Is My Avatar MY Avatar? Character Autonomy and Automated Avatar Actions in Digital Games

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ABSTRACT

This paper will explore the borders between the avatar and character dimensions of the player figure, as outlined by Vella (2015), particularly in cases where this line is blurred. Through investigation of five different examples, I suggest we use the measures of *avatar control* and *character complexity* to study the relationship between avatar and character in a given instance. *Avatar control* refers to the amount of agency the player has in a given instance in a game compared to the default mode of agency, whereas *character complexity* builds on transmedia and literary theory approaches to characters, to explore what constitutes complexity of the character in question. The analysis allows us to assess whether the instance can be considered representing either *character autonomy* or *automated avatar actions*, and in turn may help us understand the relationship between the player, the avatar, and the character.

Keywords

Avatars, Characters, Agency, Character Complexity, Avatar Control, Subjective Avatars

INTRODUCTION

In 1998, Michael Mateas presented the idea of subjective avatars; avatars that have "[...] autonomous emotional reactions to events in the world and keep track of story context" (Mateas 1998, 1). These avatars, Mateas envisioned, could be developed to allow the user to explore and experience a story from the perspective of the autonomous other, resulting in richer understandings of the underlying characters (ibid).

While Mateas' article outlines a rather specific future way of designing AI for avatars in digital games, it seems that many modern games have by now incorporated various ways of representing the player-controlled entity as an independent character that can at times be perceived as an autonomous being. The most extreme of such examples can be found in story-driven and linearly structured games that force upon the player cutscenes that are used to expand our familiarity with the character we are controlling, while exactly negating this control. Such instances remove every inch of control that the player previously had of the avatar, as the avatar transcends into a pure character, as we know the concept from the study of literature and film.

The past 20 years of studying digital games have been dedicated to how these artefacts are different from literature and film. They introduce new ways of presenting fictional

characters, while blurring the line between avatar and character. This is particularly evident in moments where our control of the avatar is not negated but rather restricted, and the avatar appears to demonstrate what may resemble autonomy, or at least pretend-independence: when Kratos takes the freedom to rip the head off Helios in *God of War III* (SCE Santa Monica Studio 2010), when all we did as players were pressing the O-button on our controller, curiously awaiting whatever action this input may translate into; when Aloy in *Horizon: Zero Dawn* (Guerrilla Games 2017) refuses to draw her bow when standing on the cliff at the Greatrun Hunting Grounds, explicitly stating that this would be unsportsmanlike; when Guybrush Threepwood takes the liberty to use up half the items of his inventory when battling the sheriff in a cutscene-like moment in *The Secret of Monkey Island* (LucasArts 1990); when Agent 47 in *Hitman: Absolution* (IO Interactive 2012) changes to another cover than that which the player wanted him to; or when Gordon Freeman automatically lowers his weapon whenever he encounters a friendly NPC (Non-Player Character) in *Half-Life 2* (Valve Corporation 2004), making it appear impossible to injure or kill any friendly NPCs, when in fact it is not.

Each of the five examples listed present a unique way of limiting the player's interaction with the gameworld through restricted avatar control. Some of them contribute strongly to the characterization of the player figure. Yet, the contributions to the characterization of Kratos' action may seem significantly stronger than that of Aloy, while we may question if Gordon Freeman's way of automatically lowering his weapon can in any way be understood in relation to characterization, or if this is simply a functional aspect of gameplay. The five paradigmatically selected examples will be used to explore *character autonomy* and *automated avatar actions*, two concepts that this paper will suggest to account for the relationship between player, avatar, and character, in these peculiar moments of negotiation of control.

AVATARS, PLAYABLE FIGURES, AND PLAYABLE CHARACTERS

As has been previously pointed out by many scholars applying the concept of *avatar* in the context of digital games (e.g. Genvo 2009; Georges 2012; Jørgensen 2009; Mukherjee 2012; Vella 2015, to name a few), it is important to consider the traditional Sanskrit meaning of the term, to understand how and why it appears suitable in the study of digital games.

In his paper on the etymological origins of the term *avatar*, Mukherjee presents that "'[a]vatar' comes from the words 'ava' and 'tri' meaning 'below' and 'crossing' respectively – thus an avatar is the 'crossing-down' of a god to free humanity from evil" (ibid, 1). Several gods — in most myths it is Vishnu, but also Ganesha, and Shiva — manifest themselves as avatars, and in doing so "mingle the divine and human" (ibid, 1). Vella states, that, when tracing the etymology to the Hindu doctrine of the avatar, "the term describes a move across ontic domains: more specifically, it refers to the material manifestation, within a subordinate ontic realm, of a consciousness belonging to a higher domain" (Vella 2015, 217).

Exploring Vella's interpretation further, we see that the avatar is special in the context of digital games; it is the player's tool for interacting with the gameworld, and as such becomes "the singular point of origin of all the lines of action the player directs towards the components of the game system" (ibid, 219). However, when engaging with digital games, we are not merely moving between two different ontic levels, but rather three. Vella presents this triadic structure through the division of the *playable figure* into respectively *avatar* and *character*: as an avatar, the playable figure is a game component

under the player's direct control, which can be understood as an ontological framing of the "game-as-system"; and as a character, the playable figure is a representation of an individual within a specific, ontological frame of the "game-as-heterocosm" (ibid, 21; 108-109). That is, we move between the three ontic realms of the physical reality in which we are located in front of our console or computer, the ludic heterocosm (or fictional world), and the ludic system.

While Vella's distinction between avatar and character is specifically useful for this particular study, as it allows for a clear distinction between the avatar as the point of control of the player, and the character as a representation of an other within a fictional world, it is important to note that there are many other academic approaches to and understandings of the video game avatar and related phenomena.

One of the most quoted scholars on the topic of avatars is Rune Klevjer, who in his 2007 dissertation outlines a general theory of avatars as prosthetic extensions of their players (Klevjer 2007). In this theory, he emphasises the importance of real-time control in arguing that "the more an avatar takes on behaviours that reflect either its own agency or which emerge as passive responses to forces and agents in the environment, the less it functions as a prosthesis to the body-subject, and the more its status as an avatar is being weakened" (ibid, 94). While the approach to avatars as prosthetic extensions appears useful for many types of studies of games, the reliance on real time control is a rather limiting factor; it will, for example, exclude most point-and-click games from the category of avatar-based games, simply because of their input/output-scheme. As this paper will explore avatar-based games in general, and not exclusively those that present this type of real-time control, Klevjer's idea of what constitutes avatar-ness seems problematic and must therefore be modified if applied to games with limited real-time control. However, Klevjer's theory points to the discussion of agency in relation to avatars and characters and puts into question whether the term *avatar* should be reserved for entities that at any given point allow the player to exert power in the gameworld.

Another recognized scholar to have worked with the concept of avatars is Peter Bayliss, who outlines some specific differences between avatars and characters, understood through the idea of *the locus of manipulation*. The locus derives from the terminology applied in the Game Ontology Project (see e.g. Zagal et al. 2005) and describes "the in-game position of the player's ability to assert control over the game-world, whether this is a visible character, an implied avatar, or a graphical user interface cursor" (Bayliss 2007, 1). Bayliss states that this locus, when approached using the idea of embodiment, can help us distinguishing between the avatar and the character: The player's intentions are manifested through the locus of manipulation as the avatar, whereas the locus of manipulation as a separately embodied entity becomes a character, allowing constraints to be explained as characteristics, functions, and narrative background. As with Klevjer's definition emphasizing real-time control, Bayliss' understanding of avatar brings into the theory the question of agency, and whether the presence of a character dimension of the player figure will automatically alter the player's agency and avatar control.

The following argument is most strongly informed by the theories of avatars (and characters) suggested by Vella, Klevjer, and Bayliss, yet a number of further observations on the topic are noteworthy in light of this particular study. Both Alexis Blanchet (2008), Emma Westecott (2009), and Fanny Georges (2012) conceive of the avatar as a marionette or puppet, controlled by the player, who thus assumes the role of a puppeteer. This relationship can also be understood as prosthetic in the sense that the puppeteer,

through physical manipulation of its strings, is in control of the movement of the puppet (Blanchet 2008, paragraph 8). However, it differs significantly from the other approaches outlined in that it acknowledges the in-built representation of a fictional other in the puppet itself; the avatar-puppet is pre-defined as a character (Georges 2012, 35).

Moreover, several scholars have approached something that we might understand as equivalent, or at least very similar to, the avatar, namely the *player/playable character* (Newman, 2002; Lankoski 2011; Meretzky, 2001). Building on the terminology introduced in Meretzky's (2001) Gamasutra post, *Building Character: An Analysis of Character Creation*, in which the player character (or PC) is defined simply as "characters under the player's direct control" (ibid), Lankoski presents a framework for analyzing player-engagement with such PCs. This framework is divided into two distinct processes that are united in the engagement with the PC: *goal-related engagement* and *empathic engagement* (Lankoski 2011, 294). Particularly the process of empathic engagement is of relevance to this article, as Lankoski outlines how PCs are constructed by the system and recognized by the player through four categories of methods for guiding and limiting the player's choices:

- Goals of a player character
- Possible and impossible actions
- Predefined functions of a player character
- Cutscenes

(ibid, 300, based on Lankoski et al. 2003)

While Lankoski's way of understanding the PC takes for granted the distinction between avatar and character, central to this paper, his overall study, in particular the list outlined above, is very relevant for understanding *character autonomy* as means for limiting the possible player actions in a game.

Finally, it seems important to be aware of the current trend of approaching the study of avatars in digital games from a phenomenological perspective. Many of the scholars whose work has already been introduced approach the study of games and avatars through phenomenology, e.g. by incorporating the ideas of philosophers such as Merleau-Ponty (Klevjer 2007), Husserl (Vella 2015), and Sartre (Kania 2017). The three studies are essentially very different from each other, but nonetheless share the one common feature that they assume certain philosophical perspectives that can be argued to be remotely similar, even if only through the core principles of phenomenology. These variations over the similar phenomenological themes should not only be understood in relation to their implications for the research methods of the different projects. It is important to understand that this specific way of making sense of the world situates the study of avatars within a post-structuralist discourse in which not only our state-of-being, but also the very fundamental relationship between subjectivity, perception, and embodied interaction, is put under scrutiny.

CHARACTERS IN LITERATURE, TRANSMEDIA, AND GAMES

One of the central points in Lankoski's (2011) study of PCs is, that characters in video games are different from the characters we meet in traditional storytelling media, such as literature, theatre, and film. Yet, much game specific scholarship of avatars and characters tends to rely on theories developed for the study of literature: Frasca (2001) turns to Forster's (2002 [1927]) distinction between flat and round characters of the novel, to account for the flatness of video game characters in general, and particularly in

The Sims (Maxis 2000); Lankoski et al. (2003) relate their work to that of Rimmon-Kenan (2003) to account for how characters are constructed; and Vella (2015) builds on Margolin's (1986) characterization statements to explore the character-dimension of the playable figure.

Because *character autonomy* and *automated avatar actions* will be explained in relation to the concept of character complexity, a framework that accounts for such complexity is necessary. While Forster's (1985 [1927]) flat/round distinction deserves an honorable mention here, it is in no way detailed enough to account for the intricate complexity of character representation in any medium. Instead, I will very briefly introduce Bertetti's (2014) theory of transmedia characters along with Margolin's characterization statements, as the two theories provide sufficient levels of granularity, while the former deals explicitly with characters independent of media, and the latter has been revised in the context of games by Daniel Vella (2015).

Bertetti's (2014) work is based on the notion that transmedia characters cannot and should not be understood merely as semiotically and narratologically immanent entities related to a single text. Instead, he approaches them as cultural and social constructs, albeit manifested by texts. The transmedia character is thus defined as "a fictional hero whose adventures are told across different media platforms, each one giving more details on the life of that character" (Bertetti 2014, 2345).

Following the Aristotelian distinction of action and character, Bertetti distinguishes between two different identities of the character: *existential identity* and *fictional identity*, both of which consists of several sub-identities: The *existential identity* can be understood as consisting of a *proper identity*, that is further broken down to a *figurative identity* (figurative attributes as e.g. appearance, qualities, proper name, image, etc.), a *thematic identity* (according to Greimas' (1988) thematic roles), and a *relational identity*, based on the relationship between character and the world around him. The *fictional identity* consists of three sub-identities: an *actantial identity*, which refers to the structural role of the character (according to Greimas' actantial model), a *modal identity*, based on the different modalizations of the character, i.e. the subject's ability, desire, knowledge, and obligation (Prince 1987, 54), and an *axiological identity*, based on the values guiding the actions of the character (Bertetti 2014, 2348-2349).

Whereas Bertetti's work differs to a great extend from Margolin's original characterization statements, there are significant overlaps between the theory of transmedia characters and Daniel Vella's revision of Margolin's theory. As such, Vella's work becomes a bridge between the otherwise unrelated works of Margolin and Bertetti. The table below illustrates how Margolin's original work and Vella's game-specific revision differ, and it can be seen that many of Vella's static mimetic elements resonate with Bertetti's identities:

Vella's categories	Margolin's categories
Static mimetic elements	**Statements about static mimetic elements**
<u>Represented elements</u>	Name
Name	Appearance
Physical appearance	Customs
Costume(s)	Habits
Voice	Man-made and natural setting or environment
Animations	
<u>Contextual elements</u>	**Statements about dynamic mimetic elements**
Possessions	
Environment	Verbal acts
Role	Mental acts
<u>Mechanical elements</u>	Physical acts
Capabilities and limitations	
Passions	**Statements about formal textual patterns**
Goals	Analogies
Attributes	Parallels
Development	Contrasts
Dynamic mimetic elements	Repetitions
Character actions	Graduations
Player actions	Stylistic features
Formal textual patterns	
Analogies	
Parallels	
Contrasts	
Groups	
Style	

Table 1: Vella's revised categories of Margolin's characterization statements (Vella 2015, 375-400) next to Margolin's original categories (Margolin 1986, 206)

Vella adds to Margolin's framework a few elements specific to the video game medium, creating a list of static- and dynamic mimetic elements respectively, along with a few, vague textual patterns. In comparison to Margolin's original list of elements, the video game specific list presents more variety in static mimetic elements, but less formal textual patterns.

Without going into too much detail with Bertetti's and Vella/Margolin's frameworks, I will argue that the two can be combined in a meaningful way to account for what we may understand as character complexity in digital games. In the following section I will outline analysis models for assessing levels of avatar control and character complexity in individual instances of a game, which will build on the theories presented thus far.

AVATAR CONTROL AND CHARACTER COMPLEXITY

Having outlined existing work on the study of avatars and characters in digital games, it is time to define the core concepts used throughout this study. As previously noted, I build on Vella's (2015) and Bayliss' (2007) idea that the entity which we control in digital games can be understood both as an avatar and as a character. I will use the term *player figure* to encompass the being that can be both an avatar and a character at the same time, derived from Vella's *playable figure*, but altered because this study deals with moments in which the figure is precisely not playable.

However, in contradiction to Bayliss, I do not believe that there is a zero-sum relationship between the two. It is not necessarily the case that more rich characters become less playable as avatars – avatar control must always be understood in relation to the specific game, and may change from one moment to the next. Possible actions in games are always limited; it is, after all, how we design for playful experiences. Simply because a game like *Snake* (Armanto 1997) gives us only the option of moving our avatar across a wraparound 2D single screen space (Fernández-Vara et al. 2007), it does not mean that the game can be said to have limited avatar control. It simply has a given type of avatar control from the beginning, which can only be understood as limited if some actions are suddenly limited (e.g. if the snake can suddenly only move up and left and not up, down, left, and right). This also means, that the game does not per default present any specific amount of character complexity due to the somewhat narrow possibility space.

Thus, what we might describe as "the default mode of agency" [1] we are given in an avatar-based game will constitute what can be thought of as "full" avatar control. This is the control scheme we can get to know and/or familiarize ourselves with, and which can be altered at a given moment in the game, both through extension and contraction. Of primary interest in this paper are situations that somehow limit the player's avatar control, and thus the levels of avatar control in any given instance of a game can be understood on a scale, ranging from *full control* to *no control*.

It is again important to note, that avatar control and character complexity must be studied first in isolation, as they are not in a zero-sum relationship. Only after assessing both, a comparative analysis between the two can be used for exploring what I in the next section introduce as *automated avatar actions* and *character autonomy*. Character complexity can present itself in situations with any amount of avatar control, but tends to be particularly strong in situations where avatar control is limited or non-existing, as for example in cutscenes or during quick-time events. Similarly to avatar control, it can be understood as a scalar property, ranging from *high character complexity* to *no character complexity*. However, as opposed to avatar control, I suggest that character complexity should not be assessed based on the individual game, but rather from a general framework of what constitutes a complex character.

This is where Bertetti and Margolin/Vella's work becomes specifically useful. Based on their different aspects of characterization of transmedia/video game/literary characters, it is possible to categorize certain aspects that appear important for the characterization of video game characters. Depending on the study in question, more or less complex frameworks may be more suitable. For this particular study, the various aspects of Bertetti and Margolin/Vella's theories have been sorted into four categories:

- *Figurative attributes*: strongly related to the static mimetic elements, particularly in Vella's (2015) revision of Margolin (1986). The category includes the represented static elements of the player figure, including name, appearance, and animations, but also costume, weapons, and inventory. Gains prominence in relation to character complexity primarily through the function of *relationships* [2], as the mere existence of figurative attributes does not necessarily contribute to an understanding of the character.

- *Relationships*: primarily communicated through verbal, mental, or physical acts (Margolin 1986). Relationships are established between the avatar and any other more or less tangible object in the gameworld (items, NPCS, environment,

ideologies, etc.), that is, they can be both natural (e.g. gravity defining the relationship between the avatar's body and the environment) and functional (e.g. ludic functions), but also social and cultural. Thus, this category relates strongly to *roles*, as these are, e.g. in the actantial model, defined through the relationships of the various actants. Whereas functional relationships may appear as less significant characterization statements, this is not always the case. Thus, to properly understand the character complexity of a given instance, all possible relationships must be closely examined to explore if and how they contribute to the characterization of the player figure.

- *Motivations*: relating to Bertetti's (2014) modal and axiological identities and primary parts of Vella's static mimetic mechanical elements, the motivations of the character can be understood both in relation to sub and main goals of the game, but encompasses also the values, desires, and obligations of the character in relation to the gameworld. Digital games often present goals that can be considered as somewhat arbitrary in relation to the representation of character and overall narrative. Karhulahti (2013) has studied challenges as respectively kinesthethic and nonkinesthetic, resulting in the conclusion that kinesthetic challenges, that constitute most of what we consider video game play, are rhematic by nature (as opposed to thematic), and hence lack meaning in terms of signification. Thus, such challenges do not present any information about a character, as their resulting goals may be either implicit or explicit and belong to either player or game system. Yet, goals set for both player and character, such as those that translate into most quests [3], often help us understand better the underlying values and desires of the character in question. Certain motivations may derive from specific *roles* and *relationships* and vice versa.

- *Roles*: encompassing both structural/actantial and thematic roles from Bertetti's framework, and "roles" from Vella's contextual elements. I argue that the structural roles present themselves differently in games than in for example literary fiction, particularly in relation to the *subject*: the subject can be either the player herself, in which case the avatar and character become the helpers; the avatar itself, in which case the player and character become the helpers (as action is dependent on interactivity through the avatar); or the character itself, in which case the avatar and player become helpers. However, all of these understandings of the subject are problematic as they automatically undermine either player, avatar, and/or character. Instead it may be productive to approach the player figure *as a whole* as the subject. The thematic role is shared between player and character, but facilitated and implied by the avatar. That is, the avatar has no inherent thematic roles, as these are always understood in conjunction with an actantial role (Prince 1987, 96), which is only actualized through play, and thus dependent on the player herself (see e.g. Leino (2015) who explores the avatar as a "third wheel" in the context of being romantically attracted to an NPC). However, the avatar facilitates the player's actualization of such roles as they are determined by possible player actions, which are determined by the affordances between avatar and gameworld.

Using the framework outlined above, it is possible to assess the level of character complexity in a given instance, based on which of the four categories (figurative attributes, relationships, motivations, and roles) are present. It should here be noted that character complexity is of course not actually quantifiable or tangibly measurable. The

framework is a superimposed structuralist tool for categorizing characterization statements and should be used accordingly.

CHARACTER AUTONOMY AND AUTOMATED AVATAR ACTIONS

Following the introduction of the analytical frameworks for assessing respectively avatar control and character complexity, it is now possible to define respectively *automated avatar actions* and *character autonomy* based on these.

Automated avatar actions are *actions that are automatically performed by the avatar promoting the player's focus on actual game mechanics*. *Character autonomy* is reflected in situations where *character complexity is emphasized in one or more categories while avatar control is limited or non-existent.* Both definitions require some clarification.

A good example of an *automated avatar action* that the player may never pay attention to is the act of walking. Many games use input in the form of mouse and keyboard, facilitating the player's navigation of the avatar in the gameworld. However, with few exceptions such as *QWOP* (Foddy 2008), the player is not herself responsible for the actual act of walking. She does not have to manoeuvre one leg of the avatar in front of the other, keep balance, or adjust the navigation to the surface on which the avatar is walking. All of this is automated by the avatar, which facilitates focus on more prominent tasks and game mechanics, defined by Sicart as "methods invoked by agents for interacting with the game world" (Sicart 2008). Potentially even stronger examples can be found in many games in which parkour or other sorts of challenging movements around an environment take place. For example, in *Horizon: Zero Dawn*, Aloy will perform various daring jumps, movements, and balancing acts from simple "jump" or directional input from the user; the avatar is the primary responsible for these daunting movements in the challenging environment. This means that the player's interaction with the world is limited by the game mechanics, but also that focused interaction is facilitated by non-mechanics understood as *automated avatar actions*.

In order for an instance or situation to reflect *character autonomy*, one or more categories of character complexity must be represented, explaining the action performed by the character or situating it within a larger context. This does not mean that all situations of *character autono*my seem meaningful or logical, but that they can be understood in direct relation to character complexity, and thus not as *automated avatar action*s, which promote focus on gameplay.

LOSING CONTROL: FIVE EXAMPLES

Having introduced the theoretical framework for assessing levels of avatar control and *character autonomy*, the framework will now be used to illustrate the concepts of *character autonomy* and *automated avatar actions* building on the five different examples outlined in the introduction. The five examples were chosen as they present different types of *character autonomy* and *avatar actions*, that make possible a discussion and comparison between both the different examples and the suggested terminology. Moreover, the games can be considered a paradigmatic selection of avatar-based digital games, covering production years from 1990 to 2017, ensuring some historical diversity.

God of War III

The first example is from *God of War III*. In this game, the buttons on the PS3 controller will have one meaning when in hack-and-slash combat mode, the most prevalent mode of the game, but another meaning when finishing off certain enemies, where a circle symbol

will appear above their head, triggering, if activated by the player, a quick-time event. During this event, the player will have to press a sequence of buttons as indicated on the screen. The buttons result in actions being performed that are different from what would be the case in hack-and-slash mode. Suddenly, pressing the square button does not cause a normal attack, but might for example cause the player figure Kratos to rip the head off Helios (see figure 1 below).

Through experience with the game, the player will learn that the buttons during a quick-time event translate into other actions than in default mode, but as new enemies are continuously introduced and defeated in various quick-time events, the outcome of pressing certain buttons is never truly predictable.

Figure 1: Kratos ripping the head off Helios in *God of War III* following a quick-time event.

When analyzing levels of avatar control in the specific instance in which Kratos rips off Helios' head, we see that it is limited, as we are, in other situations, given a type of control that allows us to anticipate the outcome of our actions. It is almost as if the quick-time event becomes a sequence of short cutscenes triggered by the player's seemingly random input, as the result of the button-pushing appears somewhat extra-ludic, a non-playable space (Aarseth 2012). In terms of character complexity, the instance represents all four categories of characterization: figurative attributes are elaborated on, as it is made explicit that Kratos is strong enough to rip off the head of Helios; the relationship between Kratos and Helios is conclusively proved and depicted through Kratos' act; the action performed epitomizes Kratos' goal of revenge; and the action situates Kratos as an actantial subject antithetical to Helios as the opponent, revenge and power being the object of desire.

Thus, because the instance limits the player's avatar control while significantly representing character complexity, it qualifies as an example of *character autonomy*; it appears as if Kratos autonomously chooses to rip off the head of Helios.

Horizon: Zero Dawn

Horizon: Zero Dawn presents another interesting example of *character autonomy* when controlling the player figure Aloy at the Greatrun Hunting Grounds. During the majority of the game, the player can use her ranged weapons as she wishes. In some situations they may have no effect (e.g. when attempting to shoot geese in any of the cities), but they can be fired regardless. At the Greatrun Hunting Grounds, however, Aloy will, if the player attempts to draw a ranged weapon to shoot at the herd of Tramplers below, refuse using the following rejections: "I'll save the shooting for down in the hunting ground", "Shouldn't use my weapons up here. I'd be cheating", and "If I'm going to prove myself in these Trials… I should do it fair and square" (Guerrilla Games 2017) (see figure 2 below).

Figure 2: Aloy refusing to use her ranged weapons at the Greatrun Hunting Grounds in *Horizon: Zero Dawn.*

This instance categorizes as *character autonomy* because it limits the player's control of the avatar in not allowing the use of ranged weapons in a specific location, and contributes to character complexity in at least two categories. It reveals Aloy's relationship to the trials that can be performed at the location, as specified in one of the rejections, and it reveals Aloy's sub-actantial role as subject in relation to the object of winning the trials. However, the character complexity is only moderate in this instance, especially compared to the previous example, and we may understand the *character autonomy* as being of a special type, as Aloy's refusal to use her ranged weapon refers to a ludic part of the gameworld just as much as to a narrative one. It becomes almost meta-reflective, commenting on how *the player*, rather than Aloy, should play fair.

The Secret of Monkey Island

A third example of *character autonomy* can be found in Guybrush's fighting scene in *The Secret of Monkey Island* (see figure 3 below). The fight with the Sheriff is initiated upon entering the specific location, where Guybrush will act on his own, using objects from the inventory, and navigate the gameworld without any user input. The objects used during this fight are lost from the inventory, so, in terms of character complexity, the figurative

attributes of the player figure are directly altered by the instance. Additionally, the entirety of the instance is a testament to Guybrush's relationship to the Sheriff, which is manifested as hostile through the autonomous fight. In this, Guybrush is clearly embodying the actantial subject in overcoming the Sheriff as opponent, and thus we can understand the character complexity as high. In the instance, the player momentarily loses complete control of the avatar, and it thus takes on the form of a type of in-engine cutscene. However, it is not common to video games that the inventory has been (negatively) altered following a cutscene, and thus it is somewhat special in form. Perhaps this is best understood in relation to the parodic nature of the game.

Figure 3: Guybrush Threepwood fighting the Sheriff in
The Secret of Monkey Island, using items, independent
of player input and without the player's consent.

Hitman: Absolution

Having illustrated three examples of *character autonomy*, let us now turn to an instance that can easily be confused for this, but actually projects *automated avatar actions* instead. In *Hitman: Absolution*, the player will navigate Agent 47 around in various environments, where the goal is to remain unseen by enemies and perform various types of stealth kills. An integral part of this challenge is exactly the navigation in the environment, particularly proper timing of movements between covers, as to not get spotted by enemies and other NPCs. By pressing the E-button of the keyboard, Agent 47 will automatically move to the nearest cover (see figure 4 below). However, there is no actual way of knowing which cover is the closest at a given moment, and Agent 47 may therefore move to an cover unintended by the player, making it appear as if he acts autonomously.

Figure 4: Agent 47 changing to an automatically selected cover in *Hitman: Absolution*.

Recalling that the definition of *character autonomy* depends on a sense of character complexity, we see that this Hitman example cannot be described as such. The instance does not communicate anything meaningful about the figurative attributes of the character, his relationship to entities in the world (other than the fact that certain objects can be used strategically, a purely functional relationship), his structural or thematic role, or his motivations. Still, the avatar control is limited, because of the information constraint of the interface: we cannot foresee the immediate consequences of our input, similarly to the example from *God of War III*. It thus appears that the instance presents a case of *automated avatar actions*, previously defined as *actions that are automatically performed by the avatar promoting the player's focus on actual game mechanics*. The game system automatically detects whichever cover is closer to the avatar, making navigation of the world simpler and technically more efficient. It is only in the rare situations where the player is unable to identify the nearest cover that the player's agency seems somehow compromised, because the avatar performs the action automatically, based on information that is accessible, but not necessarily perceivable to the player.

Half-Life 2
The final example that will illustrate the usability of the avatar control/character complexity framework is the previously mentioned example of Gordon Freeman automatically lowering his weapon in *Half-Life 2*. In situations where the player encounters enemies, she can perform the action of shooting them, yet this possibility is restricted when encountering certain NPCs meaning that player's control of the avatar is limited. Thus, it should be technically impossible to hurt or kill friendly NPCs and allies. Ironically, the player can still, through creative play, kill off many of them, for example by making gasoline barrels explode next to them (xdea9 2011), dropping heavy items on them (Simulation 2015), or otherwise luring them into dangerous situations.

This leaves the player with limited avatar control, however *Half-Life 2* presents more avatar control than the instance in *The Secret of Monkey Island* and even *Horizon: Zero*

Dawn, the latter of which appears similar to the automatic gun-lowering. The major difference between the *Horizon: Zero Dawn* example, which qualified as character complexity and the *Half-Life 2* example, which qualifies as an *automated avatar action* is, that Aloy's action appears motivated by her character, and that the associated statements contribute significantly to a sense of character complexity. Moreover, there appears to be no way of circumventing the limited avatar control on *Horizon: Zero Dawn*, whereas *Half-Life 2* allows for many types of creative play that lets the player kill the NPCs regardless of Freeman automatically lowering his gun. While this specific example challenges the fixed categories of *automated avatar actions* and *character autonomy*, it seems to fit better into the former, as it facilitates focus on the linear structure and story of the game. Thus, it functions as a way of ensuring a specific gameplay experience, ultimately promoting game mechanics through limitations of possible actions and possibility space, without contributing meaningfully to the character complexity of Gordon Freeman, because such meanings are negated by the reality that he can in fact hurt friendly NPCs.

SUMMARY AND REFLECTIONS

Considering the analysis of the five examples, the models for analyzing for levels of *avatar control* and *character complexity* appears useful. Not only do they allow us to identify moments of *character autonomy* and tell these apart from situations of *automated avatar actions*, they also generally help in exploring the relationship between player control and narrative content in a given instance of a game. While the goal of this paper is not to comment on the relationship between agency and narrative in a broader context, it appears as if there are various modes in which characterization of player figures can be implemented, some of which alter the player's control of the avatar and thus her agency more so than others.

The three documented examples of *character autonomy* function in fundamentally different ways in how they limit the player's control of the avatar. When considered in relation to the four methods for guiding and limiting the player's choices (Lankoski et al. 2003), it appears that *The Secret of Monkey Island* presents character autonomy in what resembles a cutscene, *Horizon: Zero Dawn* as a goal of Aloy wanting to play fair, and *God of War III* as a mix between cutscene and the goals of Kratos. However, the direct application of the framework for detailing *character complexity* resulting from the combination of Margolin (1986) and Vella's (2015) theories provides a more nuanced understanding of exactly *what* goals, among many other elements contributing to characterization, are represented in the individual instance. The scalar property of *avatar control*, on the other hand, gives a more nuanced understanding of whether the specific instance only partially alters the player's agency or removes it completely, and in turn lends itself to a more detailed analysis of exactly how this is done in relation to gameplay throughout the game.

Neither *avatar control n*or *character complexity* can actually be quantified, but the suggestion of a more granular and detailed framework provides a tool for assessing in greater detail each individual instance of a game to better understand the relationship between player, avatar, and character. Thus, this paper fills a gap between studies of avatars, characters, and agency, in suggesting an analysis tool and a vocabulary for better exploring the differences between the three, while also understanding their inevitable interconnection.

CONCLUSION

This paper set out to explore the borders between the avatar and character dimensions of the player figure, particularly in cases where this line gets blurry. The paper has built on Daniel Vella's theory of the *playable figure* as consisting of respectively an avatar, a game component under the player's direct control, and as a character a representation of an individual within a heterocosm. Through investigation of five different examples, I suggest we use the measures of *avatar control* and *character complexity* to understand better any given instance in an avatar-based game. The analysis of this allows us to assess whether the instance can be considered representing either *character autonomy* or *automated avatar actions*, where the former is defined as situations where *character complexity is emphasized in one or more categories while avatar control is limited or non-existent*, and the latter as *actions that are automatically performed by the avatar promoting the player's focus on actual game mechanics*.

The framework is both a suggestion of a vocabulary and an analytical tool for describing specific instances that become particularly interesting when exploring the notion of agency and player freedom in relation to the heterocosmic [4] aspects of a game. While it appears that instances that represent high character complexity also often tend to negate the player's avatar control completely, other examples illustrate how we may retain moderate or limited control of the avatar while still having the character dimension express itself in meaningful ways. Borderline cases present interesting challenges to the framework, and I hope that this paper can be seen as a meaningful contribution to the field, enabling and facilitating further discussions of the relationship between avatar and character, particularly in terms of player agency in relation to representations of characters.

ENDNOTES

1. Here used as a synonym for the player's ability to exert power in the gameworld. This does not imply that the power exerted is always what is needed to reach a specific goal, nor that it is in any way necessarily meaningful to system or player. Exertion of power is relative to the individual game, and can be understood as the freedom to take action. Sicart (2008) approaches agency as something which can be expanded or limited through design, and which ultimately defines the game. It is important to note that the term agency has a certain history within game studies (see e.g. Laurel 1993; Murray 1997; Wardrip-Fruin et al. 2009).

2. That is, certain figurative attributes will be more central to characterization than others. It may be that the player figure carries an important item, that is used to define it as a character in that world (e.g. Max's camera in *Life is Strange* (Dontnod Entertainment 2015)), explicated through the relationship between character and item, or it may be that the player figure has necessary figurative attributes that do not contribute much to characterization, but exist mainly due to convention or as a gameplay necessity (e.g. Nathan Drake's nose in *Uncharted 3: Drake's Deception* (Naughty Dog 2011), which would likely contribute more to character complexity had it not existed).

3. Not all quests will contribute equally to characterization; a Hero's Journey-like overarching quest-line may infuse the game with much more thematic meaning that a simple fetch quest and thus lead to different types of characterization.

4. Here in the Doleželean sense, as a study of fictional worlds, on which Vella builds his theory.

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