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Gender, Language and Videogames. A Corpus-assisted Discourse Analysis of Gender Representation in Videogames

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INTRODUCTION

The videogame industry experienced an important growth in recent years, as it has seen an increase in the number of users and in revenues. Thanks to its economical growth, it has become one the biggest and most valued entertainment sector, only after the television industry. This industry is expected to grow increasingly in the future, and to engage more and more users every year.

Thanks to its growth, videogames gained importance also among scholars, who started to consider them in their research, as they can be considered a form of media. This means that videogames have the potential of being influential on how players perceive reality. This is also due to the fact that in recent videogames the plot and storytelling have become an important element, which makes them similar to other media like films or books. This is particularly true for some genres of videogames as they include complex and deep stories, such as fantasy and role-playing games.

This means that videogames can be a medium for the transmission of ideologies regarding gender and its representation as well. This means that the choice that developers make in terms of characterisation can impact how players and society perceive gender identities and roles. For instance, the presence and the accurate representation of non-binary characters can have a positive impact, as it may break down barriers regarding stereotypes connected to them. Another example is how female characters are represented. By creating powerful and inspiring role models, it is possible to reduce and even eliminate biases regarding women, such as the fact that they are considered inferior, weak and unreliable. All these messages can be transmitted through the use of language.

For this reason, the aim of the current dissertation is to verify whether in recent action/adventure and RPG videogames there is a stereotyped representation of female and male gender. In the first chapter, an introduction to gender studies will be given, with a focus on gender identity and roles and the biases connected to them. This chapter helps to outline the possible bias that may be encountered in the analysis. The second chapter

outlines the methodology adapted for the research, that is corpus linguistics. Since corpus linguistics is a wide topic, this chapter will only focus on the tools and aspects that are relevant for the research. Two main methods will be adopted, that are quantitative and qualitative. The last chapter, finally, will focus on the analysis of gendered terms to verify whether the representation of gender discussed in the first chapter can be found in videogames text. In particular, this study will focus on the analysis of both pronouns and nouns. The first part will present the object of study, that is videogames. A summary of the plot and a visual representation will be provided, in order to give an overview of what the selected games are about. The following two sections will focus on the analysis. The first section will be about the analysis of *she* and *he*, which are the two most used gendered pronouns. The second section, instead, will focus on the analysis of the nouns *woman* and *man*.

GENDER AND LANGUAGE

This chapter introduces the topic of language and gender, and it provides an overview of the studies in the field. Since the aim of this dissertation is to analyse how gender is represented in in-game text, it might be useful to provide an explanation of the concept of gender and other related notions that can help understand it. This chapter has been dived into three sections. The first section gives a definition of the terms *sex* and *gender*, as they are sometimes misinterpreted. It then analyses the definition of gender roles and gender identity, which are crucial in the understanding of the concept of gender. The second section gives an overview of how gender has been perceived over time, starting from the modern feminist movement and its two inner approaches, moving on to the post modern feminist movement and the concept of performance. The last section focuses on gender-fair language. It explains how language can reflect gender bias present in society, but also how it can be used to reduce it.

1.1 *Sex, Gender Roles* and *Gender Identity*

The terms *sex* and *gender* are not easy to define, as they might be misconceived and "are sometimes used interchangeably as synonyms" (Litosseliti 2006, p. 10). Throughout this dissertation, however, they will be used as two different terms, since "by the 1980s most feminist writers in academia had agreed to use gender to refer to socially-constructed traits, while sex referred to a person's 'born' biological status" (Baker 2008 p.4).

Johnson & Repta (2012, p. 19) define *sex* as "a biological construct that encapsulates the anatomical, physiological, genetic, and hormonal variation that exists in species". As a consequence, a new-born person is assigned a binary sex (female or male) based on their reproductive organs. There have been cases of inter-sexed children as well, but they are rare (Baker 2008). Genetically, females are identified by having two X chromosomes and males by having an X and a Y chromosome. In addition, sex can be determined from either primary or secondary sexual characteristics. Primary characteristics include the female or male reproductive organs. Secondary characteristics, instead, include the superficial

differences between the sexes that emerge with puberty (e.g., breasts in females and pigmented facial hair in males) (Wienclaw 2011). But "to believe that we can understand the social world through a biological demarcation is to misunderstand the relation between bodies and social processes" (Connell 2005, p. 43).

This means the term sex is bound to the term *gender*, which appears as more complex to delineate. Johnson & Repta (2012, pp.20-21) define it as "a multidimensional construct that refers to the different roles, responsibilities, limitations, and experiences provided to individuals based on their presenting sex. Gender builds on biological sex to give meaning to sex differences". If sex is associated to the male/female binary, gender has to do with the masculine/feminine binary. Gender therefore refers to the differences between male and female behaviour that are established by a particular society (Baker 2008). There is thus a difference between the biological condition and the sociocultural status of being whether a female or male (Cameron 2005).

Johnson & Repta (2012) make a further distinction, describing six different approaches to conceptualise gender: institutionalized gender, gender as constrained choice, gender roles, gender identity, gender relations, and gender as performance. While each approach is useful in the understanding of what gender is, the concepts of gender role and gender identity are particularly relevant for the current study.

Gender roles can be defined as "social norms, or rules and standards that dictate different interests, responsibilities opportunities, limitations, and behaviours for men and women" (Johnson et al., 2007; Mahalik et al., 2003, mentioned in Johnson & Repta 2012, p. 23). That is to say, in our society (especially Western society) men and women are traditionally expected to act and think in ways that are associated respectively with the ideas of masculinity and femininity. Men are thus supposed to be competitive, physically and emotionally strong, pragmatic, while on the contrary, women are expected to be emotional, caring, gentle (Baker 2008). In their analysis on the difference between Japanese and US workplace gender roles, Simeon et al. (2001) observe that nowadays American women are participating in great numbers and at high levels in managerial roles, but men

still dominate the corporate boardrooms. Moreover, women are paid two thirds less than what men are paid for the same work. Despite significant changes took place, traditional gender roles are still present. As for Japanese culture, most of the times women are forced to choose between their carrier and their family. Even though there are very few cases of women managers of companies, Japanese work culture seems to maintain strict beliefs about the role of women. It can therefore be assumed that men are seen as more suitable to sit in positions of power and management, while women are still seen as subordinate.

Despite the persistence of such restrictive beliefs, it is noteworthy to mention that gender roles can change over time within a specific culture. For instance, the role of women in early 20th century American culture was in the home. As a result, many women did not have access to proper education and never held jobs, but instead they had to raise families and take care of their households. Nearly a century later, this gender role is not the only acceptable one. Nowadays gender roles are more flexible, but even though the 'householder' is not the only respectable role for women, in some areas traditional views are still present (Wienclaw 2011).

Another example is the perception of homosexuality in contemporary American society, that is the one that shapes Western culture. As Hart-Brinson (2016 p. 3) explains, "the dominant social imaginary changed twice: from mental illness to deviant behaviour between 1969 and 1974, and from deviant behaviour to collective identity between 1987 and 1992". This change of perception was crucial for the lives of many people who were forced to hide their identity, as homosexuality was associated with femininity, which was not acceptable for men to embrace.

Individuals are therefore expected to behave like the gender they were assigned at birth. When individuals do not conform to these 'rules', it is highly like that they will experience negative outcomes. When a girl expresses herself 'like a boy', which in Western culture means in a bold and aggressive way, she may be forced by society to change her behaviour and to conform to socially acceptable conventions, that is, to 'act like a girl' (Lakoff 1973).

Identity theory views the self as a collection of identities, each of which is experienced through social interaction (Stryker 1980 in Burke 1989). It holds that self-conceptions emerge through interpersonal interaction, as it is constrained and defined by social structure. *Gender identity* is "experienced in self-awareness and behaviour. Gender identity is the private experience of gender role, and gender role is the public expression of gender identity." (Money 1973, pp.398-399). That is to say, "it refers to the extent to which a person experiences oneself to be like others of one gender. One's sense of being male or female largely determines how people view themselves and provides an important basis for their interactions with others" (Steensma 2013, p. 289). This means that an individual chooses the behaviour that corresponds in meaning with their gender identity. To give an example, people with more feminine gender identities tend to choose more feminine behaviours, and avoid more masculine ones. Such behaviours include the choice of words when communicating, as claimed in the study by Drass (1986), whose aim is to investigate the effects of gender identity on conversation. According to this study, it can be expected that individuals will use conversational strategies that correspond in meaning with their gender identities, regardless of their sex. For instance, the use of interruptions and overlaps in conversations are verbal strategies associated with a more 'masculine' definition of self. Through the use of such strategies, both male and female individuals accomplish a form of dominance and control over the person they are talking to. In another study, Burke (1989) examines the relationship between performances in a variety of academic subjects and gender identity. It is hypothesized that "certain behaviours, such as sitting still and paying attention, are imbued with 'feminine' meaning and therefore are avoided by persons with more masculine identities and are embraced by persons with more feminine identities". On the contrary, "behaviours which disrupt the learning processes may be imbued with 'masculine' meaning, [so they] may be avoided by persons with feminine identities and adopted by those with masculine identities." (Burke 1989, p. 166).

1.2 Perception of Gender Over Time

In her study "Language and woman's place" (1973), Lakoff argues that women speak differently from men. This difference in speaking reflects and produces a subordinate position of women in society compared to men. According to Lakoff, women's speech is tentative and powerless, and consequently they are perceived as incapable of being in positions of power.

> "Since the early 1800s, women have been organizing as women to confront a variety of problems that reflect systematic inequalities of class, status, and power. The organizations women have built, campaigns women have led and events women have staged to challenge these relationships of domination have had an enormous impact on societies worldwide" (Ferree & Mueller 2004, p. 576).

"This idea manifested in many feminism movements that span from the late 19th century, which in a way signifies that feminism is indeed far-fetched from being recent, contemporary or new phenomenon" (Abdul Karim and Azlan 2019, p. 2).

Lakoff's study emerged in the early 1970s, in the context of the second wave of feminism movement or 'modern' feminist approach. Within this same movement two approaches developed: *difference* and *dominance* approach. The *difference* approach perceived society as made up of two clearly defined and opposite groups: 'women' and 'men'. Their separation kept society balanced and not prone to change. According to feminists, what had to be changed was not the distinction between these two categories, but rather the idea that this distinction was not harmful for anyone. The *dominance* approach, instead, put emphasis on the effects of gender inequalities. Differences between women's and men's speech are a consequence of male dominance over women, and those same differences are carried on to keep this dominance. To put it differently, men's position of dominance was achieved through language that assumed masculine as the norm (e.g. assuming that the gender of a lawyer or doctor is male), or by using the generic masculine to refer to a group made of individuals of both gender or to an individual of unspecified gender (Heritage 2021). Eckert (2013, p. 38) adds that "language itself is a tool of oppression".

Whether focusing on dominance or difference, both approaches regarded the study of language and gender as a matter of differences between the speech of women and men, as if they belonged to different subcultures. That is to say, the comparison between the two kinds of speech could be considered as comparable to intercultural communication (Eckert 2013).

Since the early 1990s, though, the idea of gender as binary, as perceived as two distinct categories, was superseded by a paradigm organized around the notion of *diversity* of gender identities and gendered practices. This shift towards the third wave of feminism movement or 'postmodern' feminist approach, though, did not happen suddenly. The two approaches overlapped and coexisted, but eventually there was a point when one approach surpassed the other. As explained earlier, 'postmodern' feminists believe that gender identities are constituted less by the contrast with the other gender, and more by contrast with other versions of the same gender (Cameron 2005). The advocators of this wave were non-stereotypical women, that is women who were not white, middle-class, Christian from the US and Europe. They challenged the idea that women were a uniform category that shared the same life experiences regardless of race, class or nationality. In other words, a variety of possible gender identities are assumed, that change according to other dimensions of social identity. Differences within one group (e.g. women) are equally relevant as differences between groups (e.g. women and men). Studies of language and gender have thus expanded from focusing on linguistic features within a specific category to examining how those features are used to construct not just masculinity and femininity, but any other kinds of in-between category. This bring up an issue of meaning, as it is necessary to adopt new terminology and expressions, but it also opens up a space for new ways of being (Eckert 2013).

In addition, 'post modern' feminists argued that masculinity and femininity are produced in specific contexts, or, simply put, it is performed. "Gender therefore becomes something that we do, rather than who we are" (Baker 2008, p. 73). It can therefore be hypothesized that

"Gender can be conceptualized as a spectrum rather than a binary: hyper femininity and hyper-masculinity being on opposite ends and androgyny being in the middle with infinite options in between. It is also important to note that gender expression does not always seemingly align with gender identity" (Barnes 2017 add p. 6).

Performing gender, however, does not only mean impersonating a different gender, as in the case of drag queens, who are men impersonating an exaggeration of what is socially considered femininity through clothing, makeup and language. "A 'real' biological woman is also performing a feminine gender – she is consciously (or more often unconsciously) replicating the performance of other women that she has seen or heard, who in turn have replicated other women, creating a seemingly endless series of reflections, stretching back over time, yet differing from each other in minor ways" (Baker 2008, p. 75). In view of all that has been mentioned so far, it can be argued that "because femininity and masculinity are socially constructed concepts, it is entirely possible for males and men to express their gender in a feminine manner, and for females and women to express their gender in a masculine manner" (Barnes 2017, p. 5). This is theoretically true, but it is important to bear in mind the possible bias that this might arise. As mentioned before, gender roles and gender identities are established by society, that determines which performances are acceptable and which are not. We do not perceive gender performances because they appear natural and they are validated by society. In Western culture, for example, heterosexual men are required to perform their gender in a way that is associated with masculinity. Contrastingly, homosexual men are seen as feminine, and lesbians as masculine. The maintenance of the status quo is in the interest of the powerful group, but power does not remain always in the hands of the same group. Consequently, ideas of what is acceptable or not can be subject to change. One way through which gender performances are accepted or not, but also through which it can be changed, is *language* (Baker 2008).

1.3 Gender-fair language

The Encyclopaedia Britannica defines language as "a system of conventional or written symbols through which human beings, as members of social groups and participants in their culture, communicate". In other words, language is a system of communication through which human beings express themselves. Individuals draw on the symbolic power of language to express, but also construct their different social identities (Holmes 2002). To put it differently,

> "language is a form of communicational behaviour, freely indulged in by rational autonomous subjects for the purpose of accurately representing reality. [Therefore] [...] language, as a meaningful or signifying practice, serves to sustain the asymmetrical relation of power that exists between women and men" (Cameron 1986, p. 80, 84)

Thus, "language does not simply mirror gender; it helps constitute it - it is one of the means by which gender is enacted" (Johnson & Meinhof 1997).

Consequently, it is not uncommon to encounter linguistic gender asymmetries, as a reflection of inequalities within social structures. According to feminist movements, language is a source of gender inequality, and as Gustafsson Sendén et al. (2021) point out, "because language influences how the world is perceived, language structure and word choices can constitute a subtle mechanism that contributes to gender hierarchies in society". To put it another way, feminist movements argue that language can be sexist and is source of gender inequality. "There are a few main ways that grammar ends up being sexist, but they all end up privileging the masculine in some way" (Kiesling 2019, p.62). What feminist movements want to achieve is a more representative and inclusive use of language. Through gender-fair language reforms it is possible to create a more equitable society (Gustafsson Sendén et al. 2021).

Gender asymmetries can be more or less evident in a language, depending on its structure. English is considered a *natural gender language*. It means that personal nouns are mostly gender- neutral (e.g., *friend*), adjectives do not have distinct gender forms (e.g. *my dear*

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friend), and gender is expressed through pronouns, especially in the third person (*it/he/she*) (Kiesling 2019). In English, then, when referring to someone, it is necessary to know whether the referent is human or inanimate, and then, if human, what that human's gender is. In addition, it has been argued that English lacks a gender-neutral third-person animate singular pronoun. That is to say, English speakers have to choose between *she* and *he* (and the respective paradigm) when addressing an animate third-person referent (Paterson 2020).

Pronoun choice is not problematic when the gender of the referent is known. The problem occurs when the gender is unknown or non-binary, or when general terms are used, such as *someone* or *everyone.* The issue of non-binary pronouns will be discussed further in this chapter. The most common gender asymmetry is the use of the '*generic masculine*', which consists of the use of the pronoun *he* both to refer to male individuals and as label for mixed-gender groups. In other words, *he* is used for masculine and generic reference, while *she* can only be used when specifically referring to a woman. The use of masculine pronouns in these contexts prevents the perception of women in particular roles and situations (Paterson 2020). This representation reflects the traditional gender hierarchy, which sees men as the default humans and grants them more power and higher social status. In addition, according to some nineteenth-century grammar purists, the use of generic masculine is ungrammatical. "That's because pronouns are supposed to agree with the words they stand for both in number and in gender. Although *he* is singular, it's also masculine, and so it can't agree in gender with everyone, a gender-neutral pronoun that refers to women as well as men." (Baron 2020, p. 27).

In the late twentieth-century, gender fair language was introduced in response to this asymmetry, with the intent of reducing inequalities. An example of language reform was the introduction of combined pronouns (*s/he*, *his or her*, *him/her*, etc.), to increase the visibility and inclusion of women in discourse (Sczesny et al. 2016). However, even though they are supposed to be more inclusive, their use is avoided for two main reasons. The

first objection is that they are considered redundant, while the second is that they presume a binary perception of gender (Baron 2020).

Other attempts to make language more inclusive are *neutralization* and *feminization*. The latter is based on the explicit inclusion of women through the creation of a feminine pair for masculine terms. But since English nouns do not have gender (i.e. nouns are not preceded by an article that marks gender), this can only be applied to languages such as Italian and German, where it is possible to create word pairs such as *dottore* and *dottoressa* or *der Arzt* and *die Ärztin* (respectively [male and female] doctor). On the other hand, English can use *neutralization*, where gender-marked terms are replaced by gender-indefinite nouns. Those forms are generally replaced by epicenes, that is forms "lacking characteristics of either sex" (Merriam-Webster Dictionary). So for example the noun *policeman* becomes *police officer*. Despite neutralization has not been difficult to adopt and implement, people still tend to be guided by their knowledge about typical gender stereotypes in social roles, so that even the term *police officer* is associated to a men's job (Sczesny et al. 2016).

The majority of gender-fair language transformation, though, was based on the assumption that gender is binary. As mentioned earlier, English lacks an epicene pronoun, that is to say a singular pronoun that refers to human individuals without specifying binary gender. Currently, the primary candidate for this role is *they*. Not only it is an alternative to the generic masculine and to combined pronouns, but it also became the personal pronoun of reference for many individuals whose gender identity is not, or not exclusively masculine or feminine (Konnelly and Cowper 2020).

However, *they* was considered by early grammarians as exclusively plural in its use, as it would violate the rule of number agreement with its referent. Because of this, by the first years of 1900 *he* became the preferred epicene pronoun in the majority of grammar books and texts. It was not however fully accepted in informal speech. Already in 1970s, when the issue of sexism started to be relevant in the use of the epicene pronoun, feminists started to claim that the use of *he* exclude women and was ambiguous (Baranowski 2002).

Konnelly and Cowper (2020, p. 2) argue that "in light of the significance of pronouns and pronoun recognition for transgender communities, it cannot be denied that grammatical judgements regarding singular they are inextricably connected to social judgements of these communities". In other words, the internalized assumption that individuals can be sorted into binary gender categories plays an important obstacle to the adoption of *they* as a singular pronoun of reference" (Bjorkman 2017).

As mentioned at the beginning of this chapter, its goal is to provide an overview of the studies in the field of language and gender. Since the purpose of this dissertation is to analyse how gender is portrayed in in-game language, it is important to understand the meaning of those terms and concepts that are the focus of this dissertation, that are gender, gender roles and gender identity. Depending on the gender of characters in the game, one might expect them to perform a specific gender role. For instance, if a female character is present in a game, it might be highly likely that she covers the role of healer/support, which is connected to the idea of female as being at other's disposal. Since this idea about female is biased, the purpose of this study is to find out if it is still present in recent games, or if some changes have occurred.

Another aspect that will be analysed in the in-game text is the presence of *they* used as third person singular pronoun, even though, as mentioned earlier, it is not very common. In other words, the presence and eventually the representation of non-binary characters will be investigated.

In the next chapter corpus analysis will be discussed, first by giving an introduction of what it is, and then moving on to how it can be used to analyse both gender and videogames related texts.

CORPUS LINGUISTICS

This chapter provides an introduction to corpus linguistics, which is the method that will be adopted for the analysis of videogames texts. This chapter starts by giving an overview of what corpus linguistics is, and what types of research can be conducted. It will then go on to illustrate how to build a corpus, with a brief focus on the methods that can be adopted specifically for videogames related texts. The last section will discuss how corpus analysis has been be applied in the analysis of gender representation.

1.1 Introduction to Corpus Linguistics

Corpus linguistics makes use of corpora to study language. According to Baker (2006 a, p. 2), corpora can be defined as "generally large (consisting of thousands or even millions of words), representative samples of a particular type of naturally occurring language, so they can therefore be used as a standard reference with which claims about language can be measured.". These samples are usually electronically encoded text, so the process of analysis can be carried out on a large amount of text and in a shorter period of time compared to manual investigation. For the same reason, machine-readable text and electronic tools are adopted to carry out the research.

The range of research questions that a corpus allows to address is vast. As mentioned by Jones (2022, p. 126),

> "We can use a corpus to uncover patterns of usage and to test our intuitions about how language is used by particular groups of users, in particular texts (Jones and Waller 2015). It can tell us which form or forms occur with greater frequency, how words are used together in discourse and allow us to compare this usage across different types of data (commonly, spoken vs. written), historical periods and genres. What a corpus cannot do is tell us why certain forms are used, why speakers tend to use one item with or before another or why a certain form is rarely used. Such findings must come from our own interpretations of the data."

In other words, through the application of qualitative and quantitative methods, it is possible to analyse texts and carry various research questions. However, the results are not ready-to-read, but they need to be interpreted and developed.

Despite it may be considered a basic, generalizing, reductive tool, *frequency* is "one of the most central concepts underpinning the analysis of corpora" (Baker 2006 a, p. 47). As the word itself says, the use of *frequency* allows the researcher to analyses the frequency of a word or longer sequences in a corpus. The result of this research usually appears as a list of words in order of frequency, that is to say, the words that occur most frequently would be at the top of the list, followed by the others. It is important to consider that this list would probably contain many grammatical items, such as pronouns, articles and prepositions, which alone may not tell much about the use of language. On the other hand, items such as nouns, adjectives, adverbs and verbs are more likely to carry relevant information for the research. For this reason, it would be useful to add grammatical annotations in the text. This type of annotation provides information about the grammatical class of words, that can help conduct more specific researches. In other words,

> "if our corpus already has annotations that show the part of speech of each word in the corpus, then, armed with a search tool that understands these annotations, we are able to fashion a query to extract the information we want – the frequency of nouns, or a concordance of all non-finite verbs – rapidly and reliably." (McEnery & Hardie 2011, p. 28)

Annotations, then , make the analysis of frequency easier, because they restrict the class of word of interest. In this way, the focus can be put on words that carry meaningful information for the research. The most common method to annotate texts of a corpus is the automatic one. Although not even manual annotation is completely error free, it should be noted that the accuracy rate of automatic taggers is around 97 percent (Baker 2006 a). Automatic annotation is carried out through the use of annotation tools such as Sketch Engine, CLAWS and TagAnt, that also allow the manual correction of possible mistakes.

Another useful tool for corpus linguistics analysis is a *concordancer*. It is used to look for a concordance, which consists of a list of occurrences of a specific search term, shown in the context it occurs in. The context is usually a few words left and right of the search term (Baker 2006 a). The purpose of this tool is to "make predictions about the neighbourhood of a word" (Evert 2009, p. 7). This allows the view of a precise word in a specific context, but, as mentioned earlier, it is the researcher who has to recognize and explain linguistic patterns that emerge from the results.

For instance, Figure 1 shows the results of a research of the term *woman* in the British National Corpus (BNC) with the use of Sketch Engine, an online tool for language analysis. The search term is displayed at the centre of the result page. On the right and on the left it is possible to see the context in which the word appears. The preferred format for displaying the concordance results is KWIC, that stands for 'Key Word in Context', that is the same format displayed in Figure 1. This format makes results easier to view and analyse, as it shows the search query at the centre and its context on the left and right.

	Details	Left context	KWIC	Right context
1	Written books a...	ected Fellows of the Royal Society, the only two	**women**	on the 1990 list.</s><s>Dr. Johnson then compl(
2	Written books a...	whose distinctions include having been the first	**woman**	admitted on equal terms into the male-dominate(
3	Written books a...	</s><s>The poise and capability of these young	**women**	was impressive, as was the revelation of the var
4	Written books a...	ster and that the number of careers for educated	**women**	has recently notably increased.</s><s>Yet the y(
5	Written books a...	he College.</s><s>Surely it is an association of	**women**	with a shared experience who enjoy meeting ea(
6	Written books a...	her daughter Alison who is working with village	**women**	, helping them to take a practical, active part in t|
7	Written books a...	ner in the Lincoln's Inn Firm of Hunters - the first	**woman**	partner in 275 years'.</s><s>Stephanie Hall is a
8	Written books a...	has no headings under topics such as 'music', '	**women**	', or 'servants', for the diary tells us much on thes
9	Written books a...	with regard to the O. U. D. S. At that time all the	**women's**	parts in the O. U. D. S. plays were taken by prof(
10	Written books a...	s><s>Male lecturers were almost all elderly and	**women**	dons worked extremely hard.</s><s>Barbara Da

Figure 1. KWIC analysis of the term *women* in the BNC

Concordance is usually adopted to search for *collocations*. "Words do not occur at random in a text" (Sinclair 2001, p. 110), that is to say, some words have a tendency to co-occur

near each other. But when a word frequently appears near another word and this frequency is statistically significant, the phenomenon is considered a collocation (Baker 2006 a). In other words, the frequency of the co-occurrence of specific words has to be sufficient to exclude the possibility that this occurrence is accidental (Greaves and Warren, 2022).

In order to identify collocations, three main criteria have been proposed: distance, frequency, exclusivity. The distance indicates the span from the node word, that is the word of interest, and is called 'collocation window'. "The number of words on either side of the word/cluster in focus can be usually set to fit the researcher's needs, and concordance lines can be expanded up to the whole text" (Baker 2008, p. 279). Frequency indicates how common a word association is. For instance, the word *love* is often associated with the preposition *in*. But this word association is not exclusive, as the preposition *in* can precede other words, such as *time*, *case*, *mind* or *bloom*. On the contrary, *love* is more exclusively connected with the noun *affair*. This means that the noun *affair* is highly likely to be found after the word *love,* making this association more exclusive (Brezina et al., 2015).

1.2 Building a Corpus to Analyze Videogames

In order to carry out a corpus analysis it is necessary to build or use pre-built corpora that are relevant for the purpose of the investigation. That is to say, having a clear research question in mind is crucial, so that the appropriate type of corpora can be chosen. There are two main types of corpora: general and specialised corpora. General corpora are usually representative of language use on a broad scale, so that they are larger than specialised corpora (McEnery and Brookes, 2022). An example of general corpus is the COCA (Corpus of Contemporary American English), which is the largest and most representative corpus of American English. It consists of more than one billion words and contains a large variety of type of texts, including spoken, fiction, magazines, newspapers,

web pages, and so on. The majority of general corpora can be found online, since it would take a lot of time to build one from scratch for every research question.

On the other hand, specialised corpora are "used in order to study aspects of a particular variety or genre of language" (Baker 2008 a, p. 26). That is to say, they meet specific criteria established by the researcher. Such criteria can concern a variety of elements, such as genre, period, written or spoken production, covered topic. For instance, Baker et al. (2008 b) conducted a research on the representation of refugees and asylum seeker in the UK press. The corpus was built considering the aim of the research and included UK newspapers articles concerning asylum and immigration issues that were published in the time span of interest (1996-2005). This choice of texts is coherent with the research question, since it is not general language that is to be investigated, but instead the focus is on the use of language in a specific context.

Since specialised corpora meet specific criteria, it is likely that the researcher would need to build them from scratch for each specialised research, as it might be difficult to find pre-built corpora that meet the requirements of a particular research question. When building a corpus, two factors need to be taken into consideration: size and composition. That is to say, corpora need to be large enough to include relevant linguistic features for the research. In addition, the text in the corpus must be representative of a language variety or genre. A text is considered representative if it fully captures the variability of a language (Biber, 2015).

A general corpus is likely to include a large number of words, since it covers general topics and different types of text. On the other hand, a specialized corpus is expected to be smaller, but still relevant for the research question. Baker (2006, p. 28) argues that

> "One consideration when building a specialized corpus in order to investigate the discursive construction of a particular subject is perhaps not so much the size of the corpus, but how often we would expect to find that subject mentioned within it"

That is to say, a specialized corpus might not include much text, but, nonetheless, display a significant amount of information that leads to relevant results. As a consequence, when

collecting texts to build a specialised corpus, the researcher should focus on the quality of texts over the quantity.

Very little appears to be available in the literature regarding how to build a specific corpus for in-game text analysis. According to Heritage (2021, p. 96) "there are a number of reasons why collecting corpora from videogames might be difficult" (Heritage 2021, p. 96). One of the main reasons is that text in videogames cannot be copied and pasted like text present in a website page. However, since videogames are considered a form of media, Bednarek (2018, mentioned in Heritage 2020, p. 19) notes that "there are various tools for collecting corpora from media such as televisions shows, such as by using corpora of subtitles, fan transcripts, or getting the analyst to transcribe the data". There might be a good chance that these sources are accurate, but some aspects need to be taken into consideration. For instance, fan transcripts may not be complete, as transcribing text is time-consuming, especially for long games with dense dialogues. For this reason, fan blogs contributors might choose to provide only small excerpts of text.

Another reason why transcription is time-consuming is that "a number of videogames will not present players with every possible piece of language and that a number of videogames allow players to 'shape their own narrative'" (Heritage 2021, p. 96). That is to say, when playing a game, the player may be put in front of choices that can lead to a different path in the story, and consequently to different dialogues. As a consequence, in order to collect all the dialogues of a game, it might be necessary to play it more than once.

A more accurate method to collect in-game texts seems to be the extraction of a specific file that can be found in the folder of a game that has been downloaded on a PC through Steam. Steam is an online platform where it is possible to buy and play PC games. As explained by Heritage (2021, p. 99) "when a videogame (which is not hosted on online servers) is downloaded or installed on a computer, it must include a file of language upon which the videogame software will draw the data to be shown on screen". The issue regarding this method is that the file needs to be converted to make it readable by a text reading software. However, the text contained in the decrypted file is accurate. "What is written in the file will be the exact same as what the player reads" (Heritage 2021, p. 102).

Even though the latest method of text collection seems to be the most accurate one, it would be advisable to be familiar with the games that will be analysed. Carrillo Masso (2009, p.148) argues that "one of the biggest mistakes in the area of CG [computer games] analysis has been the fact that researchers have consistently drawn conclusions and made 'analyses' of games they have not played, either previously, or as a logical step within their methodology." For this reason, it might be profitable to acquire familiarity with the games that are intended to be analysed, so that the researcher might have a clearer idea of the context in which the analysis is being conducted. As mentioned earlier, it is the researcher who has to analyse the data that emerge from the analysis, so having as much information as possible about the object of research might simply the process and make it more profitable.

1.3 Using Corpus Linguistics to Analyze Gender

Among the various types of research that corpus linguistics allows to conduct, "there have also been attempts to analyse social differences in language use, including gender" (Baker 2008 a, p. 45). Baker (2008, p. 49) then adds that "corpus analysis is useful in helping to confirm or refute theories of gendered language use, by allowing us to identify trends within a wider population, rather than simply making claims based on introspection or the examination of a limited number of speakers". A large and growing body of literature has investigated how women and men express themselves differently, but also how they are represented. For the purpose of this study, however, the focus of the literature review will be on gender representation rather than the difference on language use.

Baker (2006 b) analyses a diachronic general corpus of American English to investigate the presence of gender bias, focusing on the frequency of gender-marked nouns. The period of time analysed is 1810s-2000s. The results of this analysis show that there is a tendency "for males to be talked about more than females, for males to be mentioned first, and for males to be referred to as generic humans" (p. 204). However, it was demonstrated that in recent years these tendencies are disappearing. In addition, the conclusion is that "the overall trends that can be gleaned from the analyses [...] indicate an overwhelming male bias in

American English, [...] even though this process appears to be ongoing and incomplete at the time of writing" (p. 103).

Another study conducted by Baker and included in "Using Corpora to Analyze Gender" (2006 b), focuses instead on the representation of boys and girls in a corpus of online British texts. This study focuses on the collocation of the research terms. The conclusions show that boys and girls are represented in a biased way. That is to say, girls are associated with emotionality and romanticism, and they are mostly portrayed as victims. On the other hand, boys are described in regard to their physical actions and their poor academic performance. These depictions seems to contribute to the reinforcement of stereotypes on gender roles. In addition, "some collocational patterns in the corpus such as *mother's boy* and *big girls blouse* (both used pejoratively on boys) indicate a form of social control in that qualities associated with being soft are seen as inappropriately feminine" (p. 205).

Pearce (2008) conducted a similar study, investigating the collocation of the lemmas *man* and *woman* in the BNC (British National Corpus). The texts taken into consideration are from the time span 1975-94. The study focused on five domains, that are power and deviance, social categories, personality and mental capacity, appearance and sexuality. The conclusion is that "across the five domains, the collocates of man and woman seem often to represent gender in stereotypical ways" (Pearce 2008, p. 19). In other words, men are represented with a focus on their masculine traits, such as independence, physical strength, rationality and competitiveness; whereas women are depicted as gentle, dependent, emotional and physically weak.

An interesting and more specific study was conducted by Aull & Brown (2013). Its aim is to analyse the representation of NBA (National Basketball Association) and WNBA (Women National Basketball Association) athletes in sports reportage through the use of corpora. The texts taken into consideration are opinion articles published in the sport section of newspapers describing two fights that took place respectively during a male and a female basketball match. The results revealed that "more than the details of the [...] fight itself, the narrative focus of WNBA coverage is gender" (Aull & Brown 2013, p. 35). On the

other hand, the narrative of the event involving men focuses more on what happened rather than gender discourse. In other words, "sports reportage, even of roughly analogous events, is vastly different because a WNBA event is always seen in light of women, whereas an NBA event is seen in light of the event" (Aull & Brown 2013, p. 50).

It is worth to mentioning that there have also been a limited collection of studies regarding the use of corpora to analyse the representation of gender in videogames. Analysis of both general and specialized corpora were conducted.

Heritage (2021) carried out an analysis of a general corpus of videogames to discover how gender was depicted in ten of the most acclaimed videogames between 2012 and 2016. The author examined two gendered pronouns (*she* and *he*), and two gendered nouns (*woman* and *man*). The pronoun *they* was not considered, as a preliminary analysis showed that it was only used as a third-person plural pronoun. The concordance analysis of pronouns revealed that "it was always the male character inciting the violence" (Heritage 2021, p. 139). On the other hand, it was revealed that women are represented with a focus on their physical appearance, which is not present in male depiction. The analysis of gendered nouns, instead, focused on their occurrence with verbs and it revealed that "men are more much more likely to be the characters doing verbs, while women are much more likely to have verbs done upon them" (Heritage 2021, p. 139). The results of this study show that, once again, gender is depicted in a biased way.

Carillo Masso (2009) conducted a similar study, but the focus was on two specific videogames. Consequently, the corpus included texts about characters present in the videogames *Diablo* and *WoW* (*World of Warcraft*). The words analysed included gendered pronouns and adjectives, and proper names of characters. The purpose was to investigate the collocates with male and female characters. The results showed that male characters are mentioned more often than female characters. This means that there is an underrepresentation of female characters, as they are mentioned only in the background story.

It can be argued that, so far, the studies involving representation of gender at a text level lead to the same conclusions. Gender, whether in general or specialised corpora, is

depicted in a stereotypical way. This stereotypical representation might lead to the maintenance of such ideologies, regardless of the context, giving little to no space to a change. The aim of this paper is to conduct a research on the representation of gender in the specific context of videogames, through the use of corpus linguistics.

The next chapter will focus on the analysis of videogames text, trough the use of both quantitative and qualitative corpus linguistics methods.

ANALYSIS OF VIDEOGAMES TEXT THROUGHT THE USE OF CORPUS LINGUISTICS TOOLS

This chapter will focus on the analysis of videogame text through the use of corpus linguistics tools. The first section will explain the object of research, that is corpora made of text from action/adventure videogames. A summary of the games that constitute the corpora will be provided together with the methods adopted to collect them. The second section will focus on the analysis of the gendered pronouns *she* and *he*. In the last section the gendered nouns *woman* and *men* will be analysed.

3.1 Object of Research: Videogames Text

The current study has the aim of analysing how gender is represented in videogames through the use of corpus linguistics tools. As mentioned in the literature review, women and men are usually associated with stereotypes regarding their role (for instance, women are associated with sensitivity and weakness, while men with strength and aggressiveness). These stereotypes might be present in mass media as well (e.g. television, radio, newspapers, cinema, internet and so on), as they "hold up a faithful reflection of the current societal mores, norms, and social structures rather than causing them to be as they are portrayed" (Bowman 2014, p. 233). Since videogames can be considered a form of media, and since they "have a potential educational benefit in counteracting stereotypes and promoting gender equality" (Forni 2020, p. 77), it is highly like that the analysis of gender representation in this form of media will show some interesting results. The purpose of this study is to analyse how gender is represented and to verify whether gender stereotypes are still present in recent videogames. As Kondrat (2015) mentions:

> "It is important for game production companies to represent female gender in a respectful way, so that the target audience can learn about and perceive the female gender in a realistic, non-stereotyped way. This includes both genders, female and male, since it affects both of them." (p. 173)

In order to carry out this research, quantitative and qualitative methods will be adopted. The quantitative method is *frequency*, while the qualitative one is *concordances*. The

outcome is expected to differ from the biased representation mentioned earlier in the literature review, that is, a more inclusive representation of gender is expected to be found. In other words, it is expected to find a representation of the two gender considered (female and male) that does not reflect the gender stereotypes regarding roles and identity. The object of the current research is text present in videogames, which includes dialogues between characters and narration by external narrators. The corpus that has been analysed is a specialised one, built expressively for this research. It includes text from 13 videogames that were chosen based on their genre. For the choice of the games to analyse, the distinction that Berens and Howard (mentioned in Newman, 2019) was taken into consideration. They suggest a categorization that reflects the way the industry perceives videogames, and the way that it is more likely to find them classified in retail stores. This classification includes seven genres:

1. Action and Adventure
2. Driving and Racing
3. First-Person Shooter
4. Platform and Puzzle
5. Roleplaying (RPG)
6. Strategy and Simulation
7. Sports and Beat-'em-ups.

However, the game theorist Espen Aarseth (mentioned in Egenfeldt-Nielsen et al. 2019) suggests that identifying a game as belonging to just one genre would be unproductive, as it might present some overlaps. He then argues that "video games should be evaluated based on a series of variables" (Egenfeldt-Nielsen et al. 2019, p. 53). In other words, a videogame should not be considered as belonging just to one genre, as it might present characteristics related to different genres. It would be more beneficial to categorize it taking into consideration all the aspects a game may present.

For instance, according to the Steam page of the game *Skyrim: The Elder Scrolls*, it is usually categorised as an adventure, action and role playing game. This means that this game presents some characteristics that can be connected to each genre. It is categorised as a role

playing game because the player can create their own character, by choosing the appearance, together with the sex and ethnic group, including human ethnic groups and fantasy races, such as elves and orcs. In addition, it is classified as an action/adventure game because it includes fighting, but also it requires the character to explore the vast map this game is famous for, and to solve quests that involve a plot and mystery. Considering all these aspects of the videogame, categorizing it only as a RPG or action/adventure game would not give an exhaustive description of what the game is about.

The games that were chosen for this study present features of the action/adventure and role playing (RPG) genres. These genres were chosen because they are appreciated by both young adults and adults, and they are able to tell complex stories (Forni 2019). In addition, the games chosen were all published in the last 10 years (that is in the time span 2012-2022). This choice was made with the aim of analysing whether the most recent games presented gender stereotypes or whether some change has occurred. Another characteristic these games have in common is that they are considered 'AAA' or 'triple-AAA' games. This means that they were developed by big companies that can rely on big budgets and large development teams. As a consequence, these games are popular and more likely to influence the view of the players about reality. That is to say, "their portrayal of gender norms has a strong impact on the perception of femininity and masculinity" (Forni 2019, p. 79).

As mentioned in Section 2.3, there are two main methods that allows a researcher to collect videogames text to build a corpus: through the extraction and decryption of a file in the folder of a game that was downloaded from Steam on a PC, or by searching for fan-made transcripts in blogs and online resources. Both these methods were adopted for the construction of the videogames corpus. Since the majority of the games that were available in my Steam account belonged to genres different from the ones that were chosen to analyse, the text from only 4 games was collected by extracting and decrypting the Steam file. The text of the remaining 9 games were collected through a research in online blogs and fan-made websites.

Table 1 shows the titles of the videogames that will be analysed, the release year, the respective word count of the corpus that was built by collecting the text of those games, and the method adopted to collect those texts. The decision to include both titles of *The Last of Us* series was taken to have text of the complete story, as the series is concluded. For the same reason both titles of the *Horizon* series was included, even though it is not sure whether new games will be released in the future. A brief description of each game will also be provided.

Title	Year	Words	Method
Cyberpunk 2077	2020	118.005	Steam
Death Stranding	2019	48.569	Fan-made transcript
Horizon: Zero Dawn	2017	50.778	Fan-made transcript
Horizon: Forbidden West	2022	136.842	Fan-made transcript
Red Dead Redemption II	2018	174.647	Steam
The Last of Us	2013	34.646	Fan-made transcript
The Last of Us – Part II	2020	15.123	Fan-made transcript
The Witcher III – Wild Hunt	2015	233.241	Steam
Bloodborne	2016	35.556	Fan-made transcript
Life is Strange	2015	78.189	Fan-made transcript
Life is Strange – True Colors	2021	45.659	Fan-made transcript
Uncharted 4 – A Thief's End	2016	47.235	Fan-made transcript
Final Fantasy VII - Remake	2020	60.385	Steam
Total Words Count		**1.078.875**	

Table 1. Corpus composition

Cyberpunk 2077 is an action/adventure RPG game that inspired the Netflix TV series "Cyberpunk: Edgerunners". The player takes the role of V, a mercenary whose aspect and skills are highly customisable by the player. The story is set in a futuristic city called Night City. The mission that V is entrusted is to steal a biochip called 'The Relic', which stores the personality and memories of a person after their death, and when it is put into a living person, this becomes immortal. The chip that V has to steal belongs to a terrorist from the past. However, during the robbery the chip gets damaged, and the only way to save it is to insert it into the neural port of a person, that end up being V. After putting the chip in his port, the chip starts to overwrite V's personality and memories with the terrorist's ones. The story of the game follows V's attempt to remove the chip without dying and, most

importantly, without losing his personality and memories. Through his journey V will encounter many characters with their own story and particular personality.

Figure 1. *Cyberpunk 2077* gameplay

Death Stranding is an adventure game. After a mysterious and unknown cataclysm named 'The Death Stranding', the USA becomes isolated from the rest of the world and it starts to be destroyed by the atmospheric events that the cataclysm caused, making the landscape unrecognisable. In addition, earth started to merge with 'The Beach', a sort of purgatory between the realm of the living and the dead, which caused the earth to be populated with extraterrestrial entities that threaten the survived population. The player controls a courier whose mission is to travel across dangerous, infested areas to deliver supplies to isolated colonies and to try to reconnect them. Even though the people who survived the cataclysm tried to adapt to this new world, the general intent is to restore a sort of 'pre-Stranding' world, that is to return to a sort of normality.

Figure 2. *Death Stranding*

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Horizon: Zero Dawn is an action, adventure RPG game. It is set in the 31ˢᵗ century, in a world that faced a cataclysmic robot apocalypse that destroyed the majority of human kind. The survivors live in small tribes, which however do not live in perfect harmony with each other. The post-apocalyptic world became populated with dinosaur and animal-like robots, also known as 'machines'. At first, these machines used to coexist in harmony with humans, but as the years passed by they started to become more violent towards humans. The story follows Aloy, a young outcast hunter who was raised and trained by her adopted father, Rost, outside her native village. Aloy wants to know more about her mother and her roots, so she decides to take part into 'The Proving', a tradition of her former tribe that involves young women and men to compete in trials. With the participation of Aloy to 'The Proving', a journey through the discovery of her past starts.
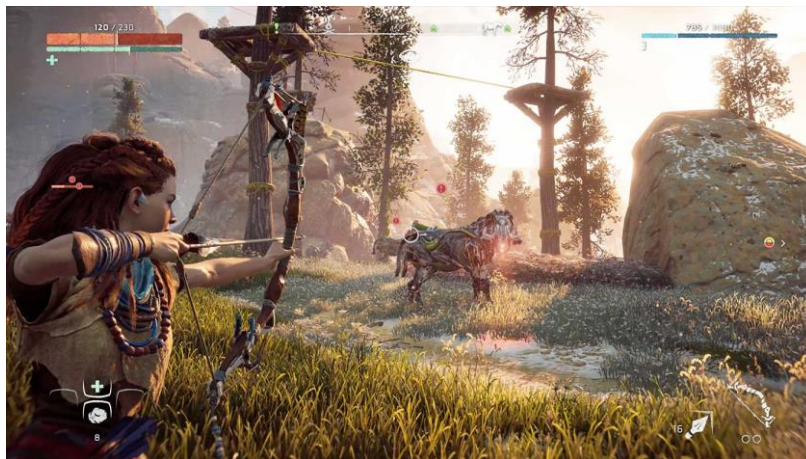
Figure 3. *Horizon –Zero Dawn*

Horizon: Forbidden West is an action, RPG and sequel of *Horizon: Zero Dawn*. It takes place in a post apocalyptic imaginary version of the Western area of the United States after the events of *Horizon: Zero Dawn*. The main character is again Aloy. Earth is facing a new threat, a sort of plague called 'Red Blight' that has been killing animals and plants. After finding her roots and where she comes from in the previous chapter, she realises that she is the only person able to save earth. For this reason, she embarks on a mission to save earth and restore the biosphere of the planet that is degrading fast due to the mysterious plague.

Figure 4. *Horizon Forbidden West*

Red Dead Redemption II is an action/adventure game that takes place in the USA in 1899, at the end of the Wild West era. The story follows Arthur Morgan, leader of the Van Der Linde gang, who has to flee with his gang after failing a robbery. During the getaway he will have to survive against the law and government forces, together with rival gangs and adversaries, but he will also have to deal with internal conflicts that threaten to split the gang.

Figure 5. *Red Dead Redemption II*

The Last of Us is an action-adventure game that was acclaimed by the critics. It takes place in the United States, twenty years after the outbreak of a fungal-based plague that decimated humanity. After the outbreak, the USA becomes under the control of the military and the non-infected survivors are separated by the infected ones in quarantine areas. The story follows two survivors, Joel and Ellie, who have to travel across the

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desolated country to try to find a cure for the plague, as Ellie seems to be the key for human's race survival.

Figure 6. *The Last of Us –Part I*

The Last Of Us - Part II is the second and last chapter of *The Last Of Us* series. It is an action-adventure game that follows the story of Ellie, the main character in the previous chapter of the game, and Abbie, a soldier seeking to avenge her father. The story is set in the same post-apocalyptic version of the USA of the previous chapter, which has been infested by a plague. After an horrific attack involving Joel, Ellie embarks on a journey for personal vengeance against Abbie and her companions.

Figure 7. *The Last of Us – Part II*

The Witcher III –Wild Hunt is an action RPG based on the novels series 'The Witcher'. It takes place in a fantasy world based on Slavic mythology that is populated by humans, dwarves, monsters, elves and other fantasy creatures. The player controls Geralt of Rivia, a monster slayer, also known as 'Witcher', who is looking for his adopted daughter after her

reappearance. The player will encounter a variety of enemies to defeat with the help of weapons and magic, but it will be also required to complete quests and interact with other characters. Depending on the choices that the player makes, it is possible to reach three different endings.

Figure 8. *The Witcher III – Wild Hunt*

Bloodborne is an action RPG that is part of the so called 'Souls-like'[1] games. The player controls a highly customizable character that is a Hunter. The inhabitants of the world this game takes place in are affected by a blood-borne disease. The goal of the main character is to find the source of the plague, and in doing so, it will be required to interact with many characters, to defeat monsters and to explore the world in order to unravel the mysteries that the city hides.

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[1] Souls-like (or souls like) games are an emerging subgenre of RPG games. The name comes from the 'Dark Souls' series, the first games that presented these characteristics. They are usually set in a dark fantasy world. The settlement has an important role in souls-like games, as it is a vast, deep built world and through its exploration the player can discover the story and back-story. Quests and bosses are particularly difficult in this type of games, and the key to defeat the enemy is to read its battle pattern and adapt to difficult situations. However, it should be taken into consideration that a clear definition of souls-like games does not exist and it is still object of discussion by the gaming community. (source: https://gamicus.fandom.com/wiki/Soulslike_video_games)

Figure 9. *Bloodborne*

Life is Strange is an adventure game that is structured into five chapters. The player controls Max, an 18-year-old photography senior who lives Arcadia Bay. During a day at school, she discovers that she is able to rewind time at her choice. Her ability allows her to change the course of events. Max discovers her ability after coming back in time and saving a girl who was shot and killed by one of her classmate. This girl turns out to be Chloe, an old friend of Max. The two girls lost contact when they were younger and are now reunited. After this discovery, the two girls are involved in the investigation of the disappearance of a fellow student, that will lead them to uncover the dark side of Arcadia Bay.

Figure 10. *Life is Strange*

Life is Strange – True Colors is the third chapter of the 'Life is Strange' series. It follows Max Chen, a young Asian-American woman, who comes home after being in a foster care group home for eight years. Here, she reunites with her brother, who suddenly dies due to a so-called accident. After his suspicious death, Max will have to reveal the truth behind it and probe the mystery that her hometown, Haven Spring, hides. In doing so, she will rely on her psychic powers, that allows her to read and manipulate others emotions.

Figure 11. *Life is Strange – True Colors*

Uncharted 4 – A Thief's End is an action-adventure game where the player controls Nathan Drake, a treasure hunter who was forced out of retirement to help his brother Samuel. Together with his partner, Nathan's goal is to find the treasure of Henry Avery, a pirate, in order to save his brother's life from an extortion. To achieve Nathan's final goal the player will have to collect clues and solve puzzles, but also be involved in combat to defeat enemies.

Final Fantasy VII – Remake is an action JRPG[2]. It takes place in a dystopian cyberpunk metropolis called Midgar. The player controls Cloud Strife, a former soldier who joins an eco-terrorist group called 'Avalanche'. The aim of this group is to destroy the Shinra, the electric power company Cloud used to work for. This company exploits the energy that keeps the earth alive, tha Cloud joins the 'Avalanche' to destroy the Shinra, in order to protect the planet and the population that inhabits it.

Figure 13. *Final Fantasy VII - Remake*

3.2 Analysing Pronouns (*she, he, they*)

For the purpose of this research, two main methods were adopted. The quantitative method adopted is *frequency*, while the qualitative one is *concordances*. To carry out these researches, the software AntConc was used. AntConc is a free software that can be downloaded on PC and used offline. It has a broad set of tools including a good concordancer, word and keyword frequency generators, tools for cluster analysis, and a word distribution plot (Anthony 2011, p. 1). In order to conduct a research, it necessary to save the text to analyse into a .txt file and upload it to AntConc. Once done, it is possible to start conducting the research with the more appropriate tools. In addition, the corpus was POS tagged to conduct more specific searches, that is to focus on specific word classes

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[2] A JRPG is a role-playing game that was designed and developed in Japan or took inspiration from it. It is different from Western RPG, as it usually includes turn-based styles of combat and involves a sort of statistical character progression. However, it should be considered that this definition is not strict and is object of discussion by the gaming community.

(such as verbs, adjectives, adverbs). The tagging was done using TagAnt, a free software that tags plain text automatically.

This section will focus on the analysis of gendered pronouns (*she, he*). Firstly, a *frequency analysis* was carried out, since "investigating the reasons why a particular word (or cluster of words - wordlists don't have to be limited to single words) appears so frequently in a corpus can help to reveal the presence of discourses, especially those of a hegemonic nature" (Baker 2006, p. 121).

Figure 14 shows the ten most frequent words in the corpus. As the figure shows, and as it was mentioned in the literature review, the first results include grammatical words, that is articles, pronouns, prepositions and conjunctions. In the ten most frequent words of the corpora two pronouns appear, but they are non-gendered (i.e. *I, you*).
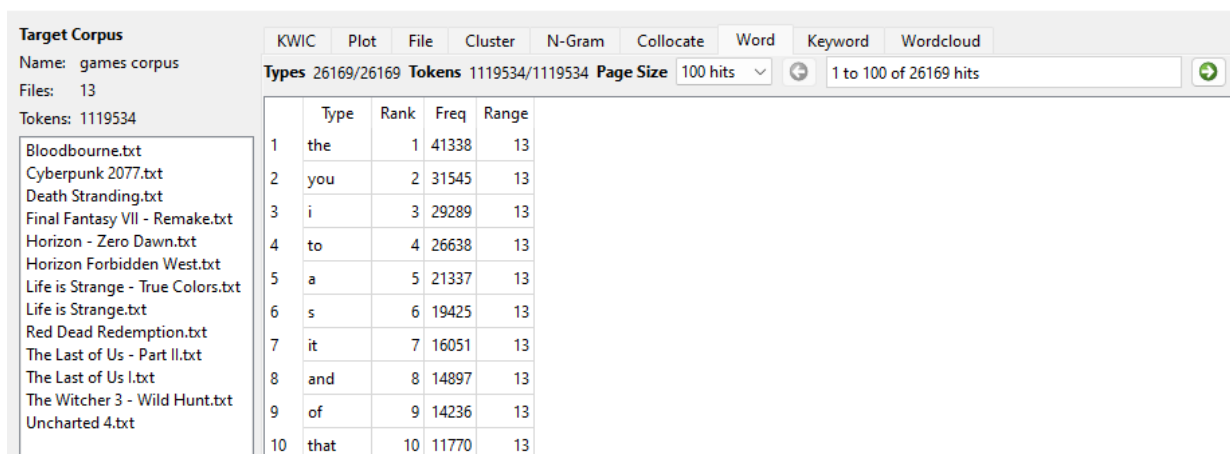
Figure 14. First ten results of the frequency research

The first gendered pronoun appears later. As Figure 15 shows, the first gendered pronoun is the 21st most frequent word, mentioned 6183 times. The pronoun in question is *he*, which means that male characters are mentioned more often than female ones. There might be two main reason why male characters are mentioned more often. One reason might be that male main characters are more frequent in the analysed games, that is to say female characters are less likely to cover a central role in the game. Another reason might be that, even though the main character is female, there might be a predominant presence of male secondary characters, resulting in a more frequent mention of them.

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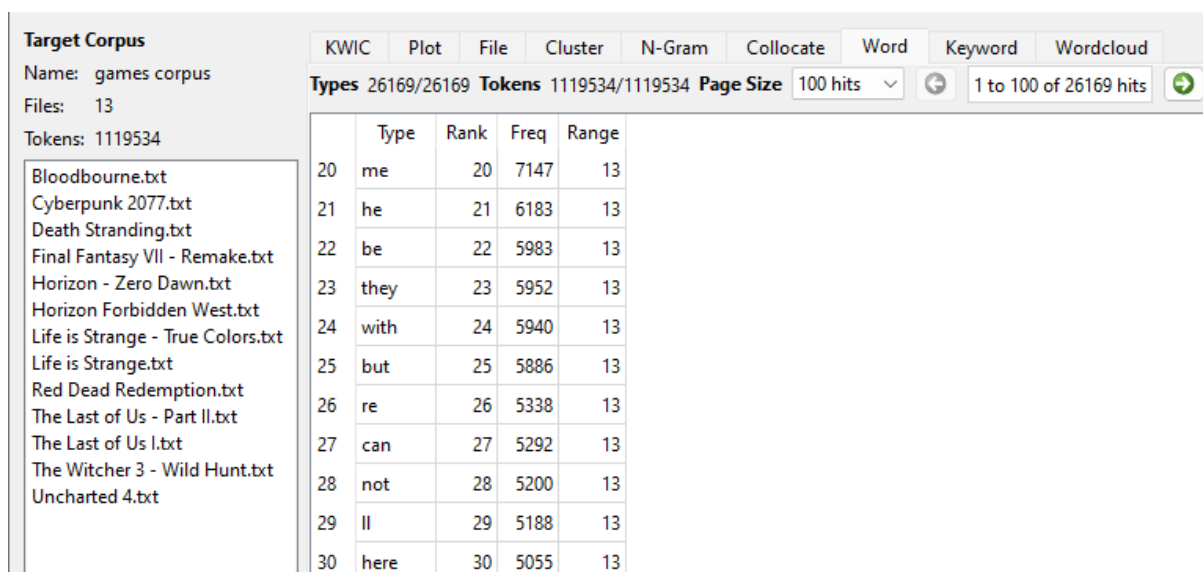
Figure 15. Frequency of the pronoun *he*

In this case, the second hypothesis is the most reasonable, as in six games out of thirteen the main character is female. For this reason, the frequency of both gendered pronouns was expected to be closer. A possible explanation is that, even though the main characters are relatively equally representative of both feminine and masculine gender, there might be more male secondary characters. In other words, the majority of secondary characters might be male, which means that females are underrepresented in secondary roles. This would explain why the pronoun *he* is more frequent than the female one.

As Figure 16 shows, the gendered pronoun *she* only appears as the 45th most frequent word, mentioned 4331 times. This reinforces the fact that male characters are more present, even though there is a similar number of female characters.
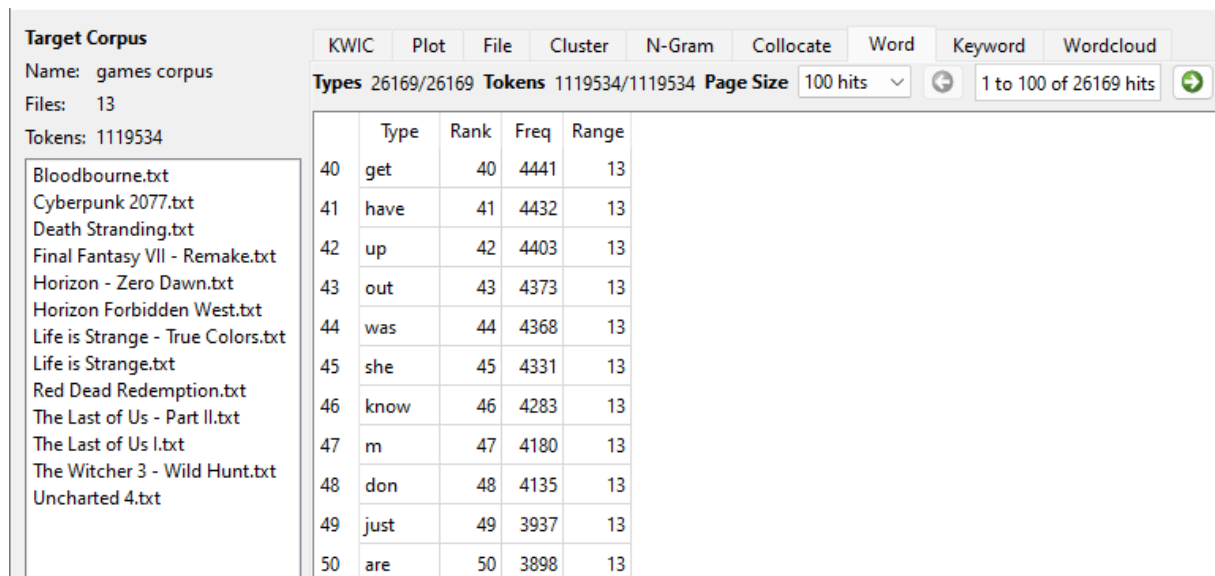
Figure 16. Frequency of the pronoun *she*

In order to understand the reason why the mention of *he* is more frequent than *she*, it might be helpful to carry out a *concordance plot analysis*. This analysis shows how feminine and masculine pronouns are distributed among the selected texts. This analysis shows where a specific word appears in the corpus and the results are displayed as stacked "barcode" charts (Anthony 2022). The vertical lines within the bar indicate the position where the pronouns appear in the target text. Figure 17 and 18 show respectively the plot analysis of the pronouns *he* and *she*.

As Figure 17 shows, the pronoun *he* appears the most in "The Witcher 3 – Wild Hunt", whose main character is a man. The two following games are "Uncharted 4" and "Red Dead Redemption", which also have a male main character. These results seem to validate the hypothesis that in videogames with male main characters male subjects are mentioned more often.
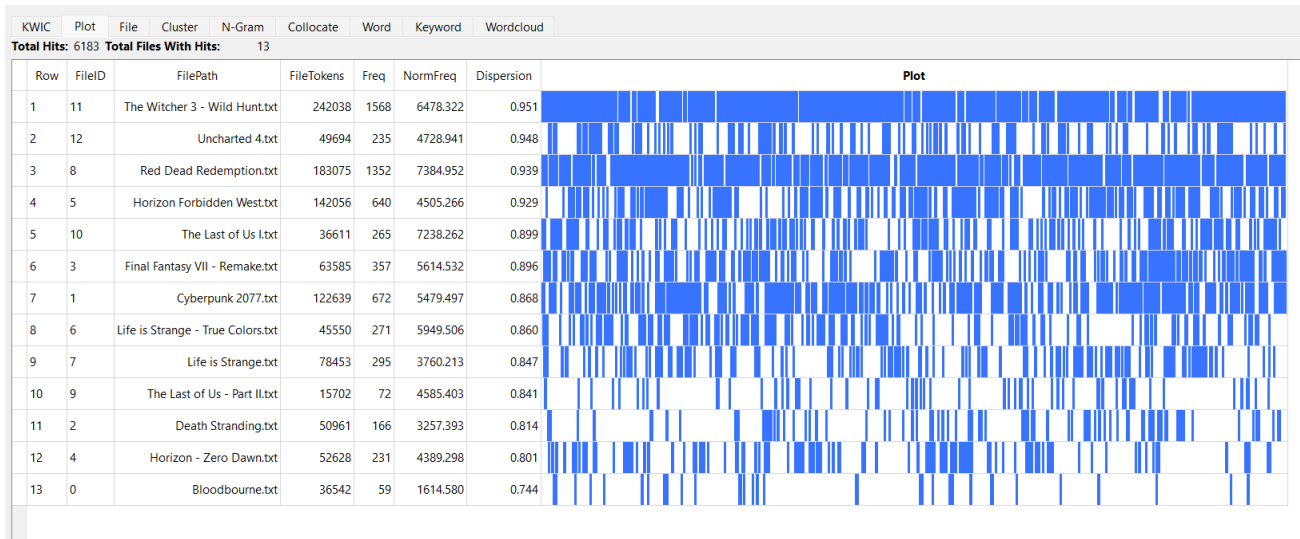
Figure 17. Concordance plot analysis of the pronoun *he*

Figure 18 shows that the pronoun *she* is mentioned the most in the corpus of the game "Horizon: Forbidden West", a game with a female main character. The following two games are "Life is Strange" and "Horizon: Zero Dawn", which include a female main character as well. As in the previous analysis, videogames with female main characters seem to mention the pronoun *she* more often.
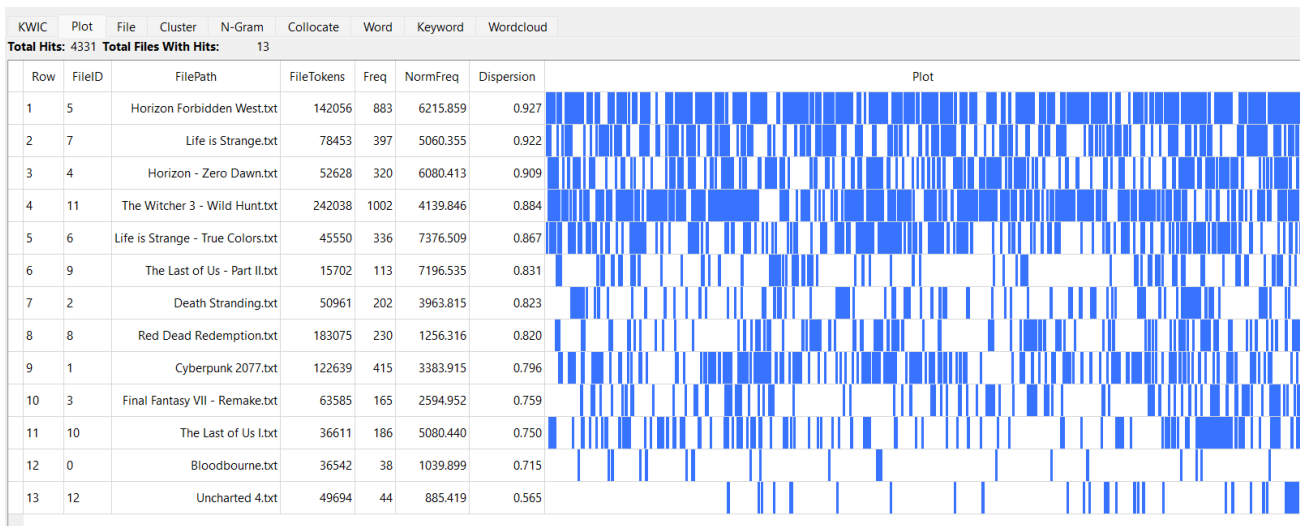
Figure 18. Concordance plot analysis of the pronoun *she*

Dispersion can also be useful in the frequency analysis, as it provides an overview of the distribution of a term in a sub-corpus. In other words,

> "The term "dispersion" is used to express how evenly an item or structure is distributed throughout a corpus. A high level of dispersion indicates that the occurrence rate of the item (i.e. its normalized frequency) is well-balanced across the corpus. Low levels of dispersion, on the other hand, point to a concentrated distribution." (Sönning 2022, p. 1)

40

Estimators usually produce a result between 0 and 1, where 0 indicates a maximally concentrated distribution, and 1 reflects a balanced setting. In this study, the games *Horizon: Forbidden West* and *The Witcher 3 – Wild Hunt* seem to be the most uniform games, as they have a dispersion value very close to 1.

The most surprising aspect of the data is the position of the game "Horizon: Forbidden West" in both charts. The fact that this game appears at a high position for both gendered pronouns means that the representation of the two gender is equal within it, despite the presence of a female main character. The same consideration can be done for the game "The Witcher 3 – Wild Hunt", which has a male main character, but this suggests that despite the presence of a male main character, the two masculine and feminine genders are mentioned equally.

However, raw frequency alone does not give an accurate representation of the relative frequency of the two pronouns in each text. When looking for raw frequency it is expected that bigger sub-corpora would have a higher number of pronouns. To make this analysis more accurate, it would be useful to calculate the *normalised frequency*. Normalised frequency is used to compare frequency of corpora of different sizes, as it converts each frequency into a value per million or thousand words. Table 2 shows the list of games in order of normalised frequency per million words for each pronoun. The results differ from the raw analysis. The pronoun *she* is mentioned more often in games where the main character is female (both games from the titles "Life is Strange", "Horizon" and "The Last of Us"), while he is mentioned the most on a game with a male main character ("Red Dead Redemption"). However, the second game where *he* is mentioned the most is a game with a female main character, that is "The Last of Us". This means that in this game female and male characters are mentioned equally, even though the main character is female. The same consideration can be done for the game Life is Strange: True Colors. In other words, even though they have a female main character, some games mention the two analysed gender equally. However, the same cannot be said for games with male main characters. in other words, games with female main characters are more inclusive than games with male main characters, as none of the latter have a high normalised frequency for the

pronoun *she*. On the other hand, games with female main characters have a high normalised frequency of the pronoun *he*. Consequently, the hypothesis that the most represented gender reflects the one of the main character is not validated, as there are games with a female main character that have a high representation of male characters as well, making them more inclusive.

Game	Normalised Frequency *she*	Game	Normalised Frequency *he*
Life is Strange - True Colors	7376.509	Red Dead Redemption	7384.952
The Last of Us – Part II	7196.535	The Last of Us	7238.262
Horizon: Forbidden West	6215.859	The Witcher 3 – Wild Hunt	6478.322
Horizon: Zero Dawn	6080.413	Life is Strange – True Colors	5949.506
The Last of Us	5080.440	Final Fantasy VII - Remake	5614.532
Life is Strange	5060.355	Cyberpunk 2077	5479.497
The Witcher 3 – Wild Hunt	4139.846	Uncharted 4	4728.941
Death Stranding	3963.815	The Last of Us – Part II	4585.403
Cyberpunk 2077	3383.915	Horizon: Forbidden West	4505.266
Final Fantasy VII - Remake	2594.952	Horizon: Zero Dawn	4389.298
Red Dead Redemption	1256.316	Life is Strange	3760.213
Bloodborne	1028.626	Death Stranding	3257.393
Uncharted 4	885.419	Bloodborne	1597.077

Table 2. Normalised Frequency per million words of pronouns *she* and *he*

In order to see the most frequent words that the pronoun *she* is followed by, a *cluster analysis* was carried out. Figure 19 shows the most frequent words that follow *she*. The most frequent word is the conjugated form of the verb 'to be', both in the present and past tense, which is the one that will be analysed more in depth.

Figure 19. Cluster analysis of the pronoun *she*

The verb 'to be' is "used when you are naming people or things, describing them or giving more information about them" (Oxford Learner's Dictionary). For this reason, what follows this verb provides an overview of how the preceding pronoun is represented, and consequently how the gender it refers to is portrayed. That is to say, it reveals whether women and men are represented in a biased way.

In order to see what follows the verb 'to be', it is necessary to carry out a KWIC analysis. Since the object of investigation is what follows the verb *to be*, the arrangement of the KWIC research was set to the right. To restrict more the research, the search query was set to "*she is/she's a*", which might reveal more interesting results than a generic research for "*she is/she's*". In order to be able to display more results in one page, the results were exported and then opened in a Excel file. Figure 20 shows the results. The expressions highlighted in green have positive connotation, while the red ones have a negative meaning. The blue ones instead refer to physical appearance.

	A	B	C
1	been her friend and mentor , then indeed --	she is a bold - faced liar ! Thanks for	The Witcher 3 - Wild Hunt.txt
2	? Never ! [Aloy holds her breath ...] Proctor : For	she is a brave now ! Vala : You did	Horizon - Zero Dawn.txt
3	all : the secret of her birth . That	she is a clone of ELISABET SOBECK , Zero	Horizon Forbidden West.txt
4	popular down here as a result . Nevertheless ,	she is a criminal and a threat to	Final Fantasy VII - Remake.txt
5	a great power she can not control .	She is a danger -- to herself , to others .	The Witcher 3 - Wild Hunt.txt
6	? She ai n't no Tifa , but	she is a firecracker . Keep her waiting too	Final Fantasy VII - Remake.txt
7	a pot of coffee . Joyce : And there	she is -- a lovely young woman . How are	Life is Strange.txt
8	, we 'll need more money . Okay , there	she is ... a real city ... the future . [Before	Red Dead Redemption.txt
9	group and shares their objectives . Or perhaps	she is a subordinate and has no choice	Horizon Forbidden West.txt
10	finally get her kicked out of Blackwell .	She 's a bad influence . (determinant) Principal Wells :	Life is Strange.txt
11	. V : Johnny , she 's unconscious . Johnny : Or	she 's a better actor than we thought . [	Cyberpunk 2077.txt
12	't . You 're going after her . Cloud :	She 's a big girl . She can handle	Final Fantasy VII - Remake.txt
13	. [ ] Die - Hardman : It 's your mother . Bridget :	She 's a bit out of it , but	Death Stranding.txt
14	, love tends to be complicated . Beau Gray :	She 's a Braithwaite . I 'm Beau Gray ,	Red Dead Redemption.txt
15	we 've been together ever since . But	she 's a BT . The ties that bind	Death Stranding.txt
16	a child of the Elder Blood . Geralt :	She 's a child of the Elder Blood .	The Witcher 3 - Wild Hunt.txt
17	told that wench about some shelter . Well ,	she 's a damn fool to trust an	Bloodbourne.txt
18	any way . Woman : She 's no human .	She 's a degenerate half - breed . To have	The Witcher 3 - Wild Hunt.txt
19	. V : What 's she do officially ? Judy :	She 's a doll . So she 's a	Cyberpunk 2077.txt
20	, partner ... I 'm waiting on a lady ...	she 's a fine lady ... she 's just	Red Dead Redemption.txt
21	Linde : Arthur ? Arthur Morgan : (whispers to Dutch)	She 's a fool . Get her outta here .	Red Dead Redemption.txt
22	. No past . No record she ever existed .	She 's a ghost . And the thing about	Death Stranding.txt
23	... driving with Steph ? Gabe : We 'll see .	She 's a GM , so she 's got	Life is Strange - True Colors.txt
24	's just another dumbass Higgs fucked over . â€ â€œ	She 's a goddamn hero , that woman . â€ Tell	Death Stranding.txt
25	: Then you know what to expect . Remember :	she 's a good friend of Avalanche , so	Final Fantasy VII - Remake.txt
26	... I treated Kate like shit ... I know	she 's a good person , but I 'm	Life is Strange.txt
27	? Cloud : Well ... She 's in great shape .	She 's a great fighter . She 's great	Final Fantasy VII - Remake.txt
28	Max Caulfield do for fun now that	she 's a grown - up ? Party all night .	Life is Strange.txt
29	baskets . Be right back ! Elmyra : That Aerith ...	She 's a handful , is n't she ?	Final Fantasy VII - Remake.txt
30	line to get us what we needed .	She 's a hero through and through . Look ,	Death Stranding.txt
31	wiped off the face of the earth .	She 's a hero - and you can tell	Death Stranding.txt
32	... she do n't mince words ... But ...	she 's a kind one , I can tell .	Bloodbourne.txt
33	're wasting your time with that girl .	She 's a liar , she 'll screw you	Red Dead Redemption.txt
34	good , you should stay away from Chloe .	She 's a loser and she 'll only	Life is Strange.txt
35	't too high to begin with . Ellie :	She 's a lot tougher than you think .	The Last of Us I.txt
36	in her profession . Panam : Well , I think	she 's a lying , manipulative bitch . She put	Cyberpunk 2077.txt
37	see this braindance . Evelyn : Judy'll help .	She 's a Mox , too . Besides , we go	Cyberpunk 2077.txt
38	. Always helped out . I trust her . But	she 's a Mox , not the latest member	Cyberpunk 2077.txt
39	officially ? Judy : She 's a doll . So	she 's a nobody . V : You sure Maiko '	Cyberpunk 2077.txt
40	about one thing - she 's not Carja .	She 's a Nora from the Savage East .	Horizon Forbidden West.txt
41	can I tell Max 's parents that	she 's a nosy little bitch ? Principal Wells :	Life is Strange.txt
42	.] Geralt : Dead ... Anabelle was no ordinary ghost .	She 's a pesta . And now she 's	The Witcher 3 - Wild Hunt.txt
43	soul is free . Thing is , turned out	she 's a pesta . Graham 's dead . Keira :	The Witcher 3 - Wild Hunt.txt
44	screen .] Abigail Marston : Stop it . John Marston :	She 's a piece of work . Abigail Marston :	Red Dead Redemption.txt
45	? Know anything about her ? Rosa : I believe	she 's a poetress or trobairitz ... Very skilled	The Witcher 3 - Wild Hunt.txt
46	... you know where she is ? Lilly Millet :	she 's a ranch maid here , you know	Red Dead Redemption.txt
47	again . Cloud : What do you mean ? Sam :	She 's a real pretty girl . Corneo 's	Final Fantasy VII - Remake.txt
48	the sea gives , we take . Geralt : Seems	she 's a reluctant giver . Matthias : Aye , I	The Witcher 3 - Wild Hunt.txt
49	it ! Sniper ! Get back ! Nate : Damn it .	She 's a sitting duck in there . C'	Uncharted 4.txt
50	see her , would you give me word ?	She 's a small girl , with a big	Bloodbourne.txt
51	eye for images and for art . Plus ,	she 's a smartass like you . We would	Life is Strange.txt
52	us ... or to do any real work .	She 's a society lady , now . Okay , take	Red Dead Redemption.txt
53	need you to deliver a package to .	She 's a strange bird . Lives even higher	Death Stranding.txt
54	painting ? Tilda van der Meer : (via Focus)	She 's a strange one , is n't	Horizon Forbidden West.txt
55	is happening here ? What . Get over here .	She 's a stranger ! Morlund : You got a	Horizon Forbidden West.txt
56	take Taima the other night . Charles Smith :	She 's a strong one . It 's been	Red Dead Redemption.txt
57	Alex starts crying . Parent 3 : I 'm sure	she 's a sweet girl , but she 's	Life is Strange - True Colors.txt
58	is paying attention to her . Many believe	she 's a symbol of the militia - a	Horizon Forbidden West.txt
59	so bad just a minute ago . V :	She 's a toughie . Keeps it inside , mostly .	Cyberpunk 2077.txt
60	trobairitz ? Molly : Yes , yes ! Now I remember :	she 's a traveling performer , sailed in from	The Witcher 3 - Wild Hunt.txt
61	't count on her clan anymore , but	she 's a true nomad She knows those	Cyberpunk 2077.txt
62	of Dandelion 's . Her name 's Bea .	She 's a waitress at the Golden Sturgeon .	The Witcher 3 - Wild Hunt.txt
63	. He thinks Max is a joke . Taylor :	She 's a weirdo with that dumb camera .	Life is Strange.txt
64	... You two argue ? Vesemir : Geralt ... I understand	she 's a -- well , how do I put	The Witcher 3 - Wild Hunt.txt
65	, see if she 's willing to help .	She 's a whiz at computer stuff . Ryan	Life is Strange - True Colors.txt
66	to her that way . Hunter : Why not ?	She 's a whore , ai n't she ?	The Witcher 3 - Wild Hunt.txt
67	licked her hand . Geralt : So what ? Pellar :	She 's a wise beast , only comes to	The Witcher 3 - Wild Hunt.txt

Figure 20. KWIC analysis results exported in Excel for the pronoun *she*

Curiously, there are only three descriptions of physical appearance, that are '*she's a small girl*', '*she's a real pretty girl*' and '*she's a fine lady*'. These expressions do not have a negative connotation. '*Small girl*' describes physical appearance in a neutral way. The same can be said about '*fine lady*', as it describes the woman it refers to as attractive, but without

sexualising her. However, it should be considered that the adjective '*fine'* does not necessarily refer to physical appearance, but it also used to refer to someone with manners and consideration of others. A fine lady is not only attractive, but also a kind and courteous woman, with excellent manners. But if looking at the context in which '*fine lady*' is used (Figure 21), it appears that in this case it is used to refer to the appearance of the lady Arthur Morgan is waiting for. It refers not only to the fact that the lady is attractive, but also to her manners, which are part of how she presents herself. This means that women are not referred to in terms of their appearance as often as expected. There are more reference to their personality or abilities.
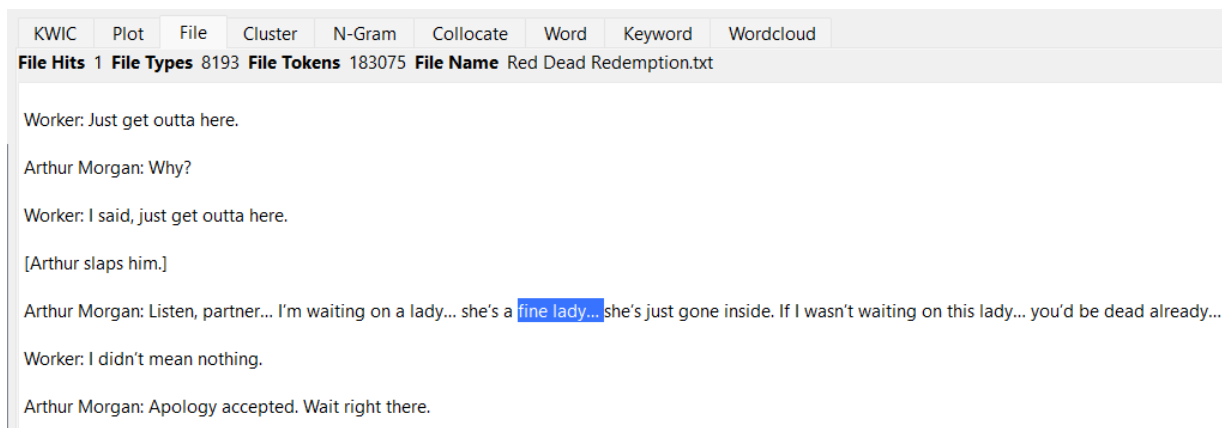
Figure 21. Context of '*fine lady*'

The red-highlighted words include expressions that can be considered "neutral", as they express negative meanings, but do not express biases. Those expressions include "*she's a criminal*", "*she's a fool*" or "*she's a strange one*", which do not represent a stereotype. That is to say, these expressions could be also related to male characters, without carrying particularly negative connotations in gender stereotypes.

On the other hand, there are some expressions that when used in association with female characters reinforce gender stereotype. Those include '*she's a bold-faced liar* ', '*she's a better actor than we thought*', '*she's a lying, manipulative bitch*' and '*she's a liar*'. These expressions seem to point to the fact that women are more inclined to lie compared to men. However, it would be useful to conduct a deeper research to validate this hypothesis. Figure 22 shows the results of a KWIC search for the term '*liar*'. The search produced 20 results. The yellow ones refer to male characters, while the green ones to female characters. The only

result that is not highlighted is a negative one, which states '*he's not a liar*'. The results of this search do not validate the previous hypothesis, that is females are more inclined to be liars. As Figure 22 shows, the term liar is most referred to male characters, so that the stereotype of women of women as manipulative and untrustworthy is not reinforced.

	A	B	C	D
1	**File**	**Left Context**	**Hit**	**Right Context**
2	The Witcher 3 - Wild Hunt.txt	Geralt: No. It's not true. Kid: He's a	liar.	Kid: He ain't a liar, witchers don't
3	Life is Strange - True Colors.txt	the investigation. I'll be ready soon. Mac's a	liar.	Alex: I think I'll be ready soon. Pike:
4	Red Dead Redemption.txt	re wasting your time with that girl. She's a	liar,	she'll screw you over like she did me. [
5	The Witcher 3 - Wild Hunt.txt	Not enough he's a heretic, he's also a	liar!	What'll we do with 'im? Bandit: We'll
6	The Witcher 3 - Wild Hunt.txt	: maybe that daft bastard Wolverstone from the "Atropos." A	liar,	a thief and a bugger, that one. He mighta
7	Life is Strange - True Colors.txt	shit with Mac. He's clearly lying, right? Definitely a	liar.	Need to learn more. Alex: No question. Steph: I
8	Life is Strange - True Colors.txt	Ryan: Bullshit, Dad! This little weasel's calling Gabe a	liar	at his own fucking wake-- Mac: No, I am
9	Red Dead Redemption.txt	van der Linde: Why? Eagle Flies: Colonel Favours is a	liar	and a murderer... his people won't stop until
10	Life is Strange - True Colors.txt	I'm gonna tell my mom you called me a	liar!	Gabe: Do it, dude. I dare you. Scrolls There
11	Life is Strange.txt	was loaded and playing the field- Max: You're a	liar.	You told Kate you took her to the emergency
12	The Witcher 3 - Wild Hunt.txt	Kid: He's a liar. Kid: He ain't a	liar,	witchers don't lie. Kid: They can lie because
13	Life is Strange.txt	Mr. Jefferson: Max, you're a better photographer and	liar...	Now I know it's a drag to hear
14	Life is Strange - True Colors.txt	seem fine. Bar's closed. Alex: You're an awful	liar.	What's wrong? Duckie: Nothing. I'm right as
15	Red Dead Redemption.txt	medical condition. Arthur Morgan: Yes, you are a compulsive	liar.	Uncle: No need to be like that. Charles, have
16	Horizon - Zero Dawn.txt	all the time. Aloy: You're not a very convincing	liar.	Olin: Do you always accuse people you've just
17	The Witcher 3 - Wild Hunt.txt	friend and mentor, then indeed -- she is a bold-faced	liar!	Thanks for taking Ciri in. Geralt: Likewise. And thanks
18	Bloodbourne.txt	odd. Do you hear the toll of the bell? Hmph.	Liar.	Such pettiness will be your undoing. The beasts you
19	The Witcher 3 - Wild Hunt.txt	a man, "You rat!" And then he killed 'im! Kid:	Liar!	Marabella: That's enough! We're done for the
20	The Witcher 3 - Wild Hunt.txt	what you're talking about. Reuven: You are the worst	liar	I've ever known... Glad I don't need

Figure 22. KWIC search for the term '*liar*'

Women are also referred to with slurs in three cases. Those are '*she's a lying, manipulative bitch*', '*she's a noisy little bitch*' and '*she's a whore*'. Both terms are used in informal language. The term '*bitch*' is used in informal language to refer to a malicious, spiteful, or overbearing woman (source: Merriam-Webster Dictionary). The term '*whore*', instead, is used to talk offensively about a promiscuous or immoral women (source: Merriam-Webster Dictionary). These terms not only are misogynist, as they are used expressively to denigrate women, but they also reinforce the stereotype of women as annoying and not loyal.

However, there are also expressions with a positive connotation, such as '*she's a good friend*', '*she's a lovely young woman*', '*she's a kind one*', '*she's a good person*'. These expressions can be considered "neutral", as they do not carry a particular meaning when referred to females.

Figure 23 shows the results of the search for "*good person*". There are only three results and all of them are used when referred to a woman. The first two results refers to Kate, a young girl in the game Life is Strange. The last result does not properly refer to a person

but it is a supposition. What should be noted is that there is no reference to men as a "good person".

Figure 23. KWIC results for "good person"

There is however a reference to men as a "*good friend*". Figure 24 shows the KWIC results for this expression. Though it is used mainly in reference to female characters.

Figure 24. KWIC for the expression "good friend"

On the other hand, there are expressions such as '*she's a great fighter*', '*she's a lot tougher than you think*', '*she's a hero*', '*she's a strong one*' and '*she's a toughie*', which are unusual to be associated with women. That is to say, expressions that give the idea of strength and toughness are usually associated with masculinity and consequently with men, since the stereotyped men is seen as strong and powerful. The fact that women are associated with those expressions shows that there has been some progress, and that women are starting to be seen and accepted also as strong individuals and not only weak, as stereotypes represent them.

It is worth mentioning that other relevant verbs emerged from the cluster analysis (Figure 19). For instance, a common verb that appears in the cluster results is 'to need'. The verb means "to require something/somebody" (Oxford Learner's Dictionary), and since women are usually associated with the stereotype of the ones in need, it gives the idea that female

characters in these games are unable to act or provide something by themselves, but instead they need the help or assistance of others.

In order to verify whether this is the case, it would be useful to see which nouns follow the verb 'need' when the subject is *she* and compare the results with *he*. To do so, a collocation analysis was carried out. Figure 26 and 27 show respectively the concordance results for the expressions "*she needs*" and "*he needs*". The results show that women and men are equally needing of help, as each research displayed four expression that carry that meaning. These expression are "*she needs help*", "*she needs your help*" and "*he needs help*", "*he needs all the help*", "*he needs our help*".

However, in the case of female characters, expressions regarding medical help are more common. For instance, the expressions "*she needs a healer*", "*she needs some rest*" "*she needs a medic*", "*she needs cryptobiotes*[3]" can only be found related to female characters, while they are absent in reference to male characters. This might suggest that female characters are possibly physically weaker than men, since they need more medical support. This might also be seen as a consequence of the fact that female characters are weaker in battle, and consequently get hurt more often. This representation of women reinforces the stereotype of women as "the weaker sex", that sees them as weaker than men, both physically and in skills.

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[3] A **cryptobiote** is a small life form in the world of *Death Stranding* which, when ingested, replenishes a small amount of a person's blood. (source: https://deathstranding.fandom.com/wiki/Cryptobiote)

Figure 26. Concordance results of the expression "*she needs*"

Hit	KWIC	File
1	'll be pursued , so he needs a hideout that '	Horizon - Zero Dawn.txt
2	? All right , then . Says he needs a second or	Cyberpunk 2077.txt
3	a great ruler . Brina : He needs a worthy successor .	The Witcher 3 - Wild Hunt.txt
4	. John Marston : Sounds like he needs all the help	Red Dead Redemption.txt
5	feel sorry for him . He needs help , but not	Life is Strange.txt
6	, son ? Brave : Eagle Flies . He needs help . They all	Red Dead Redemption.txt
7	on a dig says he needs it . Apparently the	Death Stranding.txt
8	Jerusalem [After purchasing everything he needs , John begins to	Red Dead Redemption.txt
9	't surprise me if he needs our help . So	Final Fantasy VII - Remake.txt
10	his axe .] Willard Wayne : He needs some tools ... he '	Red Dead Redemption.txt
11	? It 's not like he needs the money . Nate :	Uncharted 4.txt
12	good match for Shoreline . He needs their muscle and	Uncharted 4.txt
13	, not when it mattered . He needs time . Stay strong .	Life is Strange - True Colors.txt
14	on his own , so he needs to bring an	The Witcher 3 - Wild Hunt.txt
15	we 'd find what he needs to build himself	Horizon Forbidden West.txt
16	news . Aw . Dex says he needs to check you ,	Cyberpunk 2077.txt
17	you can tell Frank he needs to check out	Life is Strange.txt
18	have his money , but he needs to come with	Life is Strange.txt
19	this place ... only thing he needs to decide , is	Red Dead Redemption.txt
20	the fish market . Says he needs to explain everything	The Witcher 3 - Wild Hunt.txt
21	Oil - III + IV [Now he needs to tell John	Red Dead Redemption.txt
22	: Your father sent me . He needs you on Ard	The Witcher 3 - Wild Hunt.txt

Figure 27. Concordance results of the expression "*he needs*"

Another interesting fact that emerged from the cluster analysis is that the pronoun *she* is often followed by "*looks*". The verb "*to look*" can be a synonym for "to appear", which would indicate that female characters are often referred to in terms of their appearance. However, if searching for the expression "*she looks*" in a KWIC analysis (Figure 28), it can be noted that the majority of the results have a different meaning from appearing. The expression "to look like" appears in only two cases, and there are only three expressions in which 'look' has the meaning of 'appearing', e.g. '*she looks like a model*', '*she looks beautiful in them*', '*she looks so hopeful and pretty*'. Again, it seems that in the majority of the cases female characters are not referred to in terms of their appearance, but with reference to their personality and actions they make.

	A	B	C
1	's V . [For a 70 - 80 year old lady ,	she looks pretty good …] Rogue : And what is	Cyberpunk 2077.txt
2	brave people defended this place from HADES . [	She looks around .] Aloy : Machine carcasses . Remnants from	Horizon Forbidden West.txt
3	. Guess I 'll keep it for later . [	She looks around .] Aloy : I can almost see	Horizon Forbidden West.txt
4	on staying burrowed down there like that .	She looks like she 's barely seen the	Horizon Forbidden West.txt
5	. Aloy : Trust me . She 's tougher than	she looks . Kotallo : I will take your word	Horizon Forbidden West.txt
6	I like to think they underestimate her .	She looks as if she 's seen something .	Horizon Forbidden West.txt
7	, Sylens . [She returns to her friends .] Alva :	She looks okay ! Kotallo : She looks victorious . Zo :	Horizon Forbidden West.txt
8	her friends .] Alva : She looks okay ! Kotallo :	She looks victorious . Zo : As always . Beta : Aloy …	Horizon Forbidden West.txt
9	a normal girl in a normal town .	She looks up at the camera and the	Life is Strange - True Colors.txt
10	the counter to get her attention and	she looks up , smiling . Riley : Hey Gabe . Gabe :	Life is Strange - True Colors.txt
11	the bed . Gabe stares at her as	she looks around . Alex : Did n't we	Life is Strange - True Colors.txt
12	water from the bathroom sink is heard ,	she looks at her bloodied knuckles , realizing what	Life is Strange - True Colors.txt
13	something else that 's under the bed .	She looks under the bed to see what	Life is Strange - True Colors.txt
14	to the stronghold . If we can just …	She looks at the mountains in the distance	Life is Strange - True Colors.txt
15	, can you make eye contact with me ?	She looks at Ryan . Ryan : I 'm going	Life is Strange - True Colors.txt
16	stump and looks proudly at his sister .	She looks thankfully at him . They exchange a	Life is Strange - True Colors.txt
17	radio studio to get Steph 's attention .	She looks and finds Alex . She smiles , then	Life is Strange - True Colors.txt
18	Eleanor . Alex turns and notices . Alex : (thinking)	She looks terrified … I ca n't leave	Life is Strange - True Colors.txt
19	in . And then I open my mail …	She looks at the pile of mail on	Life is Strange - True Colors.txt
20	… we 've never played together before , and--	She looks back at Steph , who nods approvingly .	Life is Strange - True Colors.txt
21	approvingly . Alex : Anyway … sorry if this sucks …	She looks back at Steph for a moment .	Life is Strange - True Colors.txt
22	putting her guitar back in its case .	She looks up and sees Charlotte , standing by	Life is Strange - True Colors.txt
23	up . Alex : (thinking) What the fuck ? As	she looks around the room , she finds the	Life is Strange - True Colors.txt
24	lift herself up , but groans in pain .	She looks up , discovering the moon as her	Life is Strange - True Colors.txt
25	record player and Alex grabbing the headphones .	She looks at the argument outside , but this	Life is Strange - True Colors.txt
26	at the bottom of the mine shaft .	She looks around , and finds a tunnel further	Life is Strange - True Colors.txt
27	darkness . It 's her only way through .	She looks around and finds a lantern . She	Life is Strange - True Colors.txt
28	tunnel and into a large cavern . As	she looks around , a hissing sound begins to	Life is Strange - True Colors.txt
29	was all before the shit went down .	She looks at Gabe , expecting him to answer ,	Life is Strange - True Colors.txt
30	one of them . Max : (thinking) Rachel Amber …	She looks so hopeful and pretty … I wonder	Life is Strange.txt
31	… She wanted to be a star . Max :	She looks like a model . Chloe : That was	Life is Strange.txt
32	a display board on the main campus .	She looks at it and then tosses it	Life is Strange.txt
33	and then tosses it to the ground .	She looks up at stares at the snow .	Life is Strange.txt
34	: Assholes . Max sits down at her desk .	She looks out the window and notices Kate	Life is Strange.txt
35	desks in the back of the room .	She looks at page of a science textbook	Life is Strange.txt
36	to the back of the science lab .	She looks at the container of weedkiller on	Life is Strange.txt
37	n't shoot at Frank) Frank : Because	she looks beautiful in them and you look	Life is Strange.txt
38	glad Rachel got to drive this beast .	She looks genuinely happy . Picture 3 Max : (thinking) Rachel	Life is Strange.txt
39	… The killer slowly walks over to Max .	She looks up to see Mr. Jefferson looming	Life is Strange.txt
40	time ? This does n't make sense …	She looks out the window . Max : (thinking) Holy	Life is Strange.txt
41	the bathroom of the Two Whales Diner .	She looks at the keypad . Max : (thinking) I '	Life is Strange.txt
42	camera and tosses it to the floor .	She looks around the stall and waits for	Life is Strange.txt
43	: Look -- that 's more or less what	she looks like now , or so our agents	The Witcher 3 - Wild Hunt.txt

Figure 28. KWIC analysis results exported in Excel for the expression *she looks*

However, it would be helpful to compare the expressions that follow "*she looks*" with the ones that follow "*he looks*" to validate this hypothesis. Figure 28 shows all the results of the KWIC analysis for the expression "*he looks*". As the figure shows, expressions referring to physical appearance are absent. This means that men are never mentioned in terms of their aspect, but rather the focus is on their actions.

Corpus Files
Bloodbourne.txt
Cyberpunk 2077.txt
Death Stranding.txt
Final Fantasy VII - Remake.txt
Horizon - Zero Dawn.txt
Horizon Forbidden West.txt
Life is Strange - True Colors.txt
Life is Strange.txt
Red Dead Redemption.txt
The Last of Us - Part II.txt
The Last of Us I.txt
The Witcher 3 - Wild Hunt.txt
Uncharted 4.txt

Concordance | Concordance Plot | File View | Clusters/N-Grams | Collocates | Word List | Keyword List

Concordance Hits 31

| Hit	KWIC	File
1	him to Takemura .] Dexter : Urgh ... Heavier than he looks . Now , listen , dawg . I have done	Cyberpunk 2077.txt
2	is a matter of life and death . (he looks at V in exasperation . Why are	Cyberpunk 2077.txt
3	is a matter of life and death . (he looks at V in exasperation . Why are	Cyberpunk 2077.txt
4	ready , Sam . It 's coming ! [ ] Higgs : Whoo . He looks hungry . All you got ta do	Death Stranding.txt
5	on ... come on , come on , come on ! [He looks back at Cloud and sees that	Final Fantasy VII - Remake.txt
6	a former SOLDIER and super strong . Mireille : He looks useful enough . The kids have been	Final Fantasy VII - Remake.txt
7	! Time to line up for the don ! [He looks at Cloud .] Kotch : Wait . You look	Final Fantasy VII - Remake.txt
8	Aerith are unconscious .] Cloud : Where in the ... ? [He looks around and realizes that they are	Final Fantasy VII - Remake.txt
9	wish . [He appears on her Focus . Surprisingly he looks like a wonderful actor Lance Reddick .	Horizon - Zero Dawn.txt
10	. Itamen 's cute , he 's fun , and he looks up to me . I like him .	Horizon Forbidden West.txt
11	have crafted a delicate peace , and now he looks to the future . Who knows ? Maybe	Horizon Forbidden West.txt
12	he falls on the ground .] Natikka : Kentokk ! [He looks at Natikka one last time and	Horizon Forbidden West.txt
13	. Ryan finally notices the record is gone . He looks over to Alex who taps her	Life is Strange - True Colors.txt
14	's take a look at you now . He looks at Gabe 's bruises . Jed : Oh ,	Life is Strange - True Colors.txt
15	. I keep a personal bottle for him . He looks among the bottles behind the bar ,	Life is Strange - True Colors.txt
16	Alex grabs his arm to stop him . He looks at her . Gabe would forgive you .	Life is Strange - True Colors.txt
17	folder , then closes the door behind him . He looks at Alex , then sighs . Pike : Probably	Life is Strange - True Colors.txt
18	in his hands walks in a shed . He looks around and gives a signal to	Red Dead Redemption.txt
19	... he as big and as dumb as he looks ?	Red Dead Redemption.txt
20	. Some say he is as dumb as he looks ... but , I think ... well , he 's	Red Dead Redemption.txt
21	would . [Dutch comes out of his tent . He looks pretty pissed off .] Dutch van der	Red Dead Redemption.txt
22	buy horses . Horses are cheaper . John Marston : He looks mean . Sadie Adler : He is . John	Red Dead Redemption.txt
23	you look too ? John Marston : Hold on . [He looks around the camp through binoculars and	Red Dead Redemption.txt
24	toy on the ground when she leaves . He looks at the wound on his leg ,	The Last of Us I.txt
25	.] Geralt : Anyone home ? Must be out hunting . [He looks at the boot prints .] Geralt : Trail '	The Witcher 3 - Wild Hunt.txt
26	a few friends there , so ... Something wrong ? [He looks at the nearby table of ruffians	The Witcher 3 - Wild Hunt.txt
27	: The what now ? Man : In that ... chair . [He looks at his attendant .] Man : Cledwyn . Please	The Witcher 3 - Wild Hunt.txt
28	keeps him caught in her spell as he looks on in horror . Geralt eventually has	The Witcher 3 - Wild Hunt.txt
29	alive , in the shallows near Lofoten , as he looks for white crabs to catch . While	The Witcher 3 - Wild Hunt.txt
30	portal opens and he hears a splash . He looks over a rock to find her	The Witcher 3 - Wild Hunt.txt
31	. Sullivan : God , look at Farrell 's face . He looks like he 'd rather be anywhere	Uncharted 4.txt

Figure 28. KWIC analysis results for the expression *he looks*

A concordance analysis was carried out for the pronoun *he* as well. Firstly, a cluster analysis was carried out, to see which words the pronoun is most frequently followed by. Figure 29 shows the results of this analysis, which are mostly verbs. There are some verbs that are worth analysing in depth, since they might lead to interesting results. Those verbs are *to be*, *can*, *will*. All the other verbs are action verbs, also called dynamic verbs, such as *say, find, take, get*. They express action, both physical and mental, and they explain what the subject of the sentence is doing or has done. This means that men are more likely to be active and perform actions rather than being subjects to them.

Figure 29. Cluster of *he*

An interesting comparative result is that, while the pronoun *she* is usually followed by the verb 'needs', in the case of *he* the verb 'wants' is more frequent. Table 3 summarises and compares the frequency of the expressions. Comparing the frequency of the verb *need*, it appears that it is associated more frequently with female subjects, while *want* is more often associated with male subjects. This is an interesting aspect, as male characters are associated more often with verbs that express volition, while female characters are more associated with needing.

Expression	Frequency	Expression	Frequency
He needs	22	She needs	27
He wants	39	She wants	30

Table 3. Frequency of *need* and *want* with *he* and *she*

The collocation research for *need* was already shown previously in this section. The same research for the verb *want* should be conducted as it might reveal interesting patterns. Figures 30 and 31 show the collocation results of respectively "*he wants*" and "*she wants*".

	A	B	C
1	much does he know ? Nate : Enough that	he wants a cut . Sam : Ah , shit ... Rafe ,	Uncharted 4.txt
2	n't always sure Dutch knows what	he wants anymore . Charles Smith : Perhaps not ... but	Red Dead Redemption.txt
3	you talked to the boss ? Hunter 3 : Yeah .	He wants everyone to hold their ground , watch	The Last of Us I.txt
4	. And I do n't understand what	he wants from Thebes . I thought we found	Horizon Forbidden West.txt
5	. He 'll have to . I have something	he wants . Geralt : Please , you do n't	The Witcher 3 - Wild Hunt.txt
6	. Tell me what he really feels , what	he wants . Geralt : What I want ? Hm , one	The Witcher 3 - Wild Hunt.txt
7	: Are we really killing her ? David said	he wants her alive . Hunter 2 : He does n'	The Last of Us I.txt
8	Emperor is not known for his patience .	He wants his daughter back , safe and sound .	The Witcher 3 - Wild Hunt.txt
9	. You owe him . You took the money .	He wants it back . What 's not to	Red Dead Redemption.txt
10	guess old Dutch got all the smoke	he wants . John Marston : Well let 's hope	Red Dead Redemption.txt
11	? Okay . Thanks , Abe . Abe : What you think	he wants ? John Marston : I have no idea ...	Red Dead Redemption.txt
12	be hosting some event ... I wonder why	he wants lilies though , they 're traditionally for	Life is Strange - True Colors.txt
13	greater than yourself . Natikka : Yes . And yet	he wants me to be tethered to this	Horizon Forbidden West.txt
14	answer you ? Chloe : Frank always answers when	he wants money . Chloe takes out her phone	Life is Strange.txt
15	know who the ' runner inside is ? What	he wants ? Placide : This I hope you tell	Cyberpunk 2077.txt
16	vault , has access to the bathhouse whenever	he wants ... Reuven : Happen has numerous flaws . He	The Witcher 3 - Wild Hunt.txt
17	check the delivery terminal and see what	he wants . [ ] Sam : Just had to give yourself	Death Stranding.txt
18	: How can you be sure ? What if	he wants something more ? Geralt : Promised me he	The Witcher 3 - Wild Hunt.txt
19	not like he needs the money . Nate :	He wants the glory . Does n't want	Uncharted 4.txt
20	... There 's an Oseram in Chainscrape , Tolland .	He wants the Stormbird up there . Lokasha : Yes ,	Horizon Forbidden West.txt
21	decree that Ulvund wants ? Javad the Willing :	He wants the Sundom to designate portions of	Horizon Forbidden West.txt
22	real hero , Joyce . I know that all	he wants to do is make you happy .	Life is Strange.txt
23	to find his wife . Geralt : Your father --	he wants to find his wife , your mother .	The Witcher 3 - Wild Hunt.txt
24	- one night only . Denny : That 's what	he wants to get the crew together for ?	Cyberpunk 2077.txt
25	to Washington . He 's a good man ,	he wants to help . Arthur Morgan : Well , guess	Red Dead Redemption.txt
26	cars into a shelter . It 's safe . [	He wants to help Jill to walk .] Jill :	The Last of Us - Part II.txt
27	depressed , attempted suicide . V : What , really worried	he wants to hurt himself ? Johnny : Who knows .	Cyberpunk 2077.txt
28	will be over soon . Watch out , Max ...	He wants to hurt you next . Sorry . Street	Life is Strange.txt
29	. Ciri : What do you mean ? Geralt : Think	he wants to meet you because he missed	The Witcher 3 - Wild Hunt.txt
30	snuck out of Arasaka . What 's more ,	he wants to pass it onto NetWatch . Sounds	Cyberpunk 2077.txt
31	was only possible with his help ! Now	he wants to revive the Council and the	The Witcher 3 - Wild Hunt.txt
32	says he needs it . Apparently the fossils	he wants to study are buried deep beneath	Death Stranding.txt
33	. She then receives a text from Ryan .	He wants to talk to her . Alex : (thinking)	Life is Strange - True Colors.txt
34	yours . You make David happy , Joyce . Joyce :	He wants us all to be happy , Max .	Life is Strange.txt
35	not really looking through it . Nate : Maybe	he wants us to look through it . Sam :	Uncharted 4.txt
36	. [Geralt can check in with Yen if	he wants :] Yennefer : Well ? What is it ? What	The Witcher 3 - Wild Hunt.txt
37	that 's assortment is a bad that	he wants you dead . Aloy : Because of my	Horizon - Zero Dawn.txt

Figure 30. Concordance analysis of "*he wants*"

	A	B	C
1	who brought us the job 's anxious .	She wants to parley with one o ' the	Cyberpunk 2077.txt
2	quicksand . V : Susie seems to know what	she wants . She your boss ? Judy : You come	Cyberpunk 2077.txt
3	puke... [He got a text from Panam .	She wants to meet at Sunset Motel 's	Cyberpunk 2077.txt
4	me - no point . She 'll do whatever	she wants . Saul : No , she won't .	Cyberpunk 2077.txt
5	other side wants her back . Or maybe	she wants to go back . We can't	Death Stranding.txt
6	that . Never was . It 's about what	she wants . What we want . And why should	Death Stranding.txt
7	the answers are on the Beach . What	she wants . And why . Deadman : If we get	Death Stranding.txt
8	: See This is only a theory , but...	She wants you . Wants you to go to	Death Stranding.txt
9	, and while she isn't where	she wants to be not in urgent danger .	Horizon Forbidden West.txt
10	could melt that ice . And you say	she wants to help ? Aloy : I think so .	Horizon Forbidden West.txt
11	do more than just make some decisions...	she wants me to play a bard . Guess	Life is Strange - True Colors.txt
12	love may be shot... Arthur Morgan : If	she wants to rally , you got to let	Red Dead Redemption.txt
13	at the Gray 's place ? Sean MacGuire :	She wants us to torch their tobacco fields ,	Red Dead Redemption.txt
14	? All I 've got going on and	she wants to talk . Arthur Morgan : Everything okay	Red Dead Redemption.txt
15	ta save money and get her what	she wants . Tom Dickens : What does she want ?	Red Dead Redemption.txt
16	Dickens : What does she want ? John Marston :	She wants a place of her own...said	Red Dead Redemption.txt
17	young damsel to the lower tower courtyard .	She wants to practice ? She 'll get to	The Witcher 3 - Wild Hunt.txt
18	you do ? Any plans ? Geralt : Depends what	she wants . Keira : Imagined it -- how it will ...	The Witcher 3 - Wild Hunt.txt
19	a warm corner she calls her own .	She wants for nothing . Geralt : What happened to	The Witcher 3 - Wild Hunt.txt
20	Perch .] Geralt : A fisherman 's hut . Seems	she wants me to take a closer look .	The Witcher 3 - Wild Hunt.txt
21	she looking for here ? Radovid : I suspect	she wants to find her old friends , reconvene	The Witcher 3 - Wild Hunt.txt
22	claimed they would take too long , whereas	she wants , she needs immediate results ! She has	The Witcher 3 - Wild Hunt.txt
23	'm on , hurry up . Yen mention why	she wants this ? Geralt : Yen tell you why	The Witcher 3 - Wild Hunt.txt
24	wants this ? Geralt : Yen tell you why	she wants this ? Eskel : Mean you do n'	The Witcher 3 - Wild Hunt.txt
25	we can help her die the way	she wants to . Geralt : I wo n't	The Witcher 3 - Wild Hunt.txt
26	from experience there ... Ultimately , she does what	she wants . Avallac'h : Let us hope . Geralt :	The Witcher 3 - Wild Hunt.txt
27	's prepared to donate a tidy sum .	She wants to help mages escape from Novigrad .	The Witcher 3 - Wild Hunt.txt
28	Geralt : I get that right ? Philippa say	she wants to restore her vision ? Triss : Seems	The Witcher 3 - Wild Hunt.txt
29	. Geralt : I will . If that 's what	she wants .	The Witcher 3 - Wild Hunt.txt
30	they ? Mercenary 1 : Boss lady wants results and	she wants them yesterday . Mercenary 2 : Have they found	Uncharted 4.txt

Figure 31. Concordance analysis of "*she wants*"

If compared, the results show that men want things such as physical things, while women do not seem to have particular desires. Men want money and glory, but they also want to find their *daughter* and *wife*. The fact that they want to find their daughter and wife instead of their son or companion seem to reinforce the idea that females are the one who need to be saved and found, as the damsel in distress. This is a stereotype used in narrative, where the man has to save the woman who is in danger.

The same analysis that was conducted for '*she is/she's a*' was carried out for the pronoun *he*. The results are shown in Figure 32 and 33. Expressions with a positive connotation have been highlighted in yellow, while the negative ones in green. The only expression that refers to physical aspect is '*a scrawny little thing*', which is found in Final Fantasy VII – Remake. This expression is used by a secondary character to point out the fact that the main character (Cloud) is physically smaller than him. This situation exemplifies the stereotype for which a man, in order to be considered such, needs to be physically big and strong.

As for the research regarding the feminine pronoun, even here both positive and negative "neutral" terms can be found. Those terms carry positive and negative meaning, but they do not reinforce gender stereotypes. Examples of such expressions are '*he's a crazy man*', '*he's a gaudy one*', '*he's a strange one*', '*he's a traitor*', which carry negative meaning. Positive neutral expressions include '*he's a professional*' or '*he's a very important man*'.

On the other hand, there are some expressions that perpetuate gender stereotypes regarding men. What is noticeable is that there is a big number of repetition of the expressions '*he's a good man/guy/kid*'. The fact that these are repeated a lot, might point to the fact that, if it is not stated, men are assumed to be 'not good'. That is to say, it needs to be highlighted that they are good people. This does not happens with women, as the expression 'being a good woman' carries a different meaning from 'being a good person', but instead it refers to the role that she has in society, especially at home. A 'good woman', according to gender role stereotypes, is a woman who takes care of her children and her

house, but also a woman who cares about her appearance. The same connotation is not given to the expression '*being a good man*'.

Other interesting expressions are '*he's a delicate flower underneath*' and '*deep down, he's a big softie*'. Those expressions seem to somehow support the idea that men are not allowed to expressively show emotions or behaviours that are related to femininity, such as being soft or delicate like a flower. In other words, men are not allowed to show their emotions and they need to hide them to keep the appearance of a strong personality.

Another interesting aspect is that there is a strong presence of the words associated with strength, which is a feature typically associated with masculinity. Expressions like '*he's a man of sturdy build*', '*he's a man of honor*', '*he's a powerful man*' '*he's a man of his word*' can be found, which all give a portrayal of men as determined, strong on their will and reliable. All these characteristics align with a stereotyped idea of men, which sees them as courageous, aggressive and tenacious, otherwise they could not be considered as 'real' men.

#	A	B	Source
1	past his bluster to the heart inside ?	He is a fine man . Arthur Morgan : No ,	Red Dead Redemption.txt
2	're gon na be okay . This Captain ,	he is a fine feller . A New Englander ,	Red Dead Redemption.txt
3	n't like the tribe . Rost : Then	he is a fool . Come now . Let 's	Horizon - Zero Dawn.txt
4	falls asleep . Johnny appears in the corner .	He is a glitch in consciousness that only	Cyberpunk 2077.txt
5	... I 'm sure he was n't .	He is a magician , I know him . He '	Red Dead Redemption.txt
6	; Takemura : He will not do that .	He is a man of honor . & nbsp; &	Cyberpunk 2077.txt
7	do n't let that deceive you .	He is a man of his word . Aloy :	Horizon Forbidden West.txt
8	Chief Hekarro regally enters the throne room .	He is a man of sturdy build , adorned	Horizon Forbidden West.txt
9	Hellman 's design , his creation . Takemura : Untrue -	he is a pawn . I was thinking of	Cyberpunk 2077.txt
10	easier way . Now , I know his type .	He is a vindictive little power broker who	Red Dead Redemption.txt
11	here , Arthur . Thomas : Mr. Arthur ... old Bronte ,	he 's a bad man . Arthur Morgan : I	Red Dead Redemption.txt
12	? My men call him Uma and say	he 's a beast , but he seems more	The Witcher 3 - Wild Hunt.txt
13	, do n't be scared ! Deep down ,	he 's a big softie . Cloud : Hell with	Final Fantasy VII - Remake.txt
14	organ : Who is Leviticus Cornwall ? Hosea Matthews :	He 's a big railway magnate , sugar dealer ,	Red Dead Redemption.txt
15	is Melvin . That 's my brother Fenton ...	he 's a bit funny , but boy can	Red Dead Redemption.txt
16	irresponsible , stubborn and heeds no counsel . But	he 's a born leader . Been mates since	The Witcher 3 - Wild Hunt.txt
17	his father . Your friend here ... my friend ...	he 's a brave man . Paytah : Fearless , always	Red Dead Redemption.txt
18	should . I just want your reasons . Stella :	He 's a bully for one thing and	Life is Strange.txt
19	. You ? John Marston : Nah . You 'd think ...	he 's a colorful character ... word would get	Red Dead Redemption.txt
20	a madman 's an insult to madmen .	He 's a common goatfucker . Madman : Call me	The Witcher 3 - Wild Hunt.txt
21	by a crazy man . And get this ,	he 's a crazy man traveling with a	The Last of Us I.txt
22	's got such a good heart . And	he 's a cutie pie . You know how	Life is Strange.txt
23	but Reuven runs a bathhouse . Careful , though ...	he 's a dangerous character . Geralt : So am	The Witcher 3 - Wild Hunt.txt
24	up when we come back with Cortez .	He 's a decent feller . John Marston : If	Red Dead Redemption.txt
25	their horses .] Uncle : Look after him , Sadie ,	he 's a delicate flower underneath . John Marston :	Red Dead Redemption.txt
26	deal with Ansel Atherton at the bank .	He 's a distant cousin . Use my name ...	Red Dead Redemption.txt
27	Marston : I do n't know ... Relax ,	he 's a dog . Jack Marston : Where is	Red Dead Redemption.txt
28	ir mentor . Arthur Morgan : (laughs) Well sometimes	he 's a downright fool but ... usually , he '	Red Dead Redemption.txt
29	Morgan : Same with Bill and Brown Jack .	He 's a drunk , miserable bastard , but ... he	Red Dead Redemption.txt
30	the smith , Willis -- but it is said	he 's a dwarf . You are too tall	The Witcher 3 - Wild Hunt.txt
31	... and mostly drunk . But one of them ,	he 's a fat feller with a beard .	Red Dead Redemption.txt
32	miscarriage ? Pellar : Foul - tempered he is , and	he 's a fondness for hooch . Geralt : No	The Witcher 3 - Wild Hunt.txt
33	. He is a magician , I know him .	He 's a fool ... but , he is not	Red Dead Redemption.txt
34	me , after I served his enemies ? Vanasha :	He 's a forgiving man . Just smile a	Horizon - Zero Dawn.txt
35	know about the slums . Mireille , meet Cloud .	He 's a former SOLDIER and super strong .	Final Fantasy VII - Remake.txt
36	that . It 's a long story ... but	he 's a former noble . We met out	Horizon Forbidden West.txt
37	to know what he knows . Erend : But	he 's a friend ! Aloy : No , he 's	Horizon - Zero Dawn.txt
38	man , woman and rat in Heywood knows	he 's a fuckin ' shark . Pepe : My bro	Cyberpunk 2077.txt
39	... Bandit : What the hell ? Bandit : Black magic !	He 's a fuckin ' witch , get ' i m !	The Witcher 3 - Wild Hunt.txt
40	we might 've found our man ... and	he 's a gaudy one . Cloud : Yeah ... Leslie :	Final Fantasy VII - Remake.txt
41	' i m. No model citizen , maybe , but	he 's a good kid . NCPD Officer : Let	Cyberpunk 2077.txt
42	on edge before missions , but you ' know	he 's a good guy underneath it all .	Final Fantasy VII - Remake.txt
43	sure you do . And so does Uthid .	He 's a good man , so naturally the	Horizon - Zero Dawn.txt
44	. Though Warren obviously likes hanging with you ...	He 's a good guy . What do you	Life is Strange.txt
45	good guy . What do you mean ? Max :	He 's a good guy . A geek like	Life is Strange.txt
46	him on your terms , not Chloe 's .	He 's a good man ... He just-- Max :	Life is Strange.txt
47	do you want me to say , Jamie ?	He 's a good father ? A nice man ?	Red Dead Redemption.txt
48	... has spread all the way to Washington .	He 's a good man , he wants to	Red Dead Redemption.txt
49	wish you had n't killed James .	He 's a good kid -- just doing his	The Last of Us I.txt
50	you 're really cool . Cooler than Gabe ?	He 's a great kid . Alex : But does	Life is Strange - True Colors.txt
51	going on . Uncle : That boy over there ...	he 's a guard , for sure . Arthur Morgan :	Red Dead Redemption.txt
52	... a Chick Matthews , works at Guthrie Farm .	He 's a hand , I believe . Mr. Wróbel ...	Red Dead Redemption.txt

Figure 32. KWIC analysis of *he is | he's a*

53	chat with this pellar . Baron : Fair warning --	he 's a hard man to talk to .	The Witcher 3 - Wild Hunt.txt
54	n't say nothin' ... Bandit : Not enough	he 's a heretic , he 's also a	The Witcher 3 - Wild Hunt.txt
55	that despite the fact that I think	he 's a horse 's ass ... he knows	Red Dead Redemption.txt
56	to tell me that ? You 're right ,	he 's a jackass . Geralt : You 're right ,	The Witcher 3 - Wild Hunt.txt
57	one - man army . Jessie : Mmm , you think	he 's a keeper ? [There 's someone knocking	Final Fantasy VII - Remake.txt
58	days ! Jessie : Now more than ever ! Biggs :	He 's a keeper all right . Jessie : Yeah !	Final Fantasy VII - Remake.txt
59	' un 's seen no one , m'lord .	He 's a kiddie , must ' ave dreamt it .	The Witcher 3 - Wild Hunt.txt
60	witcher might have to kill . Even if	he 's a king . Kid : So King Foltest	The Witcher 3 - Wild Hunt.txt
61	Geralt : No . It 's not true . Kid :	He 's a liar . Kid : He ai n'	The Witcher 3 - Wild Hunt.txt
62	Morgan : Strange ? Penelope Braithwaite : Well , yes ,	he 's a little strange ... but also , so	Red Dead Redemption.txt
63	poster ... on the wall over there . Lawman :	He 's a low down huckster . He 's	Red Dead Redemption.txt
64	. I 've known him a few years .	He 's a loyal companion , cares for his	Horizon - Zero Dawn.txt
65	entry in his diary .] Arthur Morgan : (offscreen)	He 's a man who , not so long	Red Dead Redemption.txt
66	's a monster , but seems to me	he 's a man , just hideous as Ardal '	The Witcher 3 - Wild Hunt.txt
67	old friend of mine . This is Cloud .	He 's a merc . Wymer : Hah , you do	Final Fantasy VII - Remake.txt
68	's this guy ? Aerith : This is Cloud .	He 's a mercenary ... and currently my bodyguard .	Final Fantasy VII - Remake.txt
69	really want the rats out . Geralt : Triss ...	he 's a merchant . He makes his living	The Witcher 3 - Wild Hunt.txt
70	him , clothed him ... Heheheh , nah , for real .	He 's a military bot . Got a sweet	Cyberpunk 2077.txt
71	: The Carja talk about Hekarro as if	he 's a monster . Marshal Fashav : The Carja	Horizon Forbidden West.txt
72	beast ? My men call him Uma , claim	he 's a monster , but seems to	The Witcher 3 - Wild Hunt.txt
73	: At which point he reveals his face !	He 's a monster , there to steal Princess	The Witcher 3 - Wild Hunt.txt
74	invisible enemy ? [Everyone looks at him like	he 's a moron .] Cloud : Wearing robes . Came	Final Fantasy VII - Remake.txt
75	he owns the Vortex Club . Max : Yes ,	he 's a nasty piece of work . (Reported	Life is Strange.txt
76	a professional rival of mine ... James Langton :	He 's a nasty bastard . I did n'	Red Dead Redemption.txt
77	moment and passes the lasers .] Jessie : Huh .	He 's a natural ! Not too shabby . You '	Final Fantasy VII - Remake.txt
78	own water when Nathan is around now .	He 's a pharmacy simulator . Max : I do	Life is Strange.txt
79	... Arthur Morgan : He 's fine ... physically ... mentally	he 's a piece of work but ... who	Red Dead Redemption.txt
80	- I've naught , miss ... but my lord --	he 's a powerful man . He 's sure	The Witcher 3 - Wild Hunt.txt
81	is n't a SOLDIER anymore . Still ,	he 's a professional unlike the rest of	Final Fantasy VII - Remake.txt
82	stop it . Leave this mess to him .	He 's a professional . Jill : So am I.	The Last of Us - Part II.txt
83	a pussy cat . Javier Escuella : Exactly , yes	he 's a pussy ... cat . Ai n't	Red Dead Redemption.txt
84	. It 's over . Arthur Morgan : Oh , Dutch ...	he 's a rat . You know it and	Red Dead Redemption.txt
85	your filter next needs changing ! (to Cloud)	He 's a regular . Stock up here and	Final Fantasy VII - Remake.txt
86	: And you are ? Talanah : This is Ragurt .	He 's a scout with this caravan . He	Horizon Forbidden West.txt
87	not serious , are you ? Look at him !	He 's a scrawny little thing . I could	Final Fantasy VII - Remake.txt
88	that took you in ? ! Birna : Good men !	He 's a servant to an Craite , a	The Witcher 3 - Wild Hunt.txt
89	's the goddess of the moon , whereas	he 's a simple shepherd . Beside her is	Horizon Forbidden West.txt
90	bunch more . Nate : A bunch ? Sam . Elena :	He 's a sneaky one ... Nate : (chuckles) Yeah .	Uncharted 4.txt
91	heard of him ? Aloy : Yeah . Petra : But	he 's a story best told over a	Horizon Forbidden West.txt
92	a couple of times , but he 's ...	he 's a strange one . Arthur Morgan : Fear	Red Dead Redemption.txt
93	we do ... but he has his suspicions .	He 's a talker . Actually , you know what ...	Final Fantasy VII - Remake.txt
94	. Cloud : Alright . Tifa : Wh - what now ? Cloud :	He 's a talker . [He takes out his	Final Fantasy VII - Remake.txt
95	story with you and David ? Kate : Well ...	He 's a total paranoid ass ! He thinks	Life is Strange.txt
96	: But he 's a friend ! Aloy : No ,	he 's a traitor . I do n't	Horizon - Zero Dawn.txt
97	to him , Arokkeh . Arokkeh : Not a chance .	He 's a traitor . Aloy : Dekka , what 's	Horizon Forbidden West.txt
98	der Linde : (laughs) I love that Hosea .	he 's a true artist . [They pull out	Red Dead Redemption.txt
99	him ? Vespula : No ! I mean ... Tell him	he 's a two - faced snake , but ... it	The Witcher 3 - Wild Hunt.txt
100	an hour before the machine trouble started .	He 's a very important man or so	Horizon Forbidden West.txt
101	left ... but now they tolerate him , because	he 's a vicious snob . Families are ... are ...	Red Dead Redemption.txt
102	me about this Colonel Favours ? Eagle Flies :	He 's a vile man . He and his	Red Dead Redemption.txt
79	... Arthur Morgan : He 's fine ... physically ... mentally	he 's a piece of work but ... who	Red Dead Redemption.txt
80	- I've naught , miss ... but my lord --	he 's a powerful man . He 's sure	The Witcher 3 - Wild Hunt.txt
81	is n't a SOLDIER anymore . Still ,	he 's a professional unlike the rest of	Final Fantasy VII - Remake.txt
82	stop it . Leave this mess to him .	He 's a professional . Jill : So am I.	The Last of Us - Part II.txt
83	a pussy cat . Javier Escuella : Exactly , yes	he 's a pussy ... cat . Ai n't	Red Dead Redemption.txt
84	. It 's over . Arthur Morgan : Oh , Dutch ...	he 's a rat . You know it and	Red Dead Redemption.txt
85	your filter next needs changing ! (to Cloud)	He 's a regular . Stock up here and	Final Fantasy VII - Remake.txt
86	: And you are ? Talanah : This is Ragurt .	He 's a scout with this caravan . He	Horizon Forbidden West.txt
87	not serious , are you ? Look at him !	He 's a scrawny little thing . I could	Final Fantasy VII - Remake.txt
88	that took you in ? ! Birna : Good men !	He 's a servant to an Craite , a	The Witcher 3 - Wild Hunt.txt
89	's the goddess of the moon , whereas	he 's a simple shepherd . Beside her is	Horizon Forbidden West.txt
90	bunch more . Nate : A bunch ? Sam . Elena :	He 's a sneaky one ... Nate : (chuckles) Yeah .	Uncharted 4.txt
91	heard of him ? Aloy : Yeah . Petra : But	he 's a story best told over a	Horizon Forbidden West.txt
92	a couple of times , but he 's ...	he 's a strange one . Arthur Morgan : Fear	Red Dead Redemption.txt
93	we do ... but he has his suspicions .	He 's a talker . Actually , you know what ...	Final Fantasy VII - Remake.txt
94	. Cloud : Alright . Tifa : Wh - what now ? Cloud :	He 's a talker . [He takes out his	Final Fantasy VII - Remake.txt
95	story with you and David ? Kate : Well ...	He 's a total paranoid ass ! He thinks	Life is Strange.txt
96	: But he 's a friend ! Aloy : No ,	he 's a traitor . I do n't	Horizon - Zero Dawn.txt
97	to him , Arokkeh . Arokkeh : Not a chance .	He 's a traitor . Aloy : Dekka , what 's	Horizon Forbidden West.txt
98	der Linde : (laughs) I love that Hosea .	he 's a true artist . [They pull out	Red Dead Redemption.txt
99	him ? Vespula : No ! I mean ... Tell him	he 's a two - faced snake , but ... it	The Witcher 3 - Wild Hunt.txt
100	an hour before the machine trouble started .	He 's a very important man or so	Horizon Forbidden West.txt
101	left ... but now they tolerate him , because	he 's a vicious snob . Families are ... are ...	Red Dead Redemption.txt
102	me about this Colonel Favours ? Eagle Flies :	He 's a vile man . He and his	Red Dead Redemption.txt
103	! Ah , God damn it . I 'm sure	he 's a ways off by now . Just	Uncharted 4.txt
104	this ' Saka scum might actually prove useful .	He 's a well - trained dog - needs orders ,	Cyberpunk 2077.txt
105	King 's no fantasy , it seems . Except ,	he 's a werewolf . Girl : What happened to	The Witcher 3 - Wild Hunt.txt
106	'll let your host introduce me . Reuven :	he 's a witcher . The very one who	The Witcher 3 - Wild Hunt.txt
107	: You daft ? Ca n't you see	he 's a witcher ? Matthias : What 's a	The Witcher 3 - Wild Hunt.txt

Figure 33. KWIC analysis of *he is | he's a*

Taken together, these results suggest that male characters are more represented than female. They are mentioned more often than female characters in dialogues, even though the number of female main characters is not less than male main characters. By conducting a deeper frequency research, it was found that games with female main characters are more inclusive than games with male main characters, as the latter have a higher normalised frequency for the pronoun he. This result seems to reject the idea that "male characters greatly outnumber female characters in video games, contributing to the characterization of gaming spaces as masculine" (Heeter 2014, p. 373).

In addition, female characters are referred to in regards of their appearance, but not in a sexualised way. The idea that "console and PC game worlds are still largely about epic struggles and portray women in stereotypes" (Heeter 2014, p. 373) seems to be less and less relevant for recent games. Some biased representations were still present, as they are portrayed as the ones in need and not very wise. However, they were also associated with strength and courage, which are characteristics that are usually more connected with masculinity and unusual for female characters..

On the other hand, male characters were referred to in terms of their appearance only once, but still in some kind of biased way. The male character is expected to be physically big and strong, like his opponent. Another aspect that emerged from the research, is that men were expected to hide emotions and behaviours that did not reflect masculinity, for instance softness and delicacy. On the other hand, the majority of the expressions associated with male individuals are related to strength and powerfulness, which align with the stereotype of man as strong and dominant.

3.3 Analysis of Gendered Nouns (woman/man)

This section will focus on the analysis of the gendered nouns *woman* and *man*, adopting corpus linguistics tools, in order to analyse whether their representation is biased according to gender stereotypes.

Firstly, a frequency research was conducted, to verify how often those nouns are mentioned in the sub-corpora. Figure 34 shows a comparison of the frequency of the words *man* and *woman*. As can be seen, the noun *man* is mentioned more than twice as

frequently as the noun *woman*. More precisely, men are named 2.59 times more than women. This means that men are cited more often than women, like in the case of the pronoun analysis.
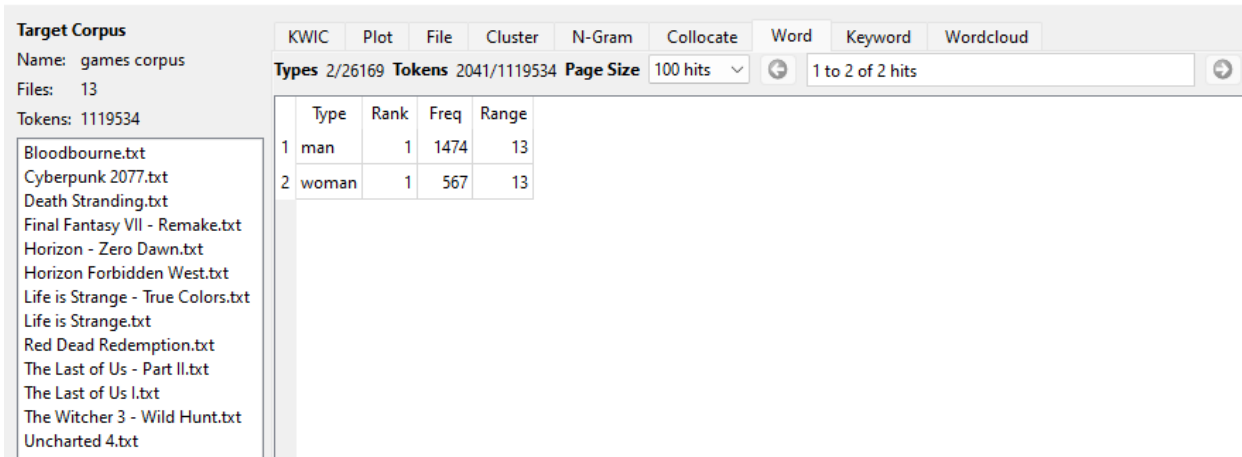
Figure 34. Comparison of word frequency analysis for the terms *woman* and *man*

A cluster analysis might be useful to understand the distribution of those terms among the corpora. Figure 35 and 36 show respectively the frequency of "*man*" and "*woman*" in each game. Surprisingly, two games with a male main character ('*The Witcher 3 – Wild Hunt*' and '*Red Dead Redemption*') have the most equal presence of both terms. On the other hand, videogames with female main characters not only do not mention the noun *man* very frequently, but they also do not mention the term *woman*. For instance, the term woman in '*The Last of Us – Part II*' is mentioned only once, despite the fact that the story revolves around two female characters.
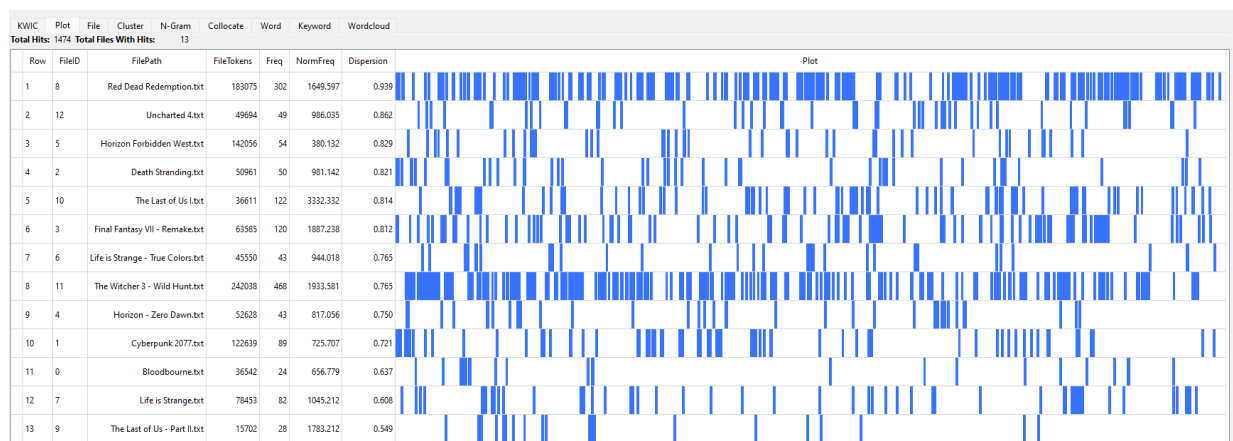
Figure 35. Plot analysis of the term *man*
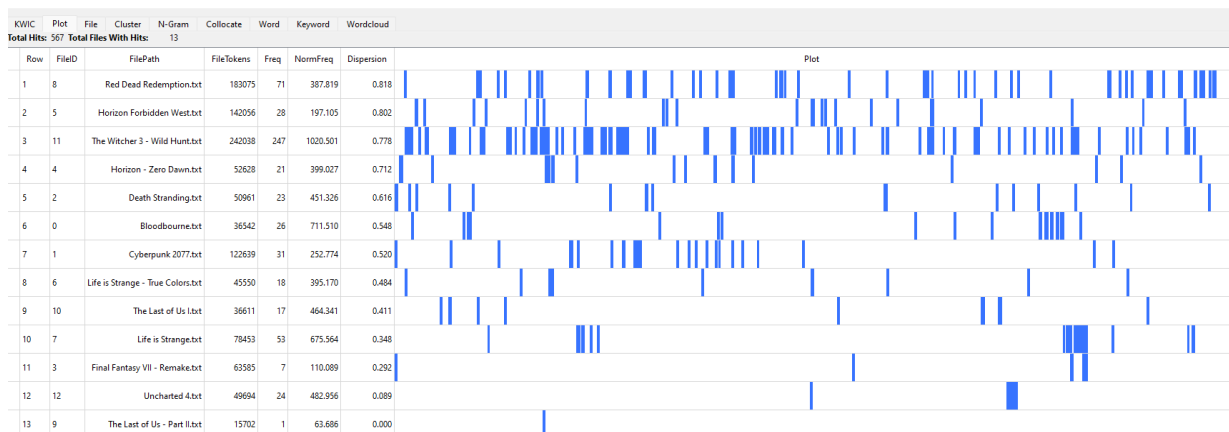
Figure 36. Plot analysis of the term *woman*

In order to see which words these terms are most frequently associated with, it is necessary to conduct a cluster research. The first term to be analysed is *woman.* Since the possible presence of adjectives that precede the noun is more likely to be relevant and show how they are represented, the research will focus on what precedes the term *woman*. The results of the cluster analysis are shown in Figure 37.

The most frequent words are articles, but the following terms are adjectives. Those adjectives (*old*, *young*) refer to the age. Surprisingly, adjectives that refer to the physical appearance were rare. The only adjective that refers to appearance refers to the hair colour. Figure 38 shows the KWIC analysis that results when clicking on 'haired woman'.

Figure 38. KWIC analysis of '*haired woman*'

Surprisingly, this expression is present in only one game, and it refers to the hair colour. The only adjectives that refers to appearance are more likely to be used to identify that person. That is to say, the sentences they appear in are like '*ever seen an ashen-haired woman around here?*', '*looking for an ashen-haired woman*', '*see a raven-haired woman here?*'. This means that appearance is only used to identify that person, and not because appearance is a key characteristic that a woman has. Another adjective that might refer to appearance is '*black*'. However, it is more likely to have to do with nationality and ethnicity rather than only a matter of appearance.

The second term that was analysed is *man*. As with the previous research, a cluster analysis was conducted in order to see whether there are adjectives that can reveal some

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patterns. Figure 39 Shows the results of this analysis. As for the previous analysis, the most common words that precede the noun are articles, but later words are mostly adjectives.

	Cluster	Rank	Freq	Range
1	a man	1	198	13
2	the man	2	103	11
3	old man	3	61	7
4	oh man	4	45	8
5	good man	5	35	10
6	this man	6	26	4
7	that man	7	23	7
8	you man	7	23	6
9	no man	9	21	5
10	young man	10	20	6
11	one man	11	16	7
12	ellie man	12	13	1
13	your man	12	13	7
14	hiker man	14	12	1
15	big man	15	11	4
16	fat man	15	11	2
17	here man	15	11	3
18	every man	18	10	4
19	of man	18	10	4
20	scared man	18	10	1
21	elderly man	21	8	1
22	it man	21	8	3
23	me man	21	8	4

Figure 39. Cluster analysis for the word *man*

A comparative analysis of the results reveals that men are referred to in terms of their age as frequent as women. However, the presence of adjectives that refer to physical appearance in the first results was surprising. Those adjectives are '*big*' and '*fat*'. As mentioned earlier, it would have been expected to find these type of adjectives in the analysis of the term woman, as they are usually represented as hyper-sexualised both in their appearance and behaviour (Blackburn & Scharrer 2018). On the contrary not only women are not portrayed in a sexualised way, but there is no mention of their appearance. This means that the statement according to which females are represented as more attractive than males (Jaggi 2014 and Ivory 2006; Scharrer 2004 mentioned in Jaggi, 2014) does not apply to these results.

CONCLUSION

The aim of this dissertation was to verify whether videogames released in the last ten years included a biased representation of gender. To do so, corpus linguistics tools were used and specific researches were conducted. The research focused only on some chosen terms to verify whether a biased representation of gender was found. The chosen terms were gendered pronouns *he* and *she*, and gendered nouns *man* and *woman*. Another aspect that was analysed was the quantitative representation of gender, that is how frequent both gender were mentioned in the games. To do so, a frequency analysis of the pronouns *he* and *she* was conducted. This analysis showed that videogames with female main characters include a more balanced mention of the pronouns *he* and *she*, in comparison to videogames with male main characters, where there is a predominance of reference to male characters. In other words, games with female main characters have a more balanced representation of male and female characters, while games with male main characters seem to give more relevance to male characters.

In addition, the qualitative analysis showed that some stereotypes about gender that were expected to be found were absent, or not very present. For instance, women are not represented in terms of their appearance and they are not sexualised. Only three expressions that referred to women's physical appearance were found in the entire corpus (*small girl, real pretty girl, fine lady*). Two of those expressions described women as attractive, but not in a sexualised or improper way. In addition, a collocation analysis for the expressions "*he is*" and "*she is*" were conducted. The results showed that women are not represented as liars and untrustworthy, but instead positive representations were found. Women are portrayed as strong and courageous, which are characteristics that are usually associated to masculinity. They are referred to as "*hero*" and "*fighter*", which means that women can play those roles as well.

However, some stereotypes were found as well. One of them is the so called damsel in distress, which represents women as the ones that need to be saved by male characters. This result emerged from the compared analysis of the verbs "*need* and "*want*" when preceded by gendered pronouns. This analysis showed that *she* is more often followed by

the verb *need* rather than *want*, while *he* is more often followed by *want*. Women are then are more often portrayed as the ones in need. A further search showed that what women need are usually "*a healer*", "*a medic*" and "*rest*", which implies that they are weak and get hurt more easily, as those expressions are not present related to men.

Another aspect that emerged from the collocation research is that women are referred to with slurs, which does not happen with men. Those slurs portray women as spiteful, overbearing, promiscuous or immoral. Expressions that carry the same derogatory meaning were not found referring to men.

On the other hand, men are associated with characteristics that align with a biased idea of the "real men", that sees them as aggressive and tenacious. A collocation analysis showed that men are referred to with expressions such as "*powerful man*", "*a man of honor*", "*a man of his word*". On the other hand, expressions such as '*he's a delicate flower underneath*' and '*deep down, he's a big softie*' were found. Those expressions support the idea that men are not allowed to expressively show emotions or behaviours that are related to femininity, such as softness or delicacy, but instead they need to hide them not to look too feminine.

However, it should be taken into consideration the fact that these results might not be representative of the whole videogame industry. This is because only a limited number of games were chosen. It should also be considered that, comparing to the results of the pronouns analysis, the research concerning nouns showed limited data. That is to say, since those nouns are not mentioned as often as pronouns, the results were more limited, but still relevant to some extent.

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L'industria videoludica ha visto un'importante crescita negli ultimi anni, diventando la seconda industria più profittevole dopo quella televisiva. In futuro si prospetta un'ulteriore crescita, La stessa industria si aspetta crescerà anche in futuro, diventando sempre più importante e coinvolgendo sempre più utenti. I videogiochi possono essere dunque considerati dei media, in quanto veicolano messaggi che possono influenzare la visione della realtà dei giocatori. Lo scopo di questa tesi è di analizzare come vengono rappresentati i generi femminili e maschili all'interno dei videogiochi, attraverso l'analisi testuale di dialoghi presenti al loro interno, e con l'ausilio degli strumenti della linguistica dei corpora. Per fare ciò ho deciso di focalizzarmi sull'analisi dei pronomi *"he"* e *"she"*, e sui termini *"man"* e *"woman"*, che sono quelli più comuni quando si pensa al concetto di genere. Nello specifico, sono stati analizzati videogiochi rilasciati nel periodo 2012-2022, per avere una visione più recente. Inoltre, i videogiochi selezionati appartengono a quelli che vengono definiti AAA o tripla A. Ciò significa che sono stati sviluppati da grandi società sviluppatrici, che possono contare su un grande team di sviluppatori. La ragione per cui non sono stati scelti videogiochi di sviluppatori indipendenti è che i videogiochi di grandi aziende spesso e hanno più importanza a livello mediatico e sono più influenti. Infine, i videogiochi selezionati appartengono ai generi azione e avventura e RPG. Questi sono stati scelti perché includono una storia più o meno sviluppata e spesso i personaggi sono caratterizzati in modo molto dettagliato.

La mia analisi è divisa in tre capitoli. Nel primo capitolo viene fornita un'introduzione agli studi di genere, con particolare attenzione alle definizioni di ruolo di genere e identità di genere. Questi due concetti aiutano a comprendere come all'interno della società siano presenti degli stereotipi legati ai due generi, e di come ci si senta, anche in modo inconsapevole, obbligati a conformarsi ad essi. Alcuni esempi possono essere ricondotti all'associazione al genere femminile di concetti come amorevole, delicatezza, emotiva, sentimentale, mentre al genere maschile vengono spesso collegati termini come aggressivo, ambizioso, coraggioso, dominante, razionale. Di conseguenza, coloro che si

discostano da queste rappresentazioni non vengono visti di buon'occhio dalla società e possono diventare oggetto di discriminazione. La discriminazione di genere è presente anche nel linguaggio. Attraverso esso si possono veicolare determinati messaggi che riguardano anche il genere. Per esempio, il fatto che per riferirsi a un gruppo composto da individui di diversi generi venga usato il maschile generico viene considerato discriminatorio o degradante, perché dà l'idea che maschi e femmine appartengano a ruoli sociali diversi. In questo caso il maschile viene preferito al femminile perché considerato più importante. Per ovviare a questa e altri tipi di discriminazione nel linguaggio è stato introdotto quello che viene definito come "linguaggio inclusivo", che include, dove possibile, forme neutre.

Il secondo capitolo di questa tesi si focalizza sulla metodologia adottata per svolgere l'analisi, ovvero sulla linguistica dei corpora. La linguistica dei corpora è una disciplina scientifica che, attraverso l'uso di strumenti di analisi statistica e quantitativa, analizza le regolarità linguistiche presenti nei testi. L'oggetto di analisi sono appunto i corpora, delle collezioni di testi selezionati e organizzati per condurre le analisi linguistiche. Esistono due tipologie principali di corpora: generale (o di riferimento) e specialistici. I corpora generali sono orientati a rappresentare tutti gli aspetti caratteristici di una lingua e si propongono come risorsa di riferimento per la descrizione di tale lingua. I corpora specialistici, invece, sono orientati alla descrizione di una particolare varietà del linguaggio, come può essere un dialetto o un particolare registro, o ad uno specifico dominio applicativo, come può essere il linguaggio sportivo, medico o economico. Poiché il corpus analizzato in questa tesi è composto da testi appartenenti ad uno specifico ambito, che è quello video ludico, si può dire che si tratta di un corpus specializzato. Questo capitolo si sofferma inoltre sugli strumenti della linguistica dei corpora che sono stati utilizzati specificatamente per questa ricerca, ovvero di strumenti sia qualitativi che quantitativi. Nello specifico, gli strumenti utilizzati per la presente analisi sono la frequenza e la collocazione. Inoltre, è stato discusso come poter costruire un corpus specificatamente per l'analisi di testi presenti all'interno dei videogiochi. Dato che si tratta

di un media particolare, i cui testi e dialoghi non sono lineari come quelli di un film o serie tv, ma che possono cambiare in base alle scelte del giocatore, è stato necessario analizzare i diversi metodi per poter estrarre i testi. Un metodo è quello di trascrivere i dialoghi mentre si gioca, ma si tratta di un processo lungo, specialmente se si intende analizzare un gran numero di videogiochi. È inoltre un metodo economicamente importante, dato che sarebbe necessario acquistarli se non si possiedono. Un altro metodo è quello di reperire i testi da blog e fan page su internet. Nella maggior parte dei casi i testi che si trovano qui sono accurati e completi, ma è consigliabile controllare sempre la loro completezza. Il metodo migliore e più completo per ricavare i testi è sicuramente quello di estrarli direttamente dal file di gioco. L'unico limite che presenta questo metodo, oltre al fatto di dover possedere il gioco, è che è possibile applicarlo solo ai giochi scaricabili dalla piattaforma Steam, disponibile su PC. Questo metodo però rimane il più affidabile in termini di completezza, in quanto si è sicuri che i testi estratti sono integrali.

L'ultimo capitolo espone i risultati della ricerca. Innanzitutto, è stato descritto l'oggetto dell'analisi, ovvero la struttura del corpus analizzato. Esso è composto dai dialoghi di 13 videogiochi che contano circa un milione di parole. Per ogni videogioco, poi, è stato fornito un riassunto che potesse dare un'idea del contesto e di cosa trattano. In seguito, l'analisi vera e propria è stata illustrata. La prima sezione dell'analisi si focalizza sull'analisi dei pronomi "*he*" e "*she*". Nello specifico, è stato prima verificato il grado di frequenza di tali pronomi all'interno dei testi, per capire se ci fosse una prevalenza di quello maschile o femminile. Da ciò è emerso che nei videogiochi con un personaggio principale donna i due generi sono presenti in modo più equo, mentre in quelli con personaggi principali uomini vi è una prevalenza del genere maschile. In seguito, sono stati analizzati aggettivi, verbi ed espressioni associati a ciascun pronome, per verificare in che modo questi vengono rappresentati. Lo stesso tipo di ricerca è stato condotto per i nomi "*man*" e "*woman*".

Da questa analisi è emerso che, al contrario delle aspettative, la presenza di stereotipi legati al genere è molto limitata. Le donne vengono rappresentate come eroine, coraggiose

e forti, tutte caratteristiche che solitamente sono legate al genere maschile. Inoltre, i riferimenti all'aspetto fisico dei personaggi femminili sono molto limitati e non implicano una loro sessualizzazione, come spesso avviene nel contesto dei videogiochi. Tuttavia, sono state trovate espressioni che le rappresentavano come deboli, in quanto bisognose di aiuto. Nello specifico i personaggi femminili sono quelli che più spesso hanno bisogno di medicazioni e sostegno medico, in quanto più esposti e più facili da colpire in battaglia o durante gli scontri. Inoltre, sono state trovate alcune espressioni denigratorie nei loro confronti, come "*bitch*" o "*whore*", cosa che non avviene nel caso dei personaggi maschili. Quest'ultimi, invece, vengono associati a espressioni che si ricollegano al concetto di "uomo vero", ovvero forza, coraggio, potere. Inoltre, sono state trovate espressioni che implicassero il fatto che gli uomini non possano esprimere i propri sentimenti in modo esplicito, ma che debbano invece in qualche modo sopprimerli, per non apparire meno mascolini. Infine, è stata riscontrata la presenza dell'espediente narrativo della "damigella in pericolo", per cui uno o più personaggi uomini devono percorrere un viaggio e affrontare una serie di sfide per salvare la damigella in pericolo. Nel caso specifico di questa analisi le damigelle in pericolo sono le figlie o mogli di personaggi maschili, le quali vengono esplicitamente rappresentate come coloro che devono essere salvate o ritrovate dai rispettivi padri o mariti.

Tuttavia, è necessario tenere in considerazione il fatto che questa analisi presenta dei limiti. Innanzitutto, il numero di videogiochi analizzati è limitato, anche se sono emersi comunque risultai rilevanti. Un campione più grande di videogiochi porterebbe sicuramente a risultati più ampi e specifici. In secondo luogo, un'analisi di ulteriori termini che riguardano il genere, oltre ai pronomi e ai nomi presi in esame in questa tesi, sarebbe utile per avere un quadro più completo di come uomini e donne vengono rappresentati all'interno dei videogiochi.