The Animation of Gamers and the Gamers as Animators in Sierra On-Line’s Adventure Games

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Abstract
Produced throughout the 1980s using the company’s Adventure Game Interpreter engine, the digital adventure games created by American software publisher Sierra On-Line played an important and largely overlooked role in the development of animation as an integral part of the digital gaming experience. While the little historical and theoretical discussion of the company’s games of the era focuses on their genre, it ignores these games’ contribution to the relationship between the animated avatars and the gamers that control them – a relationship that, as argued in this article, in essence turns gamers into animators. If we consider Chris Pallant’s (2019) argument in ‘Video games and animation’ that animation is essential to the sense of immersion within a digital game, then the great freedom provided to the gamers in animating their avatars within Sierra On-Line’s adventure games paved the way to the same sense of immersion in digital. And, if we refer to Gonzalo Frasca’s (1999) divide of digital games to narrative-led or free-play (ludus versus paidea) in ‘Ludology meets narratology: Similitude and differences between (video) games and narrative’, then the company’s adventure games served as an important early example of balance between the two elements through the gamers’ ability to animate their avatars. Furthermore, Sierra On-Line’s adventure games have tapped into the traditional tension between the animator and the character it animated, as observed by Scott Bukatman in ‘The poetics of Slumberland: Animated spirits and the animated spirit (2012), when he challenged the traditional divide between animators, the characters they animate and the audience. All these contributions, as this articles aims to demonstrate, continue to influence the role of animation in digital games to this very day.

Keywords
adventure games, animated avatars, digital animation, game narrative, King’s Quest, Sierra On-Line, video games

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Introduction

This article aims to explore the longstanding contribution of the adventure games created by American software company Sierra On-Line in the 1980s to the development of animation in the field of digital games as a whole. This contribution is largely neglected and overlooked, as the legacy of the company’s games, when discussed in the context of digital gaming history, is often referred to as that of pioneering games in the adventure genre, which has lost much of its appeal in the contemporary gaming market, and hence is no longer relevant for this market.

Originally named On-Line Systems, Sierra On-Line was founded in 1979 by husband and wife Ken and Roberta Williams with the intent of producing software for the Apple II computer. Inspired by the game Colossal Cave Adventure (1977), a pioneering title in the genre of digital adventure games (digital narratives that develop according to the gamer’s input), Roberta Williams created and released the company’s first game, Mystery House, in 1980. While Colossal Cave Adventure consisted only of textual output to deliver its narrative to the gamers, Mystery House accompanied its textual output with static computer graphics. Gamers had no on-screen avatar, but they were presented with graphic illustrations of the game’s different locations (Levy, 2010: 253–260).

The company followed Mystery House with the development of more adventure titles that contained graphics such as Wizard and Princess (1980) and The Zone (1982), but other companies that developed games in the genre – notably Infocom, which gained acclaim for the sophistication of its Zork series of games – have preferred to maintain the ‘text adventure’ format, relying on verbal text only. In 1984, Sierra On-Line introduced another change to the genre with the release of King’s Quest (later retitled King’s Quest I: The Quest for the Crown following the release of its sequels). The game was developed to demonstrate the advanced capabilities of the PCjr, a new home computer machine released by IBM. King’s Quest featured an on-screen animated avatar under the direct control of gamers, who could freely maneuver it through each location and from one location to another (Bevan et al. 2018: 6–7, 56–57): a detailed discussion of this development is offered later in this article). King’s Quest was a commercial success, leading to the development of sequels and other graphic adventure titles by the company, including the science fiction comedy Space Quest (the first title in the series released in 1986), the police procedural Police Quest (the first title in the series released in 1987), and the sex comedy Leisure Suit Larry (the first title in the series released in 1987).

Despite the success, initial critical reaction to the transition from the text adventure to graphic adventure format was not entirely positive. Reviewing the third game in the King’s Quest series (released 1986) for the Computer Gaming World magazine, Roy Wagner (1987: 18–21) praised that game’s graphics and animation but complained that the game’s pixel-graphics actually made it difficult to recognize necessary objects on the screen, arguing that attempting to complete the game without the help of a hint book is the equivalent of ‘driving without a map’, and concluding that the text adventure format is superior for the genre.

By the time the review appeared, however, the transition from text to graphics in the adventure genre had caught on among other publishers as well, notably Lucasfilm (later renamed Lucasarts) who released their first adventure game Labyrinth: The Computer Game in 1986 (an adaptation of the film Labyrinth of the same year), followed by another graphic adventure, Maniac Mansion, in 1988, which established the company as Sierra On-Line’s major competitor. Other companies such as Access Software and Legend Entertainment, alongside veteran publishers such as Activision, followed with the development of their own graphic adventures, though a decline in the popularity of the genre in the mid-1990s led to the abandonment of the genre by most major publishers and developers (Bevan et al., 2018: 5–18). Sierra On-Line was sold to another company in 1996 and,
between 1999 and 2000, the company closed all of its development departments (but the brand known today as Sierra Entertainment still exists).

Sierra On-Line’s influence on digital gaming as a whole has its own critics. Gaming historians Bill Loguidice and Matt Barton have criticized the company’s adventure games’ reliance on ‘illogical puzzles’ while admitting that the transition from text to graphic adventures remains influential within the confines of the genre to this day (Barton and Loguidice, 2009: 143–162). Game designer and theorist Chris Crawford, who was critical of the entire adventure genre while it still consisted of pure text, claiming that its gameplay was ‘just random nonsense’ (Bossman, 1986: 46–49), later dismissed Sierra On-Line’s graphic adventures as a short-lived innovation that failed to hold gamers’ attention once the genre had worn itself out (Crawford, 2004: 336–337). Such criticism examines the company’s games from their genre perspective, while ignoring their influence beyond the genre – their contribution to animation in digital games.

**Animation and digital games**

When Sierra On-Line introduced animation to the adventure genre with *King’s Quest*, the game was already featured in most other genres of digital games. In fact, animation has appeared in digital games since their early beginning, with pioneering titles such as *Spacewar!* (1962) and *Pong* (1972) containing gamer-controlled animated avatars and computer-controlled animated figures. Chris Pallant (2019) has argued that, more than a mere technological feature, animation is essential to the experience of digital gaming: ‘The bringing to life of an inanimate, digitally coded virtual world, relies upon the metaphoric power of the animated form to transport the gamer from the disengaged self-awareness . . . to the deeply immersed psychological state enjoyed during gaming.’ Referring to Mihaly Csikszentmihaly’s concept of ‘flow’, which refers to the performance of actions that follow one another according to the internal logic of a game (not necessarily of the digital kind), Pallant further claims that ‘without animation there could be no flow state within the video game realm. Our sense of immersion, as video gamers, is established as we are gradually enveloped in the animated structures of the video game’ (pp. 203–205).

Pallant’s claim that animation is a powerful tool for bringing gamers into ‘flow state’ can be supported by the dominant presence of animation in the majority of digital games. However, as the brief historical overview at the beginning of this article demonstrated, text adventures are exceptions to Pallant’s claim about the necessity of animation for a ‘flow state’ in digital games. This exception can be reconciled through the expansion of the term ‘flow state’ with a definition offered by Galloway (2006: 84): ‘If photographs are images, and films are moving images, video games are actions . . . Without action, games remain in the pages of an abstract rule book.’

Galloway divides the actions performed in the course of playing digital games between the machine running the game’s software (to which he attributes the agency of the game itself, rather than to the developers) and the player (p. 96). Later, he further divides the types of action taken by the player into two main categories: movement and expression (or ‘move acts’ and ‘expressive acts’ as Galloway defines them). While movement changes ‘the physical position or orientation of the game environment’, expression is the interaction with objects within the same environment – anything from simple shooting at machine-controlled characters to opening doors, picking objects up, etc. (pp. 378–391).

Therefore, while the flow of text adventures was not animated in the graphic sense that Pallant refers to, it certainly consisted of movement in the sense that Galloway attributes to gaming action. Players of adventure games progressed through the textual narrative – sometimes by engaging directly in movement input (typing commands such as ‘go left’ or ‘go right’ to progress from one textual description of location to another) and sometimes through their expressive input (successful
completion of one part of the narrative leads to another part). Text adventures, therefore, also challenge Galloway’s concepts by fusing both types of player actions – and, as detailed in the analysis offered by this article, Sierra On-Line’s animated adventures challenged them even further.

Movement in digital games – animated or not – points to another important aspect that separates them from other media. As Maria Katsaridou (2016: 17–32) explains, the reconstruction of a written or screened narrative by a reader/viewer follows a linear path from one scene to the next while, in digital games, the reconstruction of a narrative by the gamer is based on exploration of the game world in search of the different parts that compose the narrative. Exploration, by its very definition, is an act of movement between locations. This movement is necessary for both Pallant’s ‘flow’ and Galloway’s ‘action’ of digital games to happen. In this sense, text adventures made an important contribution to digital gaming as explained by Mark JP Wolf (2001: 94–96): in an era when machine memories were not enough to support the portrayal of a richly detailed game worlds to explore, text adventures managed to present such worlds since text required less memory.

Exploration within digital games, however, does not always happen in accordance with the way intended by the game developers or the game software itself (if we accept Galloway’s argument about the superiority of its agency). While movement within a game is subject to a finite number of programmed actions provided to the player, either animated or non-animated, these actions can be performed in a sequence that does not necessarily match the narrative that game developers had in mind.

In his influential article, ‘Ludology meets narratology: Similitude and differences between (video) games and narrative’, Gonzalo Frasca (1999) divided digital games into two categories: ludus games and paidea games. Ludus games demand that gamers should follow the developers’ intended narrative to reach the game’s goal, and paidea games, based on looser narratives that do not require gamers to reach a certain goal, allow them to keep playing with no limit on their pleasure. While ludus games, according to Frasca, are oriented towards narrative plots (a narrative structure set by the developers that gamers must follow), paidea games are oriented towards narrative setting, emphasizing the possible actions that gamers can perform within the game’s environment.

However, when we examine the case of movement in digital games, as discussed above, we discover that, even within ludus games, the act of animating the games’ avatars by the gamers allows them to perform paidea actions. While movement in digital games is not necessarily animated, animation strengthens this tension between narrative plot created by a developer (and presented on a gaming machine) and playful actions performed by an animated character, and in fact brings digital games closer to days of cinematic, non-interactive animation, when a struggle between a strict animator and a rebellious animated character was a common theme in animated productions. A key example is the Gertie the Dinosaur performances (edited into a film in 1914) by animation pioneer Winsor McCay. In these performances, McCay would stand on a stage, converse with and give orders to a dinosaur projected on a nearby screen in an animated sequence created by McCay.

Much like the gamers who perform their avatars’ movements on the screen and can practice paidea actions within a ludus environment, Gertie often disobeys the orders given to her by McCay, insisting on moving away from the narrative set for her by her creator. As Scott Bukatman (2012: 1–21) notes, Gertie’s rebellion against McCay goes beyond simple playfulness: she rebels not only against the orders she is given, but also against the attempt to confine her, an animated figure, within a pseudo-physical environment – indeed, throughout the animated segment, the audience witnesses how Gertie literally eats up the scenery that surrounds her. As explained by Donald Crafton (2012), the attraction in Gertie’s performances resulted from both the way McCay made her ‘lumbering through her routine’ and the way that she introduced ‘the possibility of a
temperamental antediluvian running amok’ (pp. 59–60). This places Gertie’s character as a strong parallel to gamers in digital games: the pleasure of watching her animated comes from both her following of McCay’s orders (much like following a digital game’s intended plot and rules in a ludus fashion) and the pleasure of her breaking and struggling against the same orders (in a more paideia fashion).

Gertie’s rebellion is, of course, highly paradoxical; McCay has created and scripted the animated segment featuring his protagonist, and the protagonist’s ‘rebellion’ against him remained under his full control. However, when game developers, or game software, extend the control of the avatars’ animation to the gamers, providing them with the possibility of animating these avatars, gamers are free to rebel – much like McCay’s Gertie – against the attempt to confine their avatars within a pseudo-physical environment. While the ‘proper’ ludus way for gamers to animate their avatars may be by following the path set by the developers, they do not have to do so, and they can animate their avatars in other sequences, including those considered ‘illegal’ by the developers and, more importantly – like McCay’s Gertie – test the pseudo-physical limitations forced on their avatars by the developers. It is here that the contribution of Sierra On-Line’s adventure games to animation in digital gaming is revealed.

The animation of gamers: Priority and control lines

The first aspect of this contribution can be described as ‘animating the gamers’ – providing gamers with the ability to animate their avatars within a digital environment. Sierra On-Line’s AGI (Adventure Game Interpreter) engine developed by the company for the first King’s Quest game and used in subsequent adventure games released by the company until 1988 broke significant new technological grounds in the field, not just for games within the adventure genre, but for the digital games industry as a whole.

As noted above, prior to the release of King’s Quest, games in the adventure genre contained no animation at all; games in other genres contained animated avatars under the control of the gamers, but their movements were limited to the X and Y axes on the screen against flat backgrounds. Gamers’ avatars did not have the choice of moving behind or in front of onscreen objects.

Games running on Sierra On-Line’s AGI engine allowed gamers to animate their avatars, using the computer’s arrow keys, in four directions (left, right, up and down) as well as diagonally, and avatars could be animated around a pseudo Z-axis in relation to onscreen objects. When gamers animated their avatar in front of an object (a tree, a house, other animated characters controlled by the game, etc.), its image would obscure the object; similarly, when an avatar was animated behind the object, it would be obscured by it. This ability combined with the ability to animate the gamers’ avatars from one screen to the next, providing the possibility of fully exploring the game’s digital world.

In many ways, this ability was an extension of Roberta Williams’s game design philosophy since her first game: in creating the original design document for Mystery House, Williams did not use textual descriptions, but rather a series of sketches representing each location (Nooney, 2017: 85). In essence, it was a graphic interpretation of the ability of text adventures to create detailed worlds, as observed by Wolf. Graphic environments and the movement between them were basic elements in her games, and the ability provided by King’s Quest to extend the option for gamers within each graphic environment can be seen as the logical following to the technological leap. Jeff Stephenson, who was in charge of maintaining the AGI engine development for the company, stated that the concept of freedom of movement for the avatar was a major attraction marketed to IBM in pitching the first King’s Quest as a demonstration of the capabilities of their new machine (Bevan et al., 2018: 56–57).
Animated movement in Sierra On-Line’s AGI games had its limitations. Movement could not provide the full spectrum of interaction with the digital environment needed for games in the adventure genre (or, in Galloway’s, 2006, terms, allow gamers more expressive actions), and for this reason the AGI engine included the ability to receive textual input from gamers. For example, to open a door in an adventure game created by the company during that era, gamers would have to move (or, in essence, animate) their avatar to a position in front of the door using the arrow keys and then type ‘open door’. This would trigger an animation of the door opening – though the avatar, for this particular action, would not be animated (i.e. there would be no animation of the avatar’s hand reaching for the doorknob, pulling it, etc.). If text adventures brought together Galloway’s movement and expressive actions, Sierra On-Line’s AGI games separated them – gamers could animate their avatars to move from one place to another, but progression through the game’s intended narrative required gamers to type textual commands.

Other limitations were technological. Sierra On-Line promoted its AGI games as ‘3D Adventures’, although the environment presented in these games was not truly three-dimensional: similar to the above-mentioned arcade games of the era, avatars and game-controlled characters in the company’s adventure games moved against ‘flat’ backgrounds containing no three-dimensional models or the depth of a true Z-axis. According to Ken Williams (2020: 216–219), even advanced home-computer hardware at the time the engine was developed could not support a true three-dimensional engine, which would calculate the distance between the gamers’ avatars and onscreen objects, and change display accordingly. Instead, the company’s developers have employed two parameters in each screen of each game to give the background a three-dimensional, or more accurately a pseudo-physical feeling – attempting to simulate an experience of moving the avatars through physical locations for the gamers.

The first parameter employed by Sierra On-Line’s developers was a priority value assigned to different areas in each screen. When gamers animated their avatar to a location represented as ‘in front of’ a certain object which appears on the screen, the avatar would obscure the object in the location, which was assigned a lower priority value. When gamers animated their avatar to a location represented as ‘behind’ a certain object which appears on the screen, the avatar would be obscured by the object in the location, which was assigned a higher priority value. Since the objects were part of the painted two-dimensional background, the avatars would not truly move ‘around’ them, but the developers created an illusion of the avatars doing so through manipulation of appearance in both the avatars and the objects. As explained by gaming critic Jenn Frank (2016), ‘the box advertised King’s Quest I as a “3-D adventure” – which might seem laughable now but, in 1984, no one had ever seen a sprite walk into the foreground before.’

The second parameter employed by Sierra On-Line’s developers was that of control lines. As the name suggests, this parameter was aimed at limiting the gamers’ avatars in their movement. Control lines were assigned to different areas in each screen to represent borders – areas that the avatars could not move beyond. For example, if gamers animated their avatar towards a wall, the avatar would stop moving once reaching the wall. Some control lines were defined as conditional: animating the avatar towards a door would make the avatar stop moving once it reached the door but, as explained above, typing ‘open door’ would likely trigger an animation of the door opening, allowing the character to pass through (most likely to another screen). Other control lines, however, represented hazards: when gamers animated their avatars to a dangerous location on the screen – for example, an open pit or a body of water – an animation of the avatar falling or drowning would be triggered, leading to a ‘game over’ announcement (Kelly, 1999).

The handling of both parameters to control the gamers’ animation of their avatar’s movements, along with the separation between movement and textual input, created a strong ludus environment, in which the digital, pseudo-physical environment is subject to rules that the gamers must
follow: for example, the need to walk through specific paths in given screens in order to avoid control-lines that lead to a game-over situation. Gamers, however, found ways of animating their characters beyond the developers’ intent.

The gamers as animators: Bypassing the narrative

The second aspect of Sierra On-Line’s adventure games contribution to animation in digital gaming can be described as turning the gamers into animators. While gamers were limited in their ability to animate their avatars to moving the avatars around the different objects in each screen and from one screen to another, they also had a surprising freedom to bypass the developers’ intended ludus narrative, and freely animate their avatars throughout the digital environment and explore it infinitely.

In fact, early games developed using the AGI engine maintained a tension between this kind of exploration and the developers’ intended narrative. In the first titles of the King’s Quest, Space Quest, Leisure Suit Larry and Police Quest games, gamers would start the game with no clear indication of what actions they should be taking. Instead, they were expected to explore their immediate digital surroundings by moving their avatars, examining different objects and speaking to different computer-controlled characters in order to learn how to proceed through the narrative. Gamers would become more immersed in the narrative and get more specific directions as they progressed throughout the games.

In employing this strategy, the developers (or the games’ software) allowed gamers relative freedom in animating their avatars, while keeping deeper interactions with the digital surroundings under tight narrative control. Object-manipulation and examination, as well as conversations with computer controlled-characters, were handled through textual input, and specific output that resulted from it depended completely on the games’ narrative design. Gamers could not engage in a full paidea Gertie-like rebellion as they could not influence their digital surroundings the same way that McKay’s dinosaur did. And yet, even ‘aimless’ animation of the avatars throughout the digital environment, without attempting to manipulate this environment, can be seen as bypassing the developers’ intended narrative. Animating the games’ avatars using the arrow keys alone, without using the textual input, through the large (for its time) digital environment, allowed gamers to build and progress through an exploration narrative that was completely detached from the games’ intended narrative. In separating movement and textual input, Sierra On-Line’s adventure games have movement – the animation of the gamers’ avatars – an expressive act in its own right.

Sierra On-Line’s game developers have struggled against this kind of bypassing in a number of ways. One was forcing the narrative on gamers, even as they were making their initial exploration of the digital environment: the first Space Quest game, for example, opens with a timed sequence in which the gamers must escape their immediate surroundings within 15-minutes before a bomb explodes (something the gamers learn shortly after they begin exploring). Failure to do so leads to a game-over situation.

Other ways to force gamers into narrative paths relied on manipulation of control lines: in the first Leisure Suit Larry game, movement between different screens was intended by the developers to be done using vehicles (gamers would need to type the word ‘TAXI’, triggering an animation of a taxi arriving, followed by a textual command to get into the taxi and a further textual command to tell the driver where they want to go). Gamers attempting to animate their character into the road (in game terms, crossing a control-line) would trigger an animation of their avatar being run over by a car (again, a game-over situation).

Such attempts at forced narrative, however, provided gamers with another opportunity of Gertie-like rebellion, deliberately triggering ‘game over’ situations, including those based on the
pseudo-physical environment as defined by the control lines. Deliberately animating the character to a location in which it would fall or be run over, or using the game’s textual input to type a command that leads to a gamer-over animation has been defined in a retrospective article at the TV Tropes website as ‘half of the fun of a Sierra game’.3 This blatant denial of the games’ narrative intent was another form of freedom practiced by the gamers, the freedom which Bukatman (2012), as explained above, defined as testing and rebelling against the pseudo-physical limitations that the developers attempted to force on the animated avatars. If the animation of the gamers (discussed in the previous section of this article) paralleled the pleasure the spectators experienced in seeing Gertie following her routine, then the deliberate triggering of death situations in Sierra On-Line’s games parallels the pleasures of seeing Gertie break her routine, rebelling against the attempts to confine her and force her through a narrative.

This practice further links Sierra On-Line’s adventure games to animation theory. Animation scholar Alan Cholodenko (2007) has identified the essence of animation in its ability to re-animate – to create the illusion of the dead coming back to life (for example, in McCay’s re-animating of Gertie, a creature representative of a species long-extinct). In his article, Cholodenko further links this essence to Roland Barthes’ (1977) ‘Death of the author’ argument. According to Cholodenko, the reader (or spectator), whose reading of the text (animation) is superior to that of the author (or the animator) also practices a similar re-animation of the dead.

Sierra On-Line’s adventure games are a literal demonstration of Cholodenko’s argument: while the game developers (or, the game’s software, according to Galloway) set up death-triggering situations to keep gamers in-line with the narrative, gamers chose to re-interpret the use of these situations, and then resurrect (and re-animate) their avatars from the dead by either restarting the game or restoring a saved game.

**Influence: Third-person, first-person and open-world games**

An examination of the contribution of Sierra On-Line’s adventure games to animation in digital gaming reveals that this influence has extended beyond these games’ genre, and even beyond their familiar aesthetic. As the adventure genre began losing popularity in the 1990s, two notable genres that started gaining a following in the same decade were the first-person and third-person three-dimensional action games, commonly known as first- and third-person shooters. Both genres demonstrate the influence of Sierra On-Line’s adventure games in animating the gamers and making the gamers animators.

A first-person perspective in digital games – which means the gamers see the digital surroundings from the avatar’s point of view, rather than seeing (and, as explained in this article, animating) an on-screen avatar, was not a new concept in the 1990s; it had been used from the late 1970s throughout the 1980s in role-playing games and even adventure games (in fact, Sierra On-Line’s early adventure games prior to King’s Quest had employed the same perspective). However, in 1996, id Software released Quake, introducing a three-dimensional digital environment presented in a first-person perspective through which gamers could navigate their avatars or, as in Sierra On-Line’s ‘3D’ adventure games, animate them.4 This solidified the popularity of the first-person shooter among gamers (Barton and Loguidice, 2009: 51–56).

The connection between the first-person shooters of the 1990s and Sierra On-Line’s adventures of the 1980s is not immediately obvious due to notable differences in the gamers’ point of view and, more importantly, genre. Gamers’ interaction with their digital surroundings (or their expressive actions within this environment, in Galloway’s terms) in a first-person shooter consists mostly of engaging in armed combat against computer-controlled opponents, with a bare minimum of puzzle-solving, usually related to operating mechanisms that lead from one location to another.
Interaction with the surroundings in a Sierra On-Line adventure game consists of detailed examination of different objects, complex manipulation of these objects and conversations with computer-controlled characters.

However, the limited form of interaction with the environment in first-person shooters emphasizes the one area where gamers had the greatest freedom to animate their avatars: movement. As in Sierra On-Line's adventure games, gamers in *Quake* and the first-person shooters that followed it could animate their avatars throughout each location and between locations, around three-dimensional objects (now based on true three-dimensional models, made possible by technological advancements, rather than the illusion of three-dimensional environments provided in Sierra On-Line's adventure games). As in Sierra On-Line's adventure games, though to a lesser degree, first-person shooters also contain hazardous locations (pits, burning fires, etc.) that would lead to a game-over situation or cause damage (as defined in the game avatar’s health score) once gamers animate their avatars into them.

A far simpler way to keep first-person shooter gamers following the games’ intended ludus narrative, however, was forcing them to fight the different machine-controlled enemies. This is something gamers had to do not just in order to progress through the game but also if they wanted to explore their surroundings, such as enemies getting in their way – not unlike the puzzles laid across the digital surroundings of Sierra On-Line’s adventure games. However, in a first-person shooter, the presence of the machine-controlled enemies made it harder for games to completely disregard the games’ intended narrative and express themselves through movement alone – the separation between movement and expression was stronger than in Sierra On-Line’s adventures.

Third-person perspective is a broad term that can be applied to Sierra On-Line’s adventure games as well since, as explained above, the gamers see and control an onscreen avatar. Third-person three-dimensional shooters, however, are a specific genre popularized in the mid-1990s by games such as Eidos Interactive’s *Tomb Raider* (1996), in which gamers control an onscreen protagonist seen from the back within a digital three-dimensional environment. Third-person shooters are aesthetically closer to Sierra On-Line’s adventure games, compared to first-person shooters. While still placing emphasis on fighting computer-controlled characters, these games feature onscreen avatars and tend to contain a large number of puzzles, sometimes even related to object-manipulation.

Environmental hazardous locations of the kind seen in Sierra On-Line’s adventure games are also common in third-person shooters, as the direct control over the onscreen avatar makes it a challenge for gamers to navigate while attempting to avoid such locations. As Pallant (2019: 206) explains, one thing that makes the *Tomb Raider* game successful is the ‘grippingly immersive challenge of maneuvering the twitchy croft avatar across unforgiving cliff edges, high ravines and monumental ziggurats – every wrong move resulting in certain death and a painful reload from some now-distant location’. This description is practically the same as the experience of animating avatars within the control lines representing hazardous locations in Sierra On-Line’s adventure games. As in first-person shooters, third-person shooters also allow gamers to freely animate their characters within a digital environment, around three-dimensional objects, and to do so in disregard of the developers’ intended narrative, in a manner that recalls the Sierra On-Line adventure games. Again, though, third-person shooters also tend to force their intended narrative on gamers through the presence of enemy characters that gamers should fight and puzzles that must be solved in order for the gamers to keep exploring (and progress through the intended narrative).

The real development that demonstrates Sierra On-Line’s adventure games to animation in digital games is the adoption of both the first- and the third-person perspective in the late 1990s and throughout the 21st century for open-world games. Open-world games either do not require their gamers to follow a specific narrative, or intentionally allow their gamers to freely explore the
game’s digital surroundings, regardless of the game’s intended narrative. Such games are an example of pure or high-level paidea gaming, and also have their roots deep in the early history of digital games: games such as the space simulator *Elite* (1984) introduced the concept. However, as technology developed, the concept of open-world games gained more popularity as it allowed gamers to freely explore rich digital worlds without limit – with notable examples being the crime game *Grand Theft Auto* (1997) and the massively-multiplayer role-playing game *World of Warcraft* (2004). Exploration in open-ended games features a stronger integration between expression and movement, close to that of Sierra On-Line’s adventures, as such games invite gamers to experience their open-ended nature by exploring their digital surroundings. In fact, it can be argued that, in open-ended games, the concept of movement as expression is not a byproduct of the game’s engine as it was in Sierra On-Line’s adventure games, but rather an intended feature.

The 21st century also saw the rise of another genre of games, which can be considered a descendant of the adventure genre, sometimes degradedly referred to as ‘walking simulators’. The genre, which includes games such as *Gone Home* (2013), is based on pure exploration of the digital environment, through movement and examination, without obstacles of any kind. Regardless of the perspective or the engine employed by games in the genre, they are almost entirely based on the ‘movement as expression’ concept.

**Sierra On-Line’s achievements – and failures**

If Sierra On-Line’s adventure games have been so influential, how did they fail to maintain their popularity and – more importantly – gain a wider recognition for their historical contribution to digital gaming? The company’s biggest failure, in this respect, is that of failing to recognize its own achievements. A notable example of this failure is found in a post by former Sierra On-Line developer and creator of the *Leisure Suit Larry* series, Al Lowe (nd), on his website, which describes his failed attempt to develop a multiplayer online title in the series:

> All I had to do was change adventures from single-person, sit-and-think, object-puzzles, inventory-manipulation, reading games to a game not requiring, or allowing, any of this. It had to be played by several players, where objects could be in any player’s possession, with no plot since everyone would be at a different place in the world . . . well, you can see that created conflicts that are impossible to resolve.

The idea that merely animating the gamers’ avatar within the digital environment can be a game in its own right – that movement can be a form of pure expression and that this action of animating is, in fact, the major achievement of the games published by his company did not occur to Lowe. In fact, since the post was written after he left Sierra On-Line and mostly retired from game development, his failure to recognize this achievement is also retrospective. Had Lowe focused his efforts on using the engine the company developed for adventures games while finding open-ended ways to interact with the digital environment, not only would he have taken the company’s games to the next level of design, but he would also have had a legitimate claim for developing the concept used for current multiplayer online games. Lowe, however, limited his vision to the confines of the adventure genre: the confines of ‘objects’ and ‘plot’.

This limited vision, however, was well supported by the critical discourse that surrounded Sierra On-Line’s adventure games: comments like Wagner’s (1987) review, which compared playing the third *King’s Quest* game to ‘driving without a map’, appear to have pushed the company’s developers in the direction of tighter narratives that would animate the gamers rather than allowing them more freedom in animation. In 1988, the company abandoned the AGI engine in favor of a new engine called SCI (Sierra Creative Interpreter) which allowed gamers to move their avatars by
clicking on the relevant location in each screen, with the computer performing the movement automatically. In 1990, textual input was completely removed from Sierra On-Line’s adventures, replacing it with a small number of icons representing actions, that also included movements – for example, clicking a ‘hand’ icon on an object would cause the game to automatically move the game’s avatar to the object and take it. While the keyboard interface offered by the AGI engine allowed for direct control and animation of avatars, the mouse and icon interface transferred most of the control of the avatars’ animation to the game. This meant that animating avatars around onscreen objects was no longer performed directly by the gamers. From a genre perspective, this change made sense, allowing gamers to focus on the games’ intended narrative – indeed, despite initial suspicion, the move to mouse-interface in Sierra On-Line’s adventure games was eventually viewed positively by critics. However, it caught the company deep within the trappings of its genre; just as the text adventures became obsolete when Sierra On-Line introduced the concept of graphic adventures, the company’s games became obsolete when it moved deeper into the elements of the genre and abandoned the conceptual development of the gamers as animators adopted by other companies for other genres.

Interestingly, fan activity that surrounds Sierra On-Line’s adventure games focuses on preserving the same genre trappings that led to the company’s decline. Fan-made remakes such as those of the first three King’s Quest games (released 2001, 2002 and 2006, respectively) featured enhanced graphics in comparison to the original AGI games, but also removed the textual input in favor of an icon-driven mouse interface. In doing so, the fans failed to realize that the AGI keyboard-driven movement of avatars, and the gamers’ ability to animate them, brought them much closer to popular games in the era that followed Sierra On-Line’s decline.

Conclusions

An examination of the Sierra On-Line adventure games’ contribution to the development of animation in digital games reveals that the most significant aspect of this contribution was actually a byproduct of these games’ design rather than an intended consequence. Before Mystery House, movement in games existed in both its animated form in most genres and non-animated forms in text adventures. Text adventures allowed for movement within a richly detailed world of text narratives that could not be paralleled by the graphic presentation of other genres. Mystery House replaced most of the textual descriptions with graphic images, showing how such richness in detail can also be achieved visually in digital games. King’s Quest and subsequent AGI games took things further by introducing avatars’ animated movements within this richly detailed graphic world – and, in the process, freed these worlds to be explored by gamers.

In doing so, Sierra On-Line’s adventure games behaved like Winsor McCay, while the gamers that played them were allowed to behave like Gertie: they could draw upon both the pleasure of following the games’ intended narrative and the pleasure of bypassing them completely. As in Gertie’s performances, each option held its own visual appeal. The tension between ludus and paidea existed long before Sierra On-Line started producing its own games (or, for that matter, before the appearance of digital games) but Sierra On-Line’s adventure games literally animated this tension when they made the very act of animated movement within a digital world a form of expression.

The fact that 21st-century open-world games and ‘walking simulators’ adopted not only the concept of Sierra On-Line’s adventure games of animating a character in a digital three-dimensional world but also the complete freedom of animated exploration is more than proof of the company’s contribution to animation in digital games. It is also a demonstration of how the designers of such games recognized the pleasures behind a Gertie-like character within an animated
narrative, providing players with enough freedom to perform such rebellion. Much like McCay’s intended animation of Gertie’s rebelliousness, the designers of many 21st-century games are well aware of the appeal in an animated rebellion, and deliberately provide gamers with the tools for such rebellion. A byproduct of the animation of the gamers in Sierra On-Line’s adventure games became the standard for treating the gamers as animators.

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Notes
1. The term ‘digital games’ is used in this article instead of ‘video games’ or ‘computer games’ since the article discusses games running on multiple platforms. Sierra On-Line’s games were computer games since they ran on computers; other games discussed in the article ran on computer, console and arcade machine platforms, sometimes on more than one platform. The term ‘digital games’ is used to represent any digital game on any platform.
2. Williams played a version of the game developed for a teletype machine titled Advent (Nooney, 2017: 79).
3. Further evidence for the attraction of the many ‘digital deaths’ in Sierra On-Line games can be found in websites and video channels devoted to the subject: examples include ‘The Many Deaths of Roger Wilco’ (Calkins, 2003) and the ‘Favourite Sierra Deaths Top 53’ video on the YouTube website available at https://www.youtube.com/watch?v=226VrKXP0Lw
4. Quake was preceded by Wolfenstein 3D (1992) and Doom (1993), both also featuring first-person perspectives but using pseudo three-dimensional graphics, rather than a true three-dimensional engine as in Quake.
5. Interestingly, and not unlike gamers’ attraction to the death options of the avatar in Sierra On-Line’s adventure games, such options in the Tomb Raider games appear to hold their own attraction for gamers as is evident in online videos such as ‘Tomb Raider 1: Featuring Lara Croft All-Death Scene’, available at https://www.youtube.com/watch?v=A_mQCNmjZxU
6. Compare, for example, Wagner’s earlier review of the third King’s Quest game to Chuck Miller’s (1993) enthusiastic review of the sixth game in the series (which, incidentally, featured the same protagonist as an avatar): ‘Yet, with its demise, the textual parser has taken with it the last vestiges of the multifaceted difficulties and cumbersome nature associated with pre-graphic adventures, and replaced it with a more intuitive, user-friendly window to game interaction.’

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