Creating Meaningful Agency through Spatial Exploration in Digital Interactive Storyworlds

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ABSTRACT

Amongst the highly interactive media of modern times, video-games are the highlight of digital interactive storyworlds. With a push towards ever increasing player freedom, video-games have started offering large explorable worlds for the player to delve into. However exploring the digital space in itself often has no meaningful bearing on the story. What could be done to make exploring these vast digital worlds itself the catalyst for unfolding a story? Within my research paper, I will investigate what techniques allow for a story-immersive reason to explore, and how a story may be born from exploring.

Keywords
digital interactive storyworld, interactive narrative, video games, meaningful agency, spatial exploration, immersion

1. INTRODUCTION

Modern day media is highly interactive, presenting new challenges to modern day creators of media content. Even stories have reached new levels of interactivity, consider for example the many video-games that provide interactive stories. Amongst the various challenges presented to video-games and other such digital interactive storyworlds, is the challenge to offer a coherent story whilst simultaneously providing the player of the game the freedom to act within and influence the story [4].

In recent years, video-game creators have been tackling this issue and have become more and more focussed on increasing player freedom [2]. In particular, many modern video-games offer a large explorable world such as in the Grand Theft Auto series, the Elder Scroll series or in MMORPGs such as Guild Wars 2. Maintaining such an open space representing the storyworld is also an important factor for immersion [1].

The activity of moving around and exploring an (digital) space, or spatial exploration, may provide the player with a great sense of freedom and having a lot of choice, or agency, but often in games the freedom to explore the space of the world has little to no connection to the story [5, 4]. Despite the open world offered by many modern video-games, such video-games often have a very “directed” storyline: the player is sent from location to location, typically via “missions,” “quests” or some other breadcrumb trail. Within the context of the story, what reason is there then to deviate from this trail? Some video-games however, such as The Path, have tried to utilize the ability to explore the storyworld space as a key element for driving story progress [3].

Little research has been done to directly investigate a connection between spatial exploration and the idea of meaningful agency, or agency relevant to the story. Tanenbaum and Tanenbaum (2010) [5] define meaningful agency as a new way to approach agency; their definition “is intended to be a way of analysing about how game design choices support (or fail to support) the experience of agency during gameplay. It is meant to apply specifically to the subset of video-games that provide interactive stories and the pleasures associated with navigating them.” [5, p. 13]

What Tanenbaum and Tanenbaum mean with meaningful agency, is that when the player character through dialogue choices commits to certain choices, what choices are made and how the player follows through with these commitments has consequences on story character’s relations towards the player and therefore the overall story. Their view however does not take into consideration spatial exploration, as it focusses on meaningful agency through dialogue.

I focus on a different angle with regards to meaningful agency in my research: how can commitment towards spatial exploration be established for the player character, and how can such spatial exploration create its own impact on the story? In other words, how can exploration become more than just a gameplay mechanic, but also become an integral part of the story?

What follows from this, and has not been done yet, is to investigate what techniques are currently used in games to provide the player with commitment to spatial exploration in a meaningful way, and how these techniques succeed or fail.

The central question in my research is “How can spatial exploration contribute to meaningful agency within interactive storyworlds?” In order to understand this the first question to be looked into is “What techniques are currently used in games to drive spatial exploration?” and following that “How can these techniques be used to create meaningful agency?”

Through answering these questions what I intend to make clear is what qualities should be present in an interactive narrative that wishes to encourage a freely explorable world, where such exploration has a meaningful connection to the story.

In this paper I will first make a breakdown of techniques,
2. BREAKDOWN OF TECHNIQUES

To make spatial exploration be a meaningful part of the story, the design of a digital interactive storyworld such as a story-driven video-game must be geared towards this goal. To begin to understand what techniques can bring this about I will be looking at several video-game titles with relevant approaches towards spatial exploration. I will be looking at what the technique itself entails, how it is able to provide the player with commitment to spatial exploration in a meaningful way and what the intended effect(s) of the technique is/are.

The selection of video-game titles that I will be using for this analysis are primarily the following: The Elder Scrolls series, particularly the fourth and fifth instalments of the series (named Oblivion and Skyrim respectively), the title The Path and finally the online multiplayer title Guild Wars 2.

Oblivion and Skyrim are Role Playing Games (RPGs) with an emphasis on providing a rich and immersive open world that the player has the opportunity to freely explore. The Path is a game focussed on letting the player experience a retelling of classic fairy tale, by making the player explore rather than follow a clear path. Guild Wars 2 is a Massively Multiplayer Online Role Playing Game (MMORPG), where the usual method of giving the player objectives through “quests” is broken down into a more dynamic environment the players can go through and act on what they find interesting.

Aside from these titles, references to other titles may be made with similar approaches to certain techniques when discussing said techniques.

2.1 The blank slate start

When creating a digital interactive storyworld it is important to consider how the player is introduced to it, and the character or characters the player is able to control within this world. Depending on the storyworld, varying amounts of information may have to be passed on to the player for them to be able to participate in the story. It would not make sense for a character with a supposed history with another cast of characters to suddenly not remember who they are.

This challenge becomes even more difficult if we were to consider spatial exploration. How much do we expect the player character to already know of their surroundings? And what of the character’s history with the surroundings, if there is any? To allows for a story to emerge from exploration it is important to consider how the character the player is intended to control is lead to such a point, and in turn how the player is introduced to this.

The following technique is a good example on how to possibly handle this issue: creating a blank slate start. Storywise, the idea is to establish that the player character is as much of a stranger to the world the story takes place in, as the player themselves.

To illustrate this technique I will mainly be taking a look at The Elder Scrolls video-game series. The Elder Scrolls series has a recurring theme in that it tends to start the player off as a prisoner, with no real background given as to why he or she is imprisoned, or any other detail regarding their origin. The reason for imprisonment is never resolved, so it is up to the player to come up with their own ideas as to what led their character to end up there.

The player character obtains the opportunity to escape through an event typically related to the overall storyline, and the “escape” serves as the tutorial for the game. Once free, the player has the freedom to then go almost anywhere within the game’s storyworld. Although the player has the option to follow up on the events that allowed their escape, which typically leads into the main storyline of the game, the player is set free upon the fully explorable world to go in whichever direction they feel is right for their character.

The intent is to handle the aforementioned problem of introducing the player to the storyworld setting, while allowing them to build a character new to this world. The game starts off in a more linear fashion to allow the player to accustom themselves to both the story and game mechanics. Upon finishing the tutorial (the escape), the player has learned enough to start freely exploring, but also has a suggested direction to prevent players from feeling lost.

The meaningful agency derived from this technique is that from a story perspective, the player’s character can be whatever the player desires to be within this storyworld. How much the character knows about the storyworld is up to the player, as are the intents and desires of their character. The player can then follow this up by going in whatever direction they feel is appropriate for their personal character, without breaking story immersion.

2.2 Freedom of direction

Many games have a progression system as part of their gameplay mechanics. For games such as this, it is common to have limitations as to where characters can go to within the world for progression’s sake. Not only that, but often there are areas in the world that have become trivialised due to the level of progression the player character has achieved. For instance the area the character starts off in may be designed to be challenging to a newly beginning character, but once the player character has progressed to a higher level of strength, enemies that are supposed to be threatening according to the story pose no threat at all anymore.

It is therefore important to look at some techniques that allow for sufficient freedom of direction within the storyworld, while using a progression system.

To provide an example technique, in the fourth and fifth editions of the The Elder Scrolls video-game series, all enemies start out at an equal level to the player character. As the player character grows stronger, so do the enemies. There are few areas in the game where enemies are set to a specific strength, meaning the player can choose to have their character begin its adventure by going to whichever place on the map they wish. There may be some story-related limitations to certain areas, but those story-elements can be traversed at almost any stage in the game.

The intention behind this technique is to prevent gameplay mechanics from limiting the player’s ability to have their character explore the storyworld in whatever direction they may want.
In an online world such as that of Guild Wars 2, freedom of direction cannot be given as easily as in the previous example. This does not mean there are no ways of dealing with the issue of freedom of direction, as the following example technique from Guild Wars 2 shows.

While there may be areas with enemies of greater strength in Guild Wars 2, if a player character progresses beyond an area’s intended level of progression, he or she is “downlevelled” or essentially brought down in terms of power to fight on equal level again to the enemies encountered in said area. Not only is the player character brought down in power, but the rewards scale back up to match the player character’s actual level of progression. This downlevelling is only an area-specific effect, but it prevents areas from being trivialised and unrewarding in terms of gameplay, allowing the player to fully explore any story-elements that remain.

This technique was implemented for several reasons. One being gameplay: it allows players to play with friends in the same area without one feeling left behind. However, it also serves an important purpose relevant to the issue of player agency: it allows the player to continue to explore an area without the challenge suggested by the story disappearing.

The relevancy of this technique to meaningful agency is that too many gameplay restrictions can severely impede a player’s agency within the story. These example techniques show ways to allow for the player to continue with spatial exploration without being limited or let down by gameplay mechanics.

2.3 Emergent lore

Whatever reason the player character may have for exploring any area of the storyworld, learning more about an area’s story and its background fits well with the idea of exploring an area. It introduces new players to the game’s overall story, and they can learn it as they go as opposed to having to go through a large introduction at the start of the game. Even if it is assumed the player character would be familiar with certain parts of the world, coming across history books is not immersion-breaking while still cluing the player in on the story, should they desire to understand more of the storyworld’s background.

Examples of emergent lore techniques can be found in various titles, including the Elder Scrolls series and Guild Wars 2. To illustrate, in the Elder Scrolls series it is possible to come across books detailing “historical accounts” of areas, people and other things. Sometimes, information about the area and its layout can be found in notes left by story characters. In Guild Wars 2, locations known as vistas can be found presenting a great view over certain areas, providing a lot of information. Exploring certain areas marked as noteworthy on the map provides new information on an area’s background.

In the Elder Scrolls series and Guild Wars 2, other common techniques within this category are used, such as story characters bantering in the background and thereby giving background information relevant to an area’s story. Overall, the intend of these various techniques is to convey the background story and setting of the world by exploring it.

In terms of meaningful agency, it creates a link between spatial exploration and uncovering the story of various aspects of the storyworld. It gives background information on the story for those that are interested.

2.4 Dynamic story events

When exploring an interactive storyworld, one is expected to come across a variety of story characters and objects with which to interact. One common issue amongst the MMORPG genre however, is that due to the many players it serves, the impact an individual player has on any ongoing issues is marginalised.

Guild Wars 2 tackles this issue by implementing open events throughout the storyworld, in which any player can freely participate. Whatever story event is ongoing, every player in the area can choose to participate or leave it be. As people participate, the event may be pushed further along its own story, which can even change the situation of a certain area to present new story events.

Non-participation may also have an effect, pushing the event’s story into a different direction. These events also scale depending upon the number of players in the area, going from an event scaled to an individual player, up to an event a large group of players all work towards together.

The intended effect is to allow players to experience a strong influence and ability to participate in the story of an area, while not conflicting with the experience of other players. Each player can play their own part, on their own or as part of a group.

Most of all, it creates an important link between spatial exploration and meaningful agency, as the events are uncovered by exploring and as the player comes across them, the player can decide whether or not they wish to participate in this small bit of the overall story or not.

3. FEEDBACK ON TECHNIQUES

To assess the effectiveness of each of the techniques mentioned in the previous section, and to understand what works and what does not, I have made use of various online resources providing feedback through the forms of reviews and public discussion.

While there is a great variety in the quality of public feedback online, I have focused on aggregating numerous positive and negative comments and issues presented by people who have played the games I have selected my techniques from. I have filtered these based on their relevancy to the techniques I have discussed and the overall quality of the points and arguments made. The background of the resulting group of people who’s public feedback I have used remains greatly varied, going from professional reviewers to relative newcomers to the video-game titles I have used.

Specific sources I have used include the popular reviewing website Giantbomb.com1, the popular public forum Reddit.com2 and the official forums provided for the various titles I have used.

Upon analysing the feedback on the techniques, it has come forth that while some of the criticisms regarding their implementation follow from issues inherited to the technique used, some are due to flaws in the specific implementation. Criticisms of the latter group may still prove to be useful in the larger picture, as they tend to follow from gameplay considerations other video-games may struggle with as well should they wish to make use of such techniques. As such, I have chosen to keep some such criticisms in consideration in my research.

References:

1 http://www.giantbomb.com/
2 http://www.reddit.com/
4 http://forum-en.guildwars2.com/forum
3.1 The blank slate start

The techniques employed in the Elder Scrolls series to provide a blank slate start, from which to develop their own character but also to provide a clean starting point for spatial exploration, have received a large amount of positive feedback. The freely explorable worlds these titles offer are considered their main selling point.

As certain reviews note, the main storyline is easily ignored, and the notion of freely going wherever the player may want is mentioned positively. Comments such as “more refreshing than anything is the freedom to just do whatever [...] you want for as long as you want,” as well as the amount of public discussion simply focussed on creating character backgrounds and goals, support the notion that the blank slate start succeeds in its intent to introduce the player to the game, while opening the player and their character up to start exploring the storyworld in whichever way they want.

There are however several legitimate criticisms to be made of the blank slate start. A main issue with the implementation of the technique in The Elder Scrolls IV: Oblivion was that the events during the tutorial, intended to direct the player to the main quest, were perceived as rather forced (much importance was given by the story for the player character to follow up on these events). This criticism towards Oblivion is in spite of developer intentions to allow the player to “unravel the main quest at your own pace or explore the vast world and find your own challenges.”

Another criticism is that although the blank slate start allows for the player to build their character from the ground up, it does not acknowledge any real history behind the character.

It is due to these criticism that fans of the games have even made “alternative start” modifications for the games, which provide a similar blank slate start although with less tutorial elements (as it is not intended for brand new players), allowing for some additional flavour choices as to the character’s origins and making a much subtler, less pressing tie-in with the main storyline.

While it should always be noted that no technique (or implementation of technique) will befit all, the criticisms do show the balance one must attend to, in terms of placing the player character into the story, when implementing this technique.

3.2 Freedom of direction

The overall opinion across the reviews and public forums with regards to the freedom of direction provided by The Elder Scrolls IV: Oblivion, The Elder Scrolls V: Skyrim and Guild Wars 2 has been greatly positive. The main criticism that has come forth in feedback has been with regards to the Elder Scrolls titles.

One main criticism found amongst reviewers and public discussion alike, regarding both Elder Scrolls titles discussed, is that having the world progress with your character in strength can possibly break immersion. One could potentially go to areas with enemies that according to the story are supposed to be extremely deadly yet may be defeated much easier than an enemy that is supposed to be much weaker, because the former was challenged at a lower level of progression than the latter. This is a hotly debated topic however, as there appear many in favour of the freedom of direction technique as well. Users disagreeing with the technique’s effect have even created a “levelled creatures” modification for the The Elder Scrolls IV: Oblivion.

An issue present in both Elder Scrolls titles discussed, is that the implementation hamstrung itself to a certain extent. Although the automatic adjustment of the world to the player character’s progression succeeded in providing the player with freedom of direction, the implementation failed in one aspect: indoor/enclosed areas were set to the level of progression of the character when they first entered this location. This means that at later stages of progression, even if such a location were to be repopulated (i.e bandits have taken shelter in a cave), the level of strength of these enemies will be lower than that of the player character, thereby trivialising the content.

3.3 Emergent lore

The overall reception to the emergent lore techniques have been positive. They mesh well with the focus on spatial exploration in the titles they are used, and allow for those interested to explore the lore of the storyworld whilst exploring the space of the storyworld. Those interested in the background and history of the storyworld voice their support for this technique, although it is also clear that it is definitely not for everyone.

One exception however we can find in The Elder Scrolls series. A common complaint regarding emergent lore is that background chatter and comments on the player character by non-player characters can become repetitive, or even out of place. This complaint is most prominent with regards to The Elder Scrolls V: Skyrim, where for instance the player character may have joined the Imperial Legion, yet patrolling soldiers around the world may still refer to the player character as a civilian.

Such breaks in story immersion are an important issue to look out for with regards to this aspect of emergent lore. The amount of background chatter and comments by non-player characters may be finite, but consideration must be given to the character’s story progression, as well as the extent to which chatter and commentary repeats.

3.4 Dynamic story events

Guild Wars 2 touted its Dynamic Event system as a prominent feature, to contrast it to the more static objectives given by other MMORPG titles. While it is often noted amongst reviewers and in public discussion that the basic tasks players must undertake may be similar in both (one still has to defeat certain numbers of a certain kind of enemy, or collect certain objects, or escort certain non-player characters and other such basic tasks that can be asked of the player character), feedback also supports that “the size and scope of the events and implications they have on each area make for an altogether far more exciting experience” and “[t]he most engaging thing about Dynamic Events

http://www.mmorpg.com/ review of Guild Wars 2, ac-

http://www.mmorpg.com/
This feedback suggests that the intentions behind the technique, namely allowing players to experience a strong level of influence and ability to participate in an area, is well achieved. The feedback also supports the link between meaningful agency and spatial exploration, as the player is encouraged to explore and come across various dynamic story events, allowing the player to uncover these parts of the story through exploration. As the player explores, they develop their own story through encountering dynamic story events in various stages of progression and through making choices regarding these events.

One issue that does need to be taken into consideration, however, is that when such a technique is used in an MMORPG the level of activity on a given server can influence the experience and even the effectiveness of dynamic story events. While most events are highly scalable and are doable by an individual player in Guild Wars 2, some events, or even certain story progressions in events, require a certain number of players around to be triggered. These are typically special group-oriented events, and some players may never experience these specific events because of a potential lack of activity on a server (or within a certain area of a server).

4. DISCUSSION ON TECHNIQUES AND RESPONSES

Following the breakdown of techniques and having processed positive and negative feedback on each, this section will focus on what can be learned from the gathered information. The goal of this section is to understand in what ways each technique succeeds and/or fails on various points, what their limitations are, and how the techniques may be improved upon.

4.1 The blank slate start

In order to allow meaningful agency to come from spatial exploration, a commitment towards spatial exploration must be made by the player character. This does not have to be explicit, but what is essential is that from a story perspective it makes sense for the player character to go and venture out on their own; that this character has reason to do so without any special overarching goal other than perhaps to explore.

Considering this, the blank slate start technique works successfully towards such a commitment. However it does so at the cost of a rich character background, as no history of the player character is ever given at either the start or any other time in the game. On the one hand this means the player can conjure up their own character background, allowing player creativity to create motives for exploring in a certain direction and/or the extent of the character’s knowledge of the land. On the other hand a player may find the lack of a provided character background to have a negative impact on story immersion, as public feedback has indicated.

Depending on the digital interactive storyworld, this part of the technique may be deviated from, although with less freedom regarding the character’s motives it may potentially limit the freedom of direction should that technique be used as well. Another option is to extend the character creation process with some additional choices relating to character history, similar to those in the “alternative start” modifications.

The “pressing main storyline” issue that was brought up in feedback on The Elder Scrolls IV: Oblivion is an example of the type of issues that must be kept in mind when implementing the blank slate start technique: a balance must be made when integrating the fresh player character into the storyworld, between introducing relevant story-elements and not overburdening the player character with purpose.

4.2 Freedom of direction

Having the ability to go in whatever direction you wish to explore without being limited by purely gameplay-related mechanics is an important consideration to make when creating a digital interactive storyworld. The freedom of direction technique shows how it is possible to allow for certain gameplay-mechanics such as a progression system without needing to direct players along a path that follows a proper progression of enemy difficulty.

While the feedback towards the freedom of direction techniques implemented in Guild Wars 2 have been largely positive, some of the same criticisms as have been levied against the two Elder Scrolls titles could also be levied against the “downlevelling” technique in Guild Wars 2. In general the freedom of direction techniques open themselves up to the kind of potential breaking of immersion as mentioned in feedback.

The implementation issue in he Elder Scrolls titles where previously visited indoor/enclosed areas remained at the level of progression that they were first visited, even after being repopulated, in fact helps balance the previous issue somewhat. Otherwise, a repopulated bandit cave may upon revisiting it be much tougher despite that bandits are not supposed to represent as much a threat to the player character any longer, as the player may have taken on much greater challenges already.

4.3 Emergent lore

Emergent lore is a technique that adds significance to spatial exploration in terms of understanding the history and background story of the world being explored. It allows the player to understand their character’s place within the storyworld and the overall story without needing to go through a lengthy introduction process. The biggest strengths of this technique are however also its greatest weaknesses. The pieces of history and current background information may be strewn about the world in a way that makes sense from the perspective of story immersion, but collecting this information to get a whole overview takes time and effort. Not only that, but the player may not know where to find all the pieces. Although there are often sources outside the digital interactive storyworld that explain the lore of the world, such as a video-game’s manual or an online source, it would help to make certain considerations to newcomers who wish to understand more of the storyworld’s lore.

One suggestion that can be seen by example in The Elder Scrolls V: Skyrim is to place a piece or pieces of emergent lore, such as a book, containing the most relevant lore elements for a newcomer in an early part of the game, such as a tutorial area, and in an obvious location. This both helps build up potential interest in understanding the lore, being the first piece of a large puzzle as it were, and teaches a new player how to uncover such lore by showing through example.

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Another strength of this technique that may also present itself as a weakness is the fact that the emergent lore may easily be ignored by those uninterested. Not every player is interested in the story, but even amongst those who are interested in the story not every player is interested in every detail. The history of a hamlet along a creek within the storyworld may be interesting to some players, but without any significant bearing on the ongoing story the character is experiencing, such historical fluff may easily be ignored.

It is therefore important to not overly rely on emergent lore to convey the story of the world. Considerations must be made as to the spread of information significant to the ongoing storyline. Options include indicating significant pieces of lore differently from other pieces of lore, such as a different colour to a book (note that this is something the player must then also be taught). Another option would be to ensure, through some in-game system, that significant pieces of lore are always presented to the player.

The problems indicated in feedback on background chatter, banter and non-player character commentary show that consideration must be made with regards to these forms of emergent lore as well. Due to technical limitations features such as background chatter may have finite dialogue lines to go through. It may be possible in certain cases for such chatter and banter to be generated in a more dynamic fashion, although this comes with its own set of difficulties beyond the scope of this paper. Although in general care must be given to the extent that chatter and banter repeats, one suggestion found among feedback in general care must be taken into consideration when implementing this technique in an online multiplayer digital interactive storyworld. If as in Guild Wars 2 certain events rely on a certain amount of participation, these events and their story may become unavailable if not enough people are in a given area.

5. CONCLUSION

The efforts undertaken throughout various video-games to this date to allow large explorable worlds themselves to develop a story as they are explored, are still limited. Ultimately every title discussed in this paper has a large overarching storyline the player character is pulled towards through the story in one way or another.

This does not however diminish the fact that exploration remains encouraged, and attempts are made at creating a meaningful connection between spatial exploration and the story. To return to my central research question: “How can spatial exploration contribute to meaningful agency within interactive storyworlds?” Each technique discussed in this paper shows promise in their ability to create meaningful agency through spatial exploration.

The blank slate start and the freedom of direction techniques, especially when combined, show how video-games can allow their stories to make way, to be driven through spatial exploration. The emergent lore technique displays how a storyworld can provide a rich and vibrant backstory without needing to direct the player along a predefined path so as to tell a specific background story. Finally, the dynamic story events technique shows how through spatial exploration a meaningful connection can be made to the story.

6. REFERENCES