

Eliciting Affective Responses Through Sentient Encounters in a Farming Computer Game

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ABSTRACT

Farming computer and video games embed a wide range of emotive and culturally idealised tropes and encounters. In this paper, ‘non-representational’ theory is utilised to assess the mechanisms through which affective responses are elicited in computer gameplay, applied to a case study of *Stardew Valley*. Analysis focuses on sentience: interactions with in-game livestock and local community members. Game mechanisms incentivise routine, daily interactions with livestock, linking affection expressed by livestock to farm productivity and financial gains and leading to a sense of responsibility for livestock welfare. In contrast, human interactions involve sporadic, discovery and reveal-based encounters. By staging these contrasting ‘worlds of affect’ in-game, *Stardew* demonstrates how an affectively rich landscape can be created through sentient encounter, and how the ‘work’ of grafting embedded in gameplay yields a range of affective responses.

Keywords

game design, rural idyll, role playing games, video games, *Stardew Valley*



Figure One: *Stardew Valley*

Source: <https://www.stardewvalley.net>

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INTRODUCTION

Farming games attract a substantial gaming cohort, routinely reaching the top of gaming charts (Kelly, 2015). In its heyday in the early 2010s, over 60 million people played *Farmville* (Alderman, 2011). *Farming Simulator* has sold over 25 million copies (VB Staff, 2020). *Stardew Valley* – an RPG based on Harvest Moon – has sold over 10 million copies (Strickland, 2020), becoming “the unlikeliest independent-video-game triumph since *Minecraft*” (White, 2018). These games reflect the deep connections between people and land embedded in a broad range of cultures and nations where there is a romanticised history of reliance on peasant or ‘family’ farming for food production. Notions of the ‘simple life’ in the country, and the moral character of farmers and farming practices thus resonate across cultural boundaries. To date, farming computer games have had limited attention within digital game studies research, overshadowed by the more popular first person shooters, sports and action-based games. In this paper I assess the mechanisms utilised to engage players in a farming computer game, focusing on embodied tropes of farming and rural life, and how these are enacted through sentient encounters.

On-line farming games engage players in tasks from petting livestock to farm business planning, through ‘sandbox’ play where players direct (within parameters) their farm’s development. Farming games embody the blurred distinction between work and play already evident in contemporary farming, which is evident in the substantial cohorts of hobby and non-commercial farming practitioners across the global West (Sutherland et al., 2019; Sutherland, 2020a; USDA 2015). Within commercial farming, seminal economic research by Ruth Gasson back in 1973 (p. 527) identified the values (instrumental, social, expressive and intrinsic) associated with the farming occupation - such as independence, working outdoors and being your own boss - recognising that commercial farmers seek to achieve more than profit maximisation from their farm work. The appeals of farming as an occupation are thus multiple, a characteristic that lends itself well to the combination of ‘grafting’ and play embedded in contemporary computer games.

The particular appeal of farming games is their “marriage of workmanlike play and sentimental atmosphere” (White, 2018). Wholesome, nostalgic engagement in peaceful practices is made possible through the combination of culturally embedded imaginings of rural spaces and the complexity of farm operation, which lends itself well to the interlocking sets of activities and achievements necessary to engross players in gameplay (i.e. to the production of ‘flow’). In contrast to first person shooters and adventure-based games, farming games offer opportunities for (largely) peaceful exploration, expression of curiosity and creativity, non-confrontational task achievement, and skill development within a supportive but challenging rural environment. In gameplay farm ‘work’ becomes play through engagement with a variety of affirmative rewards, including engagement with sentient and non-sentient in-game actants.

In this paper, I assess the mechanisms through which players are engaged in farming gameplay, focusing particularly on ‘affect’. Shaw and Warf (2009, p. 1332-1333) argue that computer games produce both ‘worlds of representation’ – which comprise the placed, gendered, racialised and politicised quality of game spaces - and ‘worlds of affect’ – the embodied, preconscious impact of video games on players. Analysis of representations demonstrates the narratives that are expressed in the game by the game designer (e.g. Sutherland, 2020c). Analysis of affect emphasises how the game is experienced by players. Computer and video games are what Riva et al. (2007, p. 46) term an “affective medium”: “a medium able to elicit different emotions through the interaction with its contents.” Affective responses are not limited to emotion, but include physiological responses, such as changes to heartbeat and blood pressure, and

automatic physical movements (e.g. tightening shoulder muscles, hunching over the keyboard). Ash (2010) argues that positive affective encounters are essential to successful computer game design.

In this paper I consider the mechanisms utilised by game developers to elicit affective resonances within a farming-based computer game, utilising a case study of *Stardew Valley*. *Stardew Valley* is a role-playing game, which tasks the player with revitalising the family farm and refurbishing the local community centre, while establishing friendships with (some of) the local village's 30 residents. I focus on sentient encounters with in-game characters (livestock and human), because these offer clear opportunities for affective response to be elicited through associations with culturally embedded ideals of farming and community life.

Sentience can be defined as: "having the awareness and cognitive ability necessary to have feelings" (Broom, 2014, p. xiii). Humans are clearly sentient, and positive association of 'small town' life are a substantive component of imaginaries of idyllic rurality. The relative sentience of livestock has been a subject of debate (Duncan, 2006). This is complicated by in-game representation - Schröter (2016) points out that in-game characters may be understood as fictional beings (i.e. with mental properties), but also may simply be treated as 'game pieces' – game mechanics which simply offer access to resources or progress the narrative. Livestock are well established in the rural studies literature as 'sentient commodities' – both saleable entities and sentient beings capable of self-directed action (Wilkie, 2017). Livestock have high affective value, routinely featuring in agri-tourism offerings (e.g. through opportunities to pet livestock, Gorman, 2018). Both human and animal in-game characters are thus likely to elicit affective responses.

In considering the affective resonances elicited through a farming computer game, I am specifically interested in how contemporary notions of idyllic rurality are mobilised to produce affective resonances in game players. The notion of idyllic rurality has a lengthy history, which can be traced back to Virgil and Theocritus (Bunce, 2003). The rural idyll can be defined simply as a set of myths or images that endure over time, particularly invoking nostalgia and heritage (Little and Austin, 1996). The rural is thus an important site of cultural production, but also subject to considerable romanticisation (Peeren and Souch, 2019). Issues of crime (Yarwood, 2001), alcoholism (Jayne et al., 2011), homelessness (Cloke et al., 2001) and social exclusion (Shucksmith, 2012) are often omitted from popular contemporary imagery of the countryside, although they have been appearing in contemporary television shows (Dickason, 2017). In this paper I will argue that *Stardew Valley* game designer Eric Barone actively reinforces traditional agrarian concepts of idyllic rurality through repetition and affective award mechanisms on-farm, but challenges these idealised notions of rural community life, creating contrasting, layered 'worlds of affect' for players to selectively explore.

The rural background (setting) to *Stardew Valley* offers fertile ground for affective engagement. Halfacree (2010) identifies three broad 'styles' of consuming the rural, using the metaphors of rural idylls as 'boltholes', 'castles', or 'life rafts'. The rural as bolthole is an escape, a distinctive place in which it is possible to escape from toxic urban life, engendering practices of flight and disappearance. The rural as 'castle' involves defensive and protective practices: fortification against urban pressures. Halfacree's third reading is of 'life rafts' – temporary escapes to the countryside for second homeowners or tourists who engage with the rural idyll on a part-time basis. The idyll becomes a space from which engagement in the dysfunctional world can be negotiated. In all three readings the rural location is positioned as a place to establish connectedness (to people, nature) not possible in an urban environment. *Stardew Valley* is a playground for farm development and community engagement, made possible

through engaging in the work of revitalising a farm holding and the local Community Centre.

AFFECT, ENCOUNTER AND THE RURAL IDYLL

To conceptualise the processes through which affective resonances are mobilised, I draw on non-representational theory (also termed more-than-representational theory). Lorimer (2005) describes ‘non-representational theory’ as an umbrella term for work that attempts to deal with the messiness of research into the more-than-human, multisensual world. Vannini (2015) identifies research foci for this approach: events, relations, practices, backgrounds and affects. These are foci for analysis of how meaning is made through bodies and performances. Events are happenings (e.g. accidents, adventures, mishaps, crises, occasions) which reveal and alter expectations, raising the possibility of alternative perceptions and outcomes. In *Stardew Valley* and many other role-playing games (RPGs), events are highlighted through ‘cut scenes’ (short videos or staged set pieces), which move gameplay in a particular direction (e.g. setting new challenges, revealing back-stories). Relations are the entanglement of actors – human and non-human – which comprise the lifeworlds within which meaning is negotiated. In this paper I emphasise the relations which yield outcomes of various forms (e.g. interactions between players and sentient beings which yield in-game financial rewards, progress gameplay or elicit emotive responses). Practices and performances are the ‘doings’ of these relations – physical and mental actions which produce particular responses (e.g. purchasing and feeding livestock, giving gifts to community members). Backgrounds are situated spatial contexts: places in which practices and events unfold.

This paper focuses particularly on affective resonances: how symbolic meanings shape bodily experiences (Bos, 2018). ‘Affect’ includes emotions but also encompasses biological and unconscious responses to particular events. Affect is not limited to a single (human) body. For example, places can have affective atmospheres (e.g. the high energy of a sporting event, or the ‘spookiness’ of haunted house). Affect is thus conceptualised as a ‘set of flows moving through bodies of humans and other beings’ (Thrift, 2008, p. 236). A basic premise underpinning thinking on affect is that most cognition is unconscious: the human mind can only actively process a limited number of inputs at the same time; most stimuli have the potential to alter behavioural responses unconsciously but are responded to without thought (Thrift, 2008). Thrift utilises the example of complex social situations (e.g. meeting new people, joining a club), where participants responses occur automatically in response to (largely) unconscious conditioning. Thrift’s (2008) conceptualisation of affect also identifies it as contagious, transferred unconsciously through imitation.

Both industry and academia recognise the role of affect and emotional content in games and gameplay. Freeman has proposed ‘emotioneer’ as a way of enhancing the breadth and depth of the game’s emotional experiences. Emotioneer makes every element of a story (e.g. plot points, characters and dialogue) both conceptually interesting and emotionally deep (Freeman 2006 in Shinkle, 2008). Games can thus be understood as sequences of interlocking emotional experiences. Role playing games (RPGs) as a genre are heavily ‘emotioneer’ – numerous affective encounters are staged in order to engage players in the game. Storylines are emotive; there are opportunities for substantive, personal interactions with other players – real and game produced. Backgrounds are intentionally designed to produce ‘affective atmospheres’ of energy, pathos, or fear. These elements make gameplay engaging and motivate ongoing play.

Affective resonances occur through ‘encounter’ – cross broader interactions with the ‘other’. Encounters are made meaningful in computer games when difference is

actively negotiated by the player (e.g. evident in forum discussions about the morally 'correct' response to a staged encounter within a computer game). The appeal of video gameplay is the opportunity to engage in alternative worlds (Shaw and Warf, 2009). Rural sociological studies of real-life engagement in farming practices and decision-making demonstrates how these practices and relations shape personal 'taste' and perceptions of symbolic wealth (i.e. cultural capital, Burton et al., 2008; Sutherland, 2013; Sutherland and Darnhofer, 2012). Game players engaging in on-line farming practices can similarly be expected to develop and internalise tastes and values based through their in-game practices. Studies of encounter focus on the embodied nature of practices, and how differences are negotiated 'in the moment' (Wilson, 2017).

Stardew Valley is consistent with other RPGs, establishing an emotive foundation for game place: inheriting the farm in the midst of a barren urban existence, moving to a valley where there are ample opportunities to explore, engage in productive and leisure practices, gain skills, solve puzzles, progress through the game narrative(s) and accumulate 'g' (in-game currency). The game takes the player back in time to a rural idyll characterised by open spaces and opportunities to engage in community life. Farm labour is manual – hoeing, weeding and watering by hand, but players have access to television. There are foraging, mining and fishing opportunities, and a set of 30 in-game characters with differing personalities and back stories. Potential affective responses range from curiosity to empathy, friendship, affection, discovery, surprise, productivity and a sense of accomplishment, leading to physiological responses of relaxation, tension, and heightened attention. To limit the scope of the paper, the focus of the analysis is on sentient encounter.

METHODS

This paper is based on the author's analysis of her direct experience of PC gameplay in *Stardew Valley*. *Stardew Valley* is an 'indie' game, the product of a single developer, released in 2016. Creator Eric Barone (known on-line as ConcernedApe) clearly states his initial intention of learning to program by creating a PC version of Harvest Moon (a console-based game), where characters similarly engage in farming and rural life (Marks, 2016). The initial set up is a rejection of urban life and the inheritance of the family farm from 'Grandpa'. The player is gifted with 15 parsnip seeds and some basic tools, and tasked with growing a parsnip and meeting all 30 community members.

Data collection involved playing avatars of both genders and on all five types of farm for at least one month (as reckoned by in-game calendars), and the two dominant story lines for 2 years (i.e. to the story lines' conclusions, totaling over 200 hours of gameplay). Interactions with livestock and human in-game players were then replayed multiple times to assess the mechanisms by which affective responses were elicited, and detail the nature of the associated practices, events, relations and backgrounds, and how these invoke or counter notions of idyllic rurality. Analysis includes consideration of the author's own affective responses, and what she perceives as the elements of game structure that elicit these responses. Forum discussions were also reviewed to assess others' affective resonances to gameplay. You Tube videos and on-line articles detailing interviews with *Stardew* creator Eric Barone were reviewed to provide context and identify his intentions in eliciting affective responses. Analysis is thus largely instrumental (following van Vught and Glas, 2018), focusing on how assessing the game as an object of encounter, with gameplay oriented to experiencing the game and encountering in-game dynamics as they were designed to be encountered.

Affective resonances are inherently personal to the individuals involved, reflecting prior experiences, personality, likes etc. In this case, the author brings with her direct lived experience of farming (being raised on a family farm in Canada), where livestock care and interaction with rural community members were formative experiences. She

is a meat eater, who engaged in livestock production (alongside her parents, brothers and grandparents) throughout her youth. Care for livestock thus involves both sentimental and practical memories from childhood, re-freshed during regular visits to the farm which her parents continue to operate. As a teenager, she was actively involved in local rural community ‘fall fairs’, and interacted with rural community members at school, in 4H (rural youth clubs) and through daily life on a farm located near a small town. She has substantial knowledge of academic concepts of agrarianism and the rural idyll, developed over an academic career which has focused primarily on the formation of farming culture. For the author, notions of idyllic rurality and sentient encounter are thus both academic concepts to critically appraise, and subjects of substantive personal experience. Other game players are less likely to have had such direct rural experiences, and may experience different affective resonances, although there are examples of farmers who play *Stardew Valley*¹, including the author’s brother.

FINDINGS

Stardew gameplay – both on farm and in relation to the local community (‘Pelican Town’) - takes place against a background of vibrant, colourful rural life. ‘Cut scenes’ which set up gameplay, locate the player’s avatar initially in a grey, monochrome office environment which she rejects to move to Grandpa’s farm. The *Stardew Valley* colour scheme is of bright pastels, with a retro feel created through overtly pixelated artwork. The landscape is alive – colourful butterflies flutter, rabbits bound from undergrowth when disturbed, birds chirp, sea gulls roam the beach areas. A variety of trees can be chopped down and regrow over time. The background music – created entirely by Eric Barone - is relentlessly cheerful while the player is on the farm and in the town centre during the day, but calms into relaxing wave and seagull noises on the waterfront. Crickets chirp at night, soothing music plays in the spa (where energy can be restored) and more ominous music is heard in the mines (where ores for upgrading tools can be found but monsters attack).

Sentient encounters in *Stardew* are spatially segregated: livestock interactions are restricted to the farm environment, whereas interactions with community members almost exclusively occur off-farm. Affective encounters in *Stardew* are not limited to sentience – the game incites a wide range of responses, including wonder, curiosity, and pride of accomplishment that occur in response to encounters with non-sentient actants - but these are beyond the scope of this present paper.

Affective encounters on the farm

Gameplay is introduced through an introductory event, presented in an extended cut scene. ‘Grandpa’ is weak and in bed, apparently dying, leaving a legacy of the farm to his grandchild (the player’s avatar). The initial set up is thus clearly emotive. Grandpa’s statements portend the dark days ahead before his gift can truly be realised:

“Now listen please, there will come a day when you feel crushed by the burden of modern life... and your bright spirit will fade before a growing emptiness. When that happens, my dear, you’ll be ready for this gift. Now let Grandpa rest.”

Stardew Valley gameplay is thus positioned as a solution to the emptiness of contemporary (urban) life, a retreat from urban challenges which characterises contemporary readings of idyllic rurality (in Halfacree’s 2010 terms, a ‘bolthole’ from urban life). The statement affirms the worth and value of the player – whose ‘bright spirit’ can be revitalised along with the farm. Grandpa is loving, perceptive, generous and wise in his timing. These scenes demonstrate Grandpa’s affection and concern for his grandchild, invoking a sense of impending loss (White, 2018). The characteristics of Grandpa as elderly and male are consistent with the popular agri-tourism trope of

the ‘Wise Old Man’ (Capriello et al., 2013). The underlying affective message is to slow down and relax. The game is a return to the simple life, where repetitive farming practices and interactions with local people heal the trauma of the urban rat race. The farm is rooted deeply in the player’s blood, it’s inheritance symbolic of the family’s care for her.

Grandpa subsequently forms part of the background to gameplay: there is no further relational potential within the direct family connections. Unlike Pelican Town community members, who have extensive back-stories, Grandpa is not an active character. Grandpa’s old friend the Mayor will occasionally comment that Grandpa “worked himself too hard”, thus mobilising the trope of the hard-working farmer. The avatar’s parents will send occasional gifts and messages of pride in the avatar’s achievements, but never appear in person. Instead, the affective potential of sentient beings on the farm is largely limited to livestock, until the player successfully navigates community relationships (discussed in the next section) to successfully woo a spouse.

Livestock production is necessary to complete the main storyline of *Stardew Valley*: to refurbish the Community Centre. This involves donating 130 different items, including a number of livestock biproducts. Players thus must establish interactions with livestock and associated materials (building barns, purchasing livestock, harvesting their feed and collecting their produce) to successfully pursue this storyline. The emphasis on variety of products embedded in the Community Centre quest incentivises players to develop a farm with a wide range of livestock and buildings, akin to contemporary children’s petting zoos where there are small numbers of a wide variety of animals. This structure is consistent with traditional imagery of farming, exemplified in English culture by the children’s song ‘Old McDonald had a Farm’ – where the farmer has a cow, pig, chicken etc (i.e. small numbers of a range of livestock, rather than a monoculture). Livestock interactions are highly sanitised – there is no manure, breeding for reproduction or disease. Unfed cattle will be ‘grumpy’ and stop producing milk but they will not starve. Death is extremely rare and achievable only through conscious neglect (when livestock are locked out of their barns overnight); in this case, the animal disappears, rather than leaving a carcass. Livestock care is thus an emotionally ‘safe’ space.

The relations of livestock-based commodity production (e.g. milk, eggs) incentivises players to make livestock care part of a daily routine, and to develop emotional attachments before there is a financial reward for their investments. Livestock are purchased as juveniles, required multiple weeks (poultry) or a month (cattle) to reach maturity. During that time the player is responsible for their care (e.g. regular feeding). To ensure ‘happy livestock’, players open the barn doors in the morning to let livestock outside (making this a logical time to pet, feed and harvest); players are thus incentivised to hurry ‘home’ in the evening to close up the barn doors again at night. Hurrying home involves affective responses of tension, increased pressure on arrow keys and heightened attention (for players who, like the author, aim to maximise every minute in the mine or fishing during the evenings).

Relationally, petting and feeding livestock not only lead to commodities, they also lead to progression along a ‘happiness meter’ – zero to five hearts. Clicking on an animal to feed, pet or harvest products will yield a heart in a thought bubble; clicking on the animal twice will yield a comment on the animal’s happiness and progression along the heart score (e.g. “Polly is very happy today” or alternately “Polly is grumpy today” if she’s hungry, along with a comment that she’s looking thin). Petting, feeding and harvesting are immediately rewarded with heart bubbles – or not, if there is no feed available, but saleable products are not produced until the livestock reach maturity. Petting livestock and feeding livestock are thus investments of time – one that

immediately pays of in positive affirmation directly from the livestock (heart bubbles) but only laterally in g (currency): ‘happy livestock’ produce higher quality products, which earn higher sales values at Pierre’s store or through the collection box.

Livestock are also an emotional investment, yielding an immediate affective response of pride and maternal warmth, but are undifferentiated in their responses – although they have different names (given by the player upon purchase), livestock respond uniformly to care. There is also a hierarchy of animals, reflected in their purchase price and housing requirements (i.e. pigs – who dig truffles - can only be housed in barns which have been upgraded twice from the base model). This game dynamic sets the player on a road to earning/achieving the higher level (i.e. yielding a sense of accomplishment and satisfaction).

Ultimately, livestock production engenders a sense of responsibility for their care. In the forums, players identify the sense of guilt that accompanies the neglect of animals; there is an implied moral contract between players and in-game livestock. The bond is forged through a game mechanism of repetition. Players with multiple livestock move from animal to animal, petting or harvesting and receiving a heart bubble each time. Avatars start their days at 6 am; livestock encounters are thus typically amongst the first activities of each new day, yielding an immediate response of affection – a heart bubble – but delayed financial rewards. The purchase of all livestock as juveniles places a time gap between purchase and production, and links the player’s activities to their growth – livestock need to be fed to mature, a process which involves harvesting or purchasing hay and placing it in feeding stations (all livestock eat grass). The player thus invests in livestock development before receiving a reward. Once mature, the financial rewards are further delayed until sales (typically until the next day, through the collection box, or even longer if the product is being processed into mayonnaise, cheese or truffle oil). Happy livestock is an achievement that gives immediate satisfaction and a sense of affection from the livestock: game dynamics yield multiple affective resonances, staged through time.

Livestock production practices are thus routinised, yielding regular, predictable rewards. Production of livestock involves considerable persistent, daily grafting i.e. work. Active events are few and initiated by the player (e.g. the purchase and naming of livestock, the construction of farm buildings). There are very few cut scene ‘events’ involving livestock: one involves a ‘void egg’, placed there by a witch who flies over one night. The asexual reproduction of animals is also unpredictable – for players with barns with available capacity and happy livestock, a notification will arrive – apparently at random and somewhat seldom – that one of the livestock have given birth to a new calf, piglet, lamb or kid. This arrival is a source of delight and pleasure. Dinosaurs – essentially lizards – are among the livestock – and a source of comic interjection, with quizzical in-game statements appearing about the new ‘reptiles’ appearing in the barn after hatching. These surprise events engender a sense of wonder, humour and magic to farming production. The farm is a safe haven of stable routine, yielding predictable affective responses from livestock and generating a sense of responsibility and being needed, interspersed with occasional surprise events and sense of achievement.

Affective encounters with community members

Grandpa sets up the value of community in the initial cut scenes – once the player opens the envelope, the follow text appears:

Dear [avatar’s name],

If you’re reading this, you must be in dire need of a change.

The same thing happened to me, long ago. I'd lost sight of what mattered most in life... real connections with other people and nature. So I dropped everything and moved to the place I truly belong..."

Grandpa identifies and emphasises the importance of 'connections with real people' as what 'matters most in life'. The player is first introduced to 'real people' as soon as her avatar steps off the bus in *Stardew Valley*, in a cut scene with Robin (the local carpenter) and the Mayor, who orient the player to the farm. The two immediately begin to squabble after Robin comments on the derelict condition of the farm – the Mayor calls her 'rude' and accuses her of attempting to drum up business. Interpersonal relationships between community members thus form a background to gameplay; community members interact directly with each other, with and without intervention from the player.

The initial cut-scene is characteristic of subsequent interactions with the locals. One of the first tasks given to the player is to personally greet all 30 residents of Pelican Town. While most in-game characters are positive and happy to meet the new farmer, several are aloof or even rude. Shane, for example, responds to the avatar's first greeting with: "I don't know you. Why are you talking to me?" With the notable exception of Morris (Joja Mart manager, personification of the game's villain) all in-game characters have 10 point 'friendship meters', similar to those of farm livestock, which demonstrate the progression of the friendship. Progression along this meter is largely the result of successful gift giving (and occasionally in-game tasks).

Human in-game encounters involve more complex and challenging practices than those with livestock, requiring considerable tenacity, intentionality and planning. Whereas livestock are located in buildings proximal to the farmhouse where the avatar starts each day, interactions with villagers requires venturing off-farm. Each community member is distinctive: each character has set of gift likes and dislikes; gift giving results in a textual response, which reflects the fit of the gift with the receiver's preferences. Gift giving requires knowing their personal weekly schedule, which varies by season and is subject to occasional deviations (e.g. for annual hospital appointments). In-game characters can be greeted every day, but gifts are only allowed twice per week, and birthdays (where gifts have double their usual heart value) occur annually, and are posted in the window at Pierre's shop (i.e. they are not easily remembered). Avatars are not allowed into some player's homes until a level of friendship has been reached. Offering a disliked gift reduces 'friendship points' and yields a negative response from the character. Actively pursuing friendships with all 30 community members could thus occupy most (if not all) of a player's time in the early stages of the game (i.e. to locate the villagers daily and produce their desired gifts). The player thus inevitably must prioritise the in-game characters with whom to pursue friendships; the others become features in the background to gameplay.

Denofgeek blogger Jenny Morrill (2018) aptly describes the complexity and appeal of friendship building:

"Not all character arcs are of the 'misunderstood soul' type. Getting to know some characters results in the opposite effect, particularly once you get to witness their interactions with each other. Dysfunctional families, clandestine relationships and embarrassing secrets are rife in Pelican Town, and you never know where the next Jeremy Kyle popcorn moment is going to come from. For a bunch of pixels, they get up to a hell of a lot of stuff."

Developing friendships involves a continuous process of discovery and revelation. Unlike livestock, there is little direct relationship between friendship and 'g'

accumulation. Gifts from friends will appear in the post but these are typically low value and not essential for completing the Community Centre tasks. The primary benefits of friendship are the ‘heart events’ (cut scenes) which reveal the current interests or struggles of the community members: access to affective encounters is the primary incentive for developing friendships. Upon reaching 10 hearts with a character, it is also possible to marry him or her, which leads to the creation of a new room on the farmhouse and the location of the character on the farm (offering access to new dialogue and occasional labour benefits, such as watering crops). The wedding itself is a major event, involving all community members in a public ceremony. The value in befriending community members is thus personalised and highly selective but substantially delayed – it typically requires weeks of in-game time (i.e. several hours) to unlock a heart event, and months of in-game time to successfully woo a spouse.

The specific relations of building friendships with community members involves active involvement with messy interpersonal situations. Eliciting cut scenes involves achieving friendship progression and being in a particular place at a particular time (e.g. the event will trigger when crossing the town square at night, or entering a character’s home or business). Unless the player is specifically pursuing a heart event – there is considerable information on the various wikis on how to do so – events appear sporadically, yielding a sense of surprise and occasional delight. Cut scenes are largely proscribed, but offer the player a chance to choose from a list of responses during the scene (which may or may not influence progression along the heart scale). For example, the player decides whether to encourage Leah to have an art exhibit, whether to reveal the Mayor’s affair with Marnie to other residents, and whether to help Clint in his efforts to woo Emily (or pursue her themselves). The player is thus invited to take moral and ideological stances through numerous minor subplots i.e. to make affective judgements, which generate affective resonances similar to those of human interpersonal encounters (e.g. friendship, affection, empathy).

While many of the cut scenes are emotionally light, *Stardew* is notable for its active engagement in issues of alcoholism, depression and post-traumatic stress. Cut scenes with Shane include images of him passed out surrounded by beer cans; dialogue involves evidence of depression and expression of suicidal ideation, giving the player the opportunity to be supportive and get Shane into medical care. Cut scenes with Linus reveal the marginalisation he feels as a homeless person within Pelican Town and offer the player the opportunity to be supportive, or to tell him to ‘get a job’. Character Clint suffers from post-traumatic stress, made evident in a cut scene where his wife’s popcorn making sends him into a rage followed by immediate regret. Cut scenes thus enable empathy and judgement to be expressed, and include educational components: Shane’s doctor, for example, counsels the player on the importance and availability of treatment for depression and the worth of human life. Shane’s arc plays out with a positive resolution (the production of blue chickens as a legacy for his niece).

The mechanism within *Stardew* is that the player chooses – or not - to earn their way into discovering what is going on underneath the surface of community life. Investment in the work of developing friendships is rewarded by access to emotive encounters, and experience of the associated affective resonances. Creator Eric Barone specifically stated his intention to create realistic encounters with in-game characters:

“Ultimately, I wanted the game world to feel like a living place. I wanted you to forget that it was a video game and to feel like these people had a life of their own” (Eric Barone in White 2018).

He also identified the attachment that develops with focusing on a small-scale world (Grayson, 2016). In doing so, he affectively engages players in a deep and complex

rurality, where the traditional ideals of idyllic rurality – of peaceful, bucolic rural life – are progressively eroded.

Pursuing friendships with the associated cut scenes is a mechanism to engage players in long-term gameplay. The limitations on gift giving mean players inevitably engage in other activities between encounters, such as revitalising the farm, building relationships with other community members. It is only possible to marry one character at a time; the forums provide examples of players who have married multiple spouses (with different avatars, or utilising the mechanism of divorce), informing debates on the variety of rationales and merits to marriage to each candidate (or marriage at all). The realisation of these encounters in the medium to long term layer with the demands of daily livestock care. Remembering multiple community members' schedules and potential heart events alongside other projects of completing the Community Centre and developing the farm thus become a set of mechanics for inducing 'flow' – immersive engagement of players in the on-line world.

Concluding Discussion: Layered worlds of affective encounter

Stardew Valley enrolls players in two overlapping 'worlds' of affective, sentient encounter – the farm and the local community. *Stardew* game mechanics involving farm-based practices mobilise traditional tropes of the wise old man, hard-working farmer, and happy livestock. The 'world of affect' located on the farm is thus predictable and stable, based on traditional farming tropes and repetitive, daily interactions. Practices elicit a sense of responsibility for animal welfare by linking the feeding of livestock to daily receipt of affection, with delayed production of outputs and financial rewards. The repetitiveness of these practices and the staging of encounters at the beginning and ending of each 'day' (when barn doors need to be opened and closed) provides a rhythm to farm life. Guilt for failure to feed or interact with livestock is reinforced through income foregone – unhappy livestock do not produce their anticipated outputs. Engaging in this world yields a stable, positive series of affective encounters which are directly linked to financial accumulation.

The 'world of affect' based in community life is considerably messier, involving infrequent but often planned and intentional interactions, yielding sporadic access to highly affective events in the lives of in-game community members. This dysfunction is justified by the game designer as a means of providing players with authentic interpersonal interactions. The commercial success of *Stardew Valley* – with over 10 million players (Strickland, 2020) – suggests that this is a successful approach. Community members are far from perfect. If the farm environment is a bolt hole, in Halfacree's (2010) terms of rural consumption (where players retreat from their urban existences to bucolic farm life), then community engagement is akin to an in-game life raft (a temporary escape) – but not for the player. Instead, the player forays from the safe haven of the farm into dysfunctional community life to rescue the community members from themselves, by providing emotional support. Gameplay thus involves selective involvement in two intersecting worlds of affect, which incentivise game players to delve further into community dynamics and to revisit the affective responses of livestock long after the primary quests are achieved.

Farming practices in *Stardew* are thus both 'work' and leisure for the player. This fuzzy barrier between work, play and self-actualisation is consistent with how farming practices are understood academically – Gasson (1973, p. 527) identifies the values (instrumental, social, expressive and intrinsic) associated with the farming occupation. Instrumental rewards of income, business expansion and congenial working hours are relatively easily achieved: there are few opportunities to lose money, particularly for experienced gamers; by and large g accumulates at a rate largely set by the player's

willingness to ‘graft’ (endless hoeing, planting watering, harvesting, feeding etc). In terms of social goals, the avatar is recognised by community members as the local farmer and credited with continuing the family tradition. Expressive values: pride of ownership, exercising abilities and the chance to be creative are evident in the wide variety of *Stardew* farm tours available on You Tube. Intrinsic rewards of independence (i.e. freedom from supervision), control in a variety of situations, outdoor world and enjoyment of work tasks can be presumed from the high number of game players. *Stardew Valley* thus emphasises the ideals of farming ambition with few challenges.

Stardew Valley simultaneously sanitises livestock encounters and reinforces familiar idyllic rurality ideals based around farming, while challenging the idyllic nature of rural communities held by real world immigrants. In contrast to the literature on real world perceptions of the idyll (which omit e.g. alcoholism, Jayne et al., 2011, homelessness, Cloke et al. 2001, and social exclusion, Shucksmith, 2012). *Stardew* creator Eric Barone presents opportunities for players to actively engage with challenging issues, but at their own pace and choosing. Curiosity and empathy are thus integrated with intentional selection of in-game characters to befriend, through practices which are necessarily sporadic and player directed. There is no need beyond the player to continue the gift giving that allows disturbing cut scenes (such as Shane’s) to be revealed – there are plenty of other in-game players to befriend and marry. Barone thus utilises affective encounters to provide a sense of realism, choice and depth to an otherwise cartoonish computer game.

Stardew Valley gameplay clearly embeds representations of farming life, which the author has addressed in more detail elsewhere (Sutherland, 2020c). In this paper, where I focus on sentience, it is worth briefly considering how sentience is represented. Barone clearly distinguishes between the sentience of in-game human characters and in-game livestock. The heart metres for human characters are 10 hearts in length; for livestock it is five. Human encounters are sporadic and varied, requiring knowledge of personal schedules and preferences, whereas all livestock are satisfied with the same feeds (hay or grass), and petting consistently yields a heart bubble (if animals are fed). It is not possible to give an animal a gift it will not appreciate, or to elicit a ‘heart event’ that will reveal a deeper personal side. Livestock are also located within the confines of the farm – a safe space of refuge for the players; interactions with are considerably messier, located in the broader game world. The implication is that although animals are granted a representation of sentience, this is clearly substantially less than for humans. It is much easier to treat livestock as productive game pieces than it is for humans in-game characters. Although *Stardew Valley* gameplay arguably encourages positive normative associations with low input agriculture, it also reinforces the function of livestock as service providers to humans.

Shaw and Warf’s (2009) stated purpose for profiling ‘worlds of affect’ was to demonstrate the importance of considering how game design intentionally influences the unconscious experiences of gameplay. *Stardew Valley* offers sentience to livestock, but positions them as positive sources of affection and g and does not enable critical appraisal of livestock production practices (e.g. contemporary issues around intensive livestock production and the meaning of sustainable food production, see Carolan, 2016; Ilbery and Maye, 2015). Although *Stardew Valley* takes the player back in time, to more traditional farming values and practices, social interactions are very contemporary. These are not the stoic grandparent generation that ‘just got on with it’ and avoided or ignored mental health issues. Affective resonances are elicited by the infrequent nature of interactions, surprise, investment, moral choices that need to be made. This layering of affective worlds engages players long-term in a dedicated fan-base.

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ENDNOTES

¹ <https://www.pcgamesn.com/stardew-valley/pc-realistic-farmer>