digital games that have been made for entertainment purposes and not as pedagogical tools like educational games.

Reinders (2012) describes *videogame-enhanced language learning* in their book *Digital Games in Language learning* as a form of applying theories of second/foreign language (L2) acquisition and learning theories to digital game-mediated environments and to demonstrate what kind of in-game contexts, configurations and game structures may afford L2 learning (Reinders 2012: 32 – 36). This means that videogames' language use and linguistic features are studied with the use of L2 language acquisition and learning theories. One can study many aspects of language learning through videogames with DGELL.

With DGELL research, one can make different L2 studies. For example, Matti Erkkilä (2017) studied Finnish upper secondary school students' perspective on game-enhanced language learning. The study was done via a questionnaire and the results showed a strong positive connection between time committed to playing videogames and the players' English language learning experience (Erkkilä 2017: 88). With Erkkilä, the study showed a correlation of how playing videogames has an impact on their skill level in using English which shows in their English prowess in school. DeHaan, Reed, Michael and Kuwanda (2010) studied how playing a commercial rhythm game called *Parappa the rapper (1996)* affected the player's and the viewer's L2 vocabulary recall from the game. The results showed that the later levels of the game was too cognitively loading for any effective learning to occur for the player, but the study still showed positive findings for the correlation of videogames and second language acquisition (deHaan, Reed, Michael & Kuwanda 2010: 84-85). Dehaan et al.'s study focused on learning vocabulary through DGELL. Satu Eskelinen (2019) studied Single-player video games as an informal language learning environment by studying the views and experiences of gaming young adults. She found in her data that many of the respondents felt that immersion in videogames was a leading factor that enhances L2 learning (Eskelinen 2019). Eskelinen (2019) focused in her study the L2 elements that digital games environment provides and its correlation to L2 learning.

2.2.3. L2 learning in videogames

Learning languages through videogames occurs while playing the game. Arnseth (2006) describes how the L2 learning happens autonomously and incidentally while playing a game, because they learn the L2 in order to play, rather than playing the game in order to learn the L2 (Arnseth 2006). Reinhardt (2019) explains how (L2) learning contexts and learning can be divided into intentional learning or incidental learning. Intentional learning occurs in formal contexts like school settings with learner goals, instruction and assessment for the learner, while incidental L2 learning happens mostly outside school environments either planned by the learner or unplanned. In incidental L2 learning, the language can be acquired by reading, listening and by being surrounded by the different language

which is called L2 acquisition (Reinhardt 2019: 31). Videogame-enhanced language learning represents incidental L2 learning outside of a school environment, whereas videogame-based language learning represents intentional language learning. The emphasis of videogame-enhanced language learning is to study how people learn languages in the digital wilds. Sauro and Zourou (2017) explain "digital wilds" as contexts that support informal L2 learning through social contexts through digital spaces, communities and networks that are less controllable or not as organized as an academic setting (Sauro & Zourou 2017: 1-7). Thus, learning languages through playing videogames outside of a school environment is seen as L2 learning in the digital wilds.

3. Data collection and research methods

The aim of this study is to discover the possible correlation between narrative decision making in SP interactive story videogames and its effect on L2 learning. The research questions of this study are the following:

1. Does playing SP interactive story videogames that utilize narrative decision making enhance English language learning?
2. In what ways does narrative decision making enhance English language learning?

I chose to focus on this subject through DGELL research because there is a gap in the research field that studies SP videogames effect on L2 learning. According to Cornielle, Thorne and Desmet (2012), there has been a lot of research done on how multiplayer videogames enhances the players L2 learning (Cornielle, Thorne & Desmet 2012: 243). According to Eskelinen (2019) there is a big gap in studying SP videogames (Eskelinen 2019: 5). This study investigates is to find new information about a very common SP videogame element (narrative decision making) correlation to L2 learning, through personal experiences of different gamers. This section introduces the research method that I use in this study and the research analysis method.

3.1. The data collection

This study focuses on qualitative research where I am trying to find new information about SP interactive story videogames' narrative decision making's correlation to L2 learning. The data

collection method this study uses is a questionnaire that utilizes closed questions and open questions. The questions' purpose is to gather data about the respondents' personal experiences and opinions about narrative decision making's effect on L2 learning. The closed questions purpose was to get the general opinion of the respondent, then after answering the closed question there followed an open question where the respondent could further explain their own opinions and experiences. As seen here:

> 5.Did you learn English while playing these kinds of games [yes/no] (if you answered yes, go to question 5, if you answered no go to question 6)
>
> 6. In what kind of situations did you learn English when you played an interactive SP videogame as a child? [open ended question]
>
> 7. What was the reason in your case why you didn't learn English while playing interactive single player videogames? [open ended question]

This study is based on DGELL research, for I am trying to find information how people have learned English in the digital wilds while playing video games. The questions are formed in a way that gives the respondents freedom to express their own individual experiences with SP interactive story videogames. A similar research was done by Eskelinen (2019*) in *Single-player video games as an informal language learning environment: Views and experiences of gaming young adults*. In this study, Eskelinen used interviews as her data collection method and got positive results (Eskelinen 2019). I chose to do a questionnaire in order to get new kind of data that could back up Eskelinen's research findings as well as find something new via a new data collection method.

The questionnaire's target group consists of people that have studied English as a L2 and play videogames regularly. I sent the questionnaire to the English majors of Jyväskylä's university facebook page which is a closed group consisting only of English major students. This way the respondents all have a long background of studying and using English as a L2. I used Google forms to post my questionnaire and received 21 answers to my questions. The questionnaire was open for 14 days. I used a 20€ gift card as a hook to draw in respondents. Because the questionnaire was not anonymous, I safely deleted all of the replies and the whole questionnaire from the Google forms app.

3.2 The Research analysis method

I will use thematic analysis to analyse my data. Maguire and Delahunt (2017) describe thematic analysis as the process of identifying patterns or themes within the qualitative data and use these themes to address the research or say something about an issue (Maguire & Delahunt 2017: 3352 –

3353). I will analyse the answers of the respondents and deduct reoccurring themes, which I will analyse by diverging them into subthemes. Then by providing the analysis of the subthemes, they will collectively describe the data's overview of the dominant themes. I chose the themes and focused on the themes that occurred the most and gave me data that could be applied to my research questions. I will study the data based on DGELL theories and previous DGELL research. Reinders (2012) highlights how in DGELL research the focus should be in how L2 learning occurs in the digital wilds (Reinders 2012: 32). Which is why, I will specifically focus on how the respondents incidental L2 learning occurred in the videogame environments. I will also compare my findings to Eskelinen's (2019) data.

4. The analysis and discussion

All of the respondents played videogames regularly. The most common SP interactive story videogames that the respondents had played were *Life is Strange* (10/21), *The Witcher 3*(6/21) and *Skyrim* (6/21). In this section, I will analyse my data into two major themes, which are focusing on what the respondents learned while playing interactive story videogames and what qualities narrative decision making has that shows a correlation to L2 learning according to the data. After each section, I will also discuss my findings and interpret the bigger theme that I found from the data and interpret it to my research questions. I will be going through these themes by interpreting the gathered data and reflecting it on previous DGELL research e.g. Eskelinen (2019), Reinders (2012), Reinhardt (2019), Dehaan et al. (2010), Erkkilä (2017).

4.1 What the respondents learned while playing interactive story videogames

While analysing the data, I discovered a theme from the answers regarding the experiences of playing SP interactive story videogames that utilize narrative decision making. This theme was the experienced L2 learning of the respondents while playing these games. In this section, I will analyse the data I gathered about the respondents' experiences of playing SP interactive story videogames. All respondents who experienced L2 learning while playing SP interactive story videogames expressed their experiences from the point of view when they were children. There were 15 out of 21

of the respondents who had played these kinds of games when they were little. I chose three sub themes while analysing this theme. The first one was the data from the situations where the L2 learning occurred in SP interactive story videogames. I chose this theme because I found reoccurring situations where 13 out of 15 respondents raised certain situations where they had experienced L2 learning during gameplay. The second subtheme was how the respondents learned L2 during gameplay. I chose this theme because 5 out of 15 respondents specifically pointed out the way how they acknowledged and acquired the L2 while playing. The third subtheme was the L2 elements that the respondents learned while playing interactive story videogames. I chose this theme because 6 out of 15 respondents specifically pointed out the L2 elements they learned while playing. All subthemes were chosen because they had a clear connection to the research questions. I will analyse the data according to Reinders (2012) explanation of DGELL. Lastly, I will compare my findings to Eskelinen's (2019) data.

4.1.1 When the L2 learning occurred during gameplay

One important aspect that I discovered from the data was the learning occurrences when the respondents experienced L2 learning. All 13 respondents who had played English SP interactive story videogames when they were young learned English while playing these kinds of games. Only 2 of the 15 respondents did not learn English while playing SP interactive story videogames and the reason was that the games they had played were in Finnish. According to the experiences of the 13 respondents, the data showed that the English language learning occurred during active playing, listening to dialogues and in situations when the player needed to understand an objective in order to progress in the game. This applies well to Reinders' (2012) description of DGELL theory, where these in-game contexts, configurations and game structures have affected a player's L2 learning positively. The majority of the respondents who played interactive story videogames when they were children point out specifically that they experienced English language learning during the moments when the player had to make a choice and during the aftermath of what that choice created.

> (1) (I learned English) in situations where instructions were given and where you had to choose what to do. [17]
> (2) -- I also learned by seeing what happens after doing different actions. [14]

From the answers, I was able to form a re-occurring pattern of the respondents game experiences. From these experiences, I can analyse how the games taught English in these situations where the respondents experienced L2 learning. As seen in 17 and 14's answers, SP interactive story videogames seem to give out a lot of helpful information to guide and help the player to continue the story. In these informational moments, most of the respondents experienced that the game taught them essential information in English, thus enhancing their L2 learning. From the answers, I also

interpreted that SP interactive story videogames provide a lot of contextual feedback to the decisions the player makes. From these contextual and visual clues, the player is also aided to understand the decisions the player had made, thus enhancing their L2 learning in the Digital Wilds. When the young players face these aspects in SP interactive story videogames, according to the data, it is implied that L2 learning occurs in these gameplay situations.

4.1.2 How did the respondents learn L2 while playing SP interactive story videogames

In these situations, I discovered common themes in how the respondents used different tactics to help them proceed and understand what the videogame required of them, thus learning English while playing the videogame. Two of the respondents specifically mention using a dictionary that worked as an aid to understand words that were difficult for the player. Three respondents simply used trial and error and learned from the feedback how the game reacted to the choices the player had made and adapted to it. From the replies, I also analysed that most of the respondents learned L2 by passively playing the games, as seen in these answers.

> (3) --Every day after school, me and my friends would sit in front of the screen while desperately flipping through dictionaries to figure out what the characters were saying and how the game wanted us to proceed. Trial and error taught us what the different words in battle menus meant and navigating inventories for the correct item under pressure got me used to processing a lot of foreign text quickly. [20]

> (4) I learned passively by being exposed to English while playing games. [14]

From the data, I interpreted that the majority of the L2 learning that the respondents experienced happened through incidental L2 learning. As Reinhardt (2019) explained it, in incidental L2 learning, the language can be acquired by reading, listening and by being around the different language (Reinhardt 2019: 31). When the respondents spent a lot of time playing the videogame, they were acquiring the language by simply being surrounded by the L2 in written, spoken and interacting with the game world with the use of L2. Not many of the respondents specifically explained how they learned English while playing, but 13 out of 13 respondents that had played these games when they were little, had experienced L2 learning. From this, I can interpret that most of the respondents experienced L2 learning by simply playing the game regularly.

4.1.3 What L2 elements did the respondents learn while playing

While analysing the replies, I noticed a theme of specific L2 elements that the respondents learned while playing SP interactive story videogames. These elements were pronunciation, new vocabulary and syntax. 5 respondents specifically mention learning vocabulary while playing. respondent

number 20 exemplifies the effect of playing SP videogames, including interactive story videogames, in their L2 learning when they were a child:

> (5) --I remember particularly well how the teacher introduced the present perfect tense as a new topic, and I was completely taken aback that a lot of the students were struggling with it. It felt so obvious to me - not because anyone had ever taught me the rules, but because I had naturally acquired the logic from dozens of examples with context in my games. So games improved not only my vocabulary, but also my subconscious understanding of syntax. [20]

From the replies, I interpreted that most of the SP interactive story videogames that the respondents had played, had very authentic and diverse use of L2 language. 4 respondents specifically point out about learning English through SP interactive story videogames that had rich text and how they learned vocabulary and pronunciation through the dialogue of the game. This implies that SP interactive story videogames provide rich verbal and written L2 language use, which taught the respondents new vocabulary by playing the games. Comparing the findings to Eskelinen's (2019), in her data in the section about *Language learning opportunities provided by types and qualities of games* she gets similar findings that how games that have a lot of language that are essential to the plot, as in SP interactive story videogames, are good for English learning for the player is motivated to learn the language in order to play and proceed (Eskelinen 2019: 61 – 62). Both my findings and Eskelinen's findings show similar positive possibility of L2 learning while playing SP interactive story videogames.

4.2 The qualities of narrative decision making and its correlation to L2 learning

In this section, I will go through the qualities of narrative decision making that has a correlation to L2 learning, focusing on the qualities the respondents find both positive and negative for the gameplay experience and language learning experience both as an L2 learner and as a player. 19 out of 21 respondents thought that narrative decision making enhances L2 learning, but 4 respondents also found qualities that did not enhance their L2 learning. I decided to include the point of view from a player as well as an L2 learner. From the player perspective, you get data from how narrative decision making as an element shapes the playing experience that affects the player's L2 learning. This is important, as discussed above, in DGELL the English language learning environment is the videogame itself. Thus, from this perspective, one can find essential information of how narrative decision making affects the players L2 learning experience. I will analyse and separate the reoccurring qualities into sections that enhance L2 learning and to sections that do not. I will analyse the themes according previous DGELL research and reflect those qualities to the answers of the respondents.

4.2.1. How Narrative decision making creates immersion

One key quality that I found in the data about narrative decision making was the correlation of narrative decision making and creating immersion. 16 respondents out of 21 specifically point out how narrative decision making creates immersion and find it as one of the most positive qualities that narrative decision making creates for the playing experience. According to the data, the emphasis on how narrative decision making creates immersion is through giving the player their own unique story and the freedom to choose and decide from multiple and diverse narrative options that has an effect on how the story progresses, thus making them more immersed in the story and its characters. This is a quality that narrative decision making had created for the respondents and it had enhanced the respondents playing experience and thus enhancing their L2 learning. This is exactly one of those key features that Reinders (2012) mentioned when discussing narrational games, about when the player interacts with those narrative-evoking elements, they create their own unique personal narratives (Reinhardt 2019: 82). As seen in this example:

> (6) (Narrative decision making) shapes the game experience to be more unique. It makes me want to play the game several times through in a short amount of time to see the different options of dialogue. It can be interesting to hear about the other choices other people made and gives something to talk about. They give chance to interesting storytelling.[1]

From this data, I interpreted that immersion is one of the keyfeatures that narrative decision making creates that enhances L2 learning. The respondents also emphasised that narrative decision making specifically created immersion if the choices and decisions changed the course of how the story proceeded regarding the choices. The data shows that most of the respondents felt that by being immersed in the videogame world, they were more involved in the story and thus paying more attention to it. In DGELL studies, videogame's immersion and its correlation to L2 learning is a broadly studied subject with a lot of positive findings. For example, the previously mentioned Dehaan et al. (2010) and Eskelinen (2019) focused on immersion in their studies and found positive correlations to L2 learning. In the field, immersion is regarded as one of the major factors in DGELL. Immersion creates a need for the player to keep playing regularly, thus learning English more passively. With immersion, the player is more invested in the narrative of the game and as seen from the gathered data, the respondents wanted to learn English in order to understand the world better, because they felt immersed. As seen in this reply.

> (7) Firstly, having narrative decisions as a part of the gameplay gives the player an incentive to actually follow the story. -- Secondly, especially if the choices are numerous and relevant

to the story, it can help the player to engage with the story in a more personal level, thus involving them more. [20]

4.2.2. How narrative decision making does not create immersion

The data showed that narrative decision making does not always necessarily create immersion inside the game. 6 respondents all point out how in many SP interactive story videogames that utilize narrative decision making, the in-game decisions do not actually shape or change the narrative to something different. This neglects Reinders' (2012) definition of an interactive videogame. The respondents feel in these situations that their decisions do not matter, which takes away from their immersion from the gameplay. Hence, they also feel less involved in the story which decreases their motivation to understand the videogame.

> (8)I find it annoying in narrative games when the conclusion is basically the same regardless of the choices I make, it makes the game less replayable. [3]

From this answer alone, one can see how much the effect of the narrative decisions to the story has for a player and an L2 learner. When the narrative decisions do not affect the actual narrative the respondents felt these kinds of games are not worth coming back to. As I previously mentioned in how the respondents had learned English while playing SP interactive story videogames that utilize narrative decision making, many of the respondents learned English by playing passively and being invested in the story. When the decisions do not actually affect the story, the respondents will spend less time playing and thus they will learn L2 less. For example, Erkkilä (2017) pointed out in his findings that the more hours the students had played videogames, the higher was their English language learning experience (Erkkilä 2017: 88). Thus, according to the data, if narrative decision making does not affect the narrative, it can also not enhance L2 learning.

4.2.3 Narrative decisions create a need to learn L2

A certain theme was raised when I was analysing my data about the L2 enhancing elements of narrative decision making. One of them was the effect of having narrative decisions in a game, which requires the player to pay close attention to the dialogue and the given decision options. 16 respondents point out and emphasize that narrative decision making in videogames creates a need for the player to pay attention to the narrative closely and understand the context of the dialogues. The respondents bring up that narrative decision making brings more attention to understanding the used L2 than in games that do not use narrative decision making, as seen in this reply:

(9) I feel that when you play a game with no narrative decision choices you can play the game through without reading a single sentence (as I did in Pokemon games when I was a kid). However, if you play a game where you have to make active decisions the player really needs to read to know what is going on, and what the choices mean to affect the game the way they want to. So briefly, in these games I feel like you have to read and understand the text to play, thus enhancing English vocabulary, comprehension etc. [4]

From this, I interpreted that narrative decisions work as an L2 learning element, for it raises a high demand of attention to the used L2 inside the videogame environment. In order to progress in the game, the player needs to understand the L2 contexts that the player is making decisions of. Narrative decision making thus creates a situation where the player needs to focus on learning the L2 language in order to play and progress in the game. Eskelinen (2019) also had similar findings in her study, where there was an emphasis on the respondents L2 learning motivation through focusing on understanding the game's ingame L2 contexts in order to progress in games that utilized narrative decision making (Eskelinen 2019: 84 – 86). From the gathered data, one can interpret that narrative decisions works as a motivating factor for L2 learning.

5. Conclusion

The study showed a very positive correlation of SP interactive story videogames and narrative decision making to L2 language learning according to the individual experiences of the respondents. The data provided multiple occasions and ways that both the SP interactive story videogame and the narrative decision making element enhanced English language learning as well as occasions where it does not.

For my first research question, the study gave a lot of ways in which playing SP interactive story videogames enhances English language learning. I interpreted from the respondents' own experiences of learning L2 while playing SP interactive story videogames that the language learning occurred in situations where the game gives out a lot of information, through trial and error and through language acquisition. Thus, SP interactive story videogames enhanced the respondents L2 learning through providing necessary and helpful information and by giving contextual feedback to the players decisions and by playing the game regularly. From these contextual and visual clues, the player is aided to understand the decisions the player had made, thus enhancing their L2 learning in the Digital Wilds and the more time they spent playing the games, the more L2 learning they acquired. The specific L2 elements that SP interactive story videogames taught the respondents that were raised

in the data was vocabulary, pronunciation and syntax. SP interactive story videogames, according to the data, provide a rich verbal and textual use of L2 language which the respondents acquired by being surrounded by versatile L2 language.

For the second research question, I found two major themes in narrative decision making that enhance L2 learning. Narrative decision making creates a need to learn L2 in order to progress in the game. 16 out of 21 respondents emphasized how narrative decision making creates a situation where the player needs to focus on learning the L2 language in order to play and progress. The second theme is narrative decision making and how it creates immersion. The immersion occurred for the respondents when the decisions affected the outcome of how the story progressed regarding the decisions. This hooked them in to being more invested in the videogame's story and environment and thus more involved in the language learning environment. Narrative decision makings relation to immersion had both a positive and a negative effect regarding its effectiveness in the outcome of the story. Narrative decision making did not create immersion for the respondents when the outcome of the decisions were minimal or irrelevant to the outcome of the story. If the narrative decision making element in a videogame is not relevant to the continuity of the story regarding the player's own decisions, it detaches the player from the game's world and hence, they also feel less involved in the story which decreases their motivation to understand the videogame.

Overall, this study managed to give an overview of certain elements from SP interactive story videogames and narrative decision making that created L2 learning for the respondents, but the deeper understanding of how the L2 learning occurred was very minimal, due to the lack of indepth L2 learning answers. To find out more information of the possibilities of how SP interactive story videogames and narrative decision making can enhance L2 learning, there should be more diverse and broader data gathering methods, e.g. game-enhanced activities by playing SP interactive story videogames and evaluating the L2 learning through a test; making broader questionnaires with a bigger emphasis on contextual L2 learning situations. This study managed to give more positive findings in SP videogame's correlation to L2 learning. Future studies that can be further researched from this study is studying immersion and interactive story videogames relation to L2 learning; studying specific SP interactive story videogame's L2 learning capabilities (e.g. Life is Strange, The Witcher 3, Skyrim) ;studying a different SP videogame genre's effect on L2 learning through qualitative research.

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