Queering Data and Dating: AroAce Modding and File System Playgrounds in Stardew Valley

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ABSTRACT

Modding the sexualities of video game characters is one way in which queer players have opened up new representational possibilities for themselves. This paper focuses not merely on what queer modding does but on how it does it. It highlights the extent to which queer modders engage with, leverage, and play in game data to customize their experience beyond what the base game permits, even if their changes are ultimately small when playing the modded game itself. Turning to a unique mod enabling asexual and aromantic relationships in Stardew Valley (Eric Barone 2016), this work also considers how a game's technical structures, from its file system to its underlying development technologies, sustain but do not determine queer representation. With access to these structures, modders can turn them, and the games built on top of them, into playgrounds for queer expression.

Keywords

modding, queer modding, role-playing games, queer games studies, game engines

INTRODUCTION

In considering queer representation in video games, many scholars have turned to role-playing games (RPGs) (Consalvo 2004; Harper 2014; Wood 2017). Games such as those in BioWare's *Mass Effect* (2007-present) and *Dragon Age* (2009-present) franchises allow players to explore sexual and romantic relationships with non-player characters (NPCs). As some of these NPCs are written to be lesbian, gay, or bisexual, romantic relationships with them also offer an opportunity for gamers to play with queerness, depending on the gender of their own character. At the same time, the mechanics of dating in these games quantify, encode, and delimit sexuality in ways that queer fans sometimes find too narrow and rigid, leading them to stage their own technical interventions known as mods.

Modding is the practice of players making, disseminating, and using their own alterations to the games that they play. These modifications, or "mods", vary drastically in scope, from small aesthetic changes, such as giving a disliked character permanent clown makeup, to completely new games, such as Valve's *Counter-Strike* (2000), which began as a mod for *Half-Life* (Valve, 1998). What mods can change and

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how they can change them is in part determined by the game itself— how it encodes and stores the data that modders seek to alter, or what elements of its code and mechanics are easily accessible. Some games are thus easier to mod than others. Some developers fully embrace customizability, from the early modding and machinima scenes around *DOOM* and *Quake* (id Software 1993, 1996) to Larian Studios' hit success *Baldur's Gate 3* (2023) (Lowood 2014; Manovich 2002; Wilde 2023). Other studios, such as Electronic Arts, are notoriously less permissive (Blake 2022).

Whether modders are empowered by their games or fighting them every step of the way, all modding requires an interaction with the game that goes beyond the normal bounds of play. Rather than accepting a game as a coherent, finished product, modders play within its technical structures and can enact these structures differently. Subsequently, mods that alter an NPC's sexuality beyond what a mainstream RPG permits are valuable objects of study for queer games scholars. Described by scholars Adrienne Shaw and Bo Ruberg as more of a "paradigm" than a subdiscipline, queer games studies brings together diverse approaches to making, researching, and theorizing games under the umbrella of imagining games and games scholarship differently (2017). In addition to studying how LGBTQ characters are represented in games, then, queer games scholars often take queerness further. Calling upon the more conceptual registers of queerness articulated in queer critical theory, this paradigm operates from many different vantage points. Queerness can articulate a design methodology that breaks with norms of interactivity and player agency, or a transgressive and resistive reception modality that can be adopted by any player, a mode of analysis that complicates dominant narratives around gender and sexuality in games, and much more (Clark 2017; Phillips 2022; Ruberg 2019).

Part of this *more* is a call to understand the relationship between queerness and game code as it simultaneously enables and delimits queer expressivity (Freedman 2018). While some scholarship approaches this question from the perspective of industry and design, understanding how queer game makers are restricted by the tools that they use, mods also engage with issues of access and restriction in defining the possibility space for queerness (Freedman 2020). Leveraging game code to remediate representation, queer sexuality mods counter, undermine, subvert, and reject the heteronormative logics of the games they alter, as well as imagining queer alternatives. They are compelling objects of study for queer games scholars because they are at once representational objects and distilled, concentrated code objects which can draw sharp attention to—and challenge—the functionality of sexuality.

Numerous scholars have investigated this practice (Howard 2019; Lauteria 2012; Sihvonen 2012; Thompson 2018; Welch 2018). Much of this literature distinguishes queer mods based on how—or, more precisely, where—they interact with the game: at the level of content (i.e., making an otherwise straight NPC available to same-gender relationships) or at the level of mechanic and code (i.e., turning a game into a pornographic platform for depicting explicit, hardcore sex between characters). The former is often presented as less queer than the latter, differentiating between superficial, representational queerness and deeper, mechanical queerness.

By turning to queer modding's entanglements with *data*, this essay complicates such reliance on the surface/depth binarism. Rather than being relegated to a surface

effect or hailed for its deeper penetration of code, queerness opens up the potential for slippage, intermingling, and blurring, wherein the representational capacities of data are not subordinate to mechanics but in fact give them meaning and significance. At the same time, it must be acknowledged that the ability for modders (and scholars) to engage across and between a game's layers is in part contingent upon a given game's technical architecture. By focusing specifically on an aromantic-asexual mod for *Stardew Valley* (Eric Barone 2016), this paper expands the identities encompassed by queer modding and argues that it is *Stardew Valley*'s radical openness that enables this expansion. With its open access—easily disassembling into code and data and reassembling into a text—*Stardew Valley* becomes a modder's playground for queer expression.

THE PLAYGROUND OF QUEER MODDING

Queer modding exists at the nexus of technical practice and queer play. This is a somewhat fraught positioning, given modding's historical associations with an implicitly white and masculine hobbyist culture (Postigo 2016, 236; Trammell 2023). This tension persists today and can be seen, for example, in the burgeoning modding community of Baldur's Gate 3. Mods that productively and expansively elaborate upon the game's base mechanics exist alongside those that whiten characters of color and meticulously remove indications of LGBTQ identities. At the same time, the potentials for queer play persist even in games as texts and as communities that resist it. As Bo Ruberg argues, queerness "as a name for being or desiring differently [...] can also be a way of designing a game, interpreting it, or playing it" (2019, 15). For Ruberg, this includes refusing the hypermasculine violence of a competitive firstperson shooter by playing it as a walking simulator (2019, 208) or redistributing agency in a violent action-adventure game with misogynistic, homophobic, and transphobic writing to a hapless deer (2022). This paper takes queer modding to do all three: it is an intervention into a game's design that reinterprets sexuality and is distributed for others to play (with).

Early scholarship on queer modding includes the work of Tanja Sihvonen and Evan Lauteria. Where Sihvonen focused narrowly and deeply on the modding culture around EA's The Sims franchise (2000, 2004 at the time of Sihvonen's writing) Lauteria took a wider approach. Turning to mods for Mass Effect 1 (BioWare 2007), Dragon Age: Origins (BioWare 2009), The Sims 2 (2004), and Fallout: New Vegas (Obsidian Entertainment 2010), Lauteria developed ga(y)mer theory as an understanding of how LGBTQ players negotiate, challenge, and remake the heteronormative game logics that delimit and straighten sexuality. Modding, for Lauteria, is one such tool of resistance, which he consistently conceptualized through spatial metaphors (2014, para. 22). Drawing parallels to the activities and ethos of the mid-20th century Marxist organization the Situationist International, Lauteria argued that modders occupied game space in much the same way that the Situationist International occupied capitalist production spaces (2014, para. 4). In both instances, resistance is predicated on disruption rather than outright destruction— interrupting the normal logics and flow of capitalism and heteronormativity, destabilizing but not undoing their structural integrity.

The work of queer modders is thus queer in at least two senses. First, it imagines new possibilities for queer representation. Second, it expands the boundaries of play to encompass a game in its entirety, including the systems, data, and code that are normally obfuscated by its singular, seemingly complete and discrete executable file.

In this case, queerness is less a question of identity and more of "locating unspoken norms by which a field of human activity [...] is operating, and finding points of rupture that destabilize those assumptions," with play as the activity and mods as the points of rupture (Clark 2017, 4). As Lauteria notes, these two notions of queerness are closely intertwined: "[m]ods offer meaningful political alternatives to these commercialized and normative manifestations of LGBT content, instead facilitating something far closer to the 'free play' envisioned by Johan Huizinga and Roger Caillois" (2012, para. 29). Keeping with Lauteria's emphasis on game space, then, we can see how queer mods' occupation of that space opens it up for modes of play beyond what was intended and prescribed by the game's developers. A modded game becomes a playground for queer expression.

Yet not all forms of play in this occupied space are equivalent. For one, there are barriers to accessing the space in the first place. Modding as a practice is closely tied to computer games, rather than console games, wherein the platform's design impose restrictions that can only be subverted at the level of hardware (Postigo 2016, 330). Even on a PC, developing mods requires a level of technical knowledge—finding, reading, editing, and debugging opaque file formats—that undermines some of the liberatory and democratizing potential identified by Lauteria.

In queer modding particularly, Lauteria and later scholars such as Tom Welch draw distinctions based on the extent and depth of mods' changes. Welch, for example, constructs a dichotomy between cosmetic enhancement mods and mechanical alteration mods. Cosmetic enhancement mods only engage with queerness at the level of a game's content. They may swap player avatars to circumvent gendered restrictions on romantic content, like the Harvest Moon (Miraculous Interactive Inc. 2003) mod that Welch discusses (2018, n.p.), while others bypass gendered logics that restrict non-player characters to heterosexual relationships, like the mods that Lauteria analyzes for Mass Effect 1 and Dragon Age: Origins (2014, para. 24-25). By contrast, mechanical alteration mods, as the name suggests, change a game's mechanics, breaking and remaking the gameplay system toward queer ends. Nathan Thompson, for example, closely considers mods that transform Bethesda's Skyrim (2011) into a platform for simulating hardcore gay sex, arguing that "gaming practices and the heterosexual and non-erotic play that often come with it are purposefully made strange in order to broaden possibilities for players who often feel marginalized or underrepresented" (2018, 186). Welch similarly discusses making play strange in turning to the campiness of a queer mod for Bubsy 3D (Eidetic 1996), a platformer whose commercial and aesthetic failure open it up for queer remixing (2018, n.p.).

Welch argues that cosmetic enhancement mods—those that only engage with a game's representational surface—"are not queering gameplay on the whole" compared to mechanical alteration mods— those whose interventions are more radical, more destabilizing, and more queer (2018, n.p.). These latter mods are significant for reappropriating and remediating straight code as (re)source for queer imaginings. At the same time, I propose that cosmetic enhancement mods can also do queer theoretical work by revealing the instability of this very division between surface and depth. In this regard, I draw inspiration from queer theorist Sara Ahmed, who suggested that the word queer "might allow us to 'twist' between" different registers of meaning and signification "without flattening them or reducing them to a single line" (2006, 565). This slippage allows for movement across a game's platformed layers, twisting, bending, and blurring them while still acknowledging the

principle of escalating technical abstraction that undergirds modern software design (Anable 2018; McPherson 2014; Montfort & Bogost 2009). It is a slippage that queer mods exemplify as dually code and representational objects.

To illustrate this, it is useful to return to one of mods that Lauteria discussed in "Ga(y)mer Theory" and which Welch later cites in explaining the limitations of mods that only engage with queerness as representation. For BioWare's Dragon Age: Origins, "Equal Love" by NexusMods user Kamajii is an example of what is colloquially known as a "bi mod".2 These mods take NPCs whose romances are otherwise gated by gender and make them available to any player character. In essence, they make straight NPCs bisexual. "Equal Love" and others do this by thwarting conditional logic in the game's code that restricts flirtatious lines of dialogue to player characters of the "correct" gender (Lauteria 2012, para 25). This allows player characters of the same gender to initiate and pursue romantic and sexual relationships with their otherwise straight companions. Subsequently, such mods reveal how sexuality is constituted in RPGs: not as something characters are, intrinsically or otherwise, but something that results from gating certain dialogue options in order to control the player's behavior. Queer modding allows us to twist through the registers of a game and understand how a seemingly singular and cohesive act of representation is constituted across these levels.

Indeed, it is reductive to suggest that bi mods are only concerned with circumventing otherwise incidental bits of conditional logic. By understanding such mods purely in terms of representation (surface-level aesthetic changes) and mechanics (deeper code), one overlooks how profoundly these mods can entangle with and play inside the games that they alter. There are other bi mods for *Dragon Age: Origins* that do more than "Equal Love," such as the "Complete Bi Overhaul" mod by NexusMods user GoesOnGhost.³ A common problem that modders encounter when making a straight character bisexual is dialogue, either spoken or in subtitles. For characters who are bisexual by default, their dialogue will be scripted to change with regards to the player character's gender, but straight NPCs have no such sensitivity. This results in a same-gender partner being misgendered constantly. This is easier to fix in subtitles but presents a real, time-intensive challenge for spoken dialogue, leading many modders to leave new gender-inclusive or queer dialogue unvoiced.⁴

As the mod's name might suggest, however, "Complete Bi Overhaul" goes the extra mile to splice new audio not only for the two straight companion characters of *Dragon Age: Origins*, Alistair and Morrigan, but for every single secondary and minor character who has sexually or romantically charged interactions with the player character. The 3,000+ line README file that accompanies the mod explains in detail how the creator altered the game's dialogue. These changes include removing gender checks from lines of dialogue that were otherwise restricted, adding in new checks to ensure that new gendered lines play as necessary, and sometimes deleting lines entirely. These changes may ultimately seem cosmetic. In the course of gameplay, players may not even encounter these changes and, when they do, they ultimately amount to swapping pronouns or switching "king" to "queen." Looking behind the gameplay, however, it is evident that this was a massive undertaking that reveals how sexuality within the game is constituted not only by the conditional logics that structure the appearance of flirtatious dialogue options, but also the data that comprises this dialogue.

Queer mods turn such data into a playground that sprawls across the file system architecture for both the modder and the players that use them. Additional packages for "Complete Bi Overhaul" enable players to further customize their experience. The "Cool Your Jets My Dude" add-on, for example, removes content where certain male NPCs will flirt with a female player character no matter what. This dialogue often uncomfortably and uncritically replicates the power differentials involved in a man making unwanted advances against a woman. "Complete Bi Overhaul" allows players to excise this content entirely. Alternatively, by deleting clearly-labeled folders from the package, players can pick which NPCs they want to change, leaving the others' flirtatious behavior intact (see figure 1). Other optional extensions require a bit more maintenance from the player, such as the "All Origins Marriage" package. This removes restrictions on which player characters can end the game as the lawfully-wedded partner of the world's king or queen. As the mod installation page notes, the files for this package must replace their counterparts in the main mod, rather than simply being placed alongside the mod, as in the case of "Cool Your Jets My Dude" (see figures 2 & 3). It falls then to the player to navigate and alter their file system.

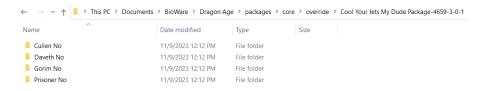
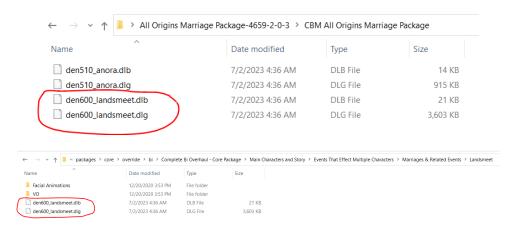


Figure 1: Screenshots of the folders in the "Cool Your Jets My Dude" package for the "Complete Bi Overhaul" mod. Taken by author.



Figures 2 and 3: Screenshots of the files in the "All Origin Marriages" package for the "Complete Bi Overhaul" mod, as well as those same files in the "Complete Bi Overhaul" mod which must be replaced by those in the package in order to install the package. Taken by author.

Lauteria envisioned queer modding as a kind of utopic free play. While "Complete Bi Overhaul" works within the game's established mechanical norms, it also reconfigures the relationship between player and game. Required to become intimately involved with their games, players interact with them not merely as

entertainment products but as a set of interrelations between files taking up space on their computer.

ACING ACCESS

In continuing to elaborate the relationships between queer modding, data, and structures of access, I want to highlight that queer mods are not without their own norms, whether resulting from modders' own biases or from more complicated entanglements with the encoded structures in which they work. In discussing raunchy gay Skyrim mods, for example, Thompson acknowledges that the bodies he saw represented were overwhelmingly white, thin, able-bodied, and muscular, paralleling normative desires within gay male culture (2018, 196-97). In particular, I want to note that, for as many mods as there are that amplify sexuality through heightened visual erotics, there are very few that work the other way (Lauteria 2012; Sihvonen 2012; Thompson 2018). A Dragon Age: Origins mod called "mild romance scenes" makes the evening trysts with NPCs less explicit, but this is anomalous compared to the multiple mods that add more explicit content to these scenes.⁵ It also maintains sex as an integral part of a romantic relationship. This uninterrupted linkage between sex and romance-and, indeed, the ubiquity of romance as the framing for more intimate interpersonal relationships-limit possibilities for exploring and expressing asexuality and aromanticism in video games.

With some notable exceptions like Parvati Holcomb from The Outer Worlds (Obsidian Entertainment 2019), there are very few depictions of characters who are aromantic (do not experience romantic attraction) and/or asexual (do not experience sexual attraction) in video games compared to other sexualities (Klepeck 2019). This absence also challenges the capacities of modding to repair queer representation. Players may be able to interpret a given character as being aromantic (aro) or asexual (ace) through fanwork, but they cannot readily manifest such reading practices in the game itself. Intimate relationships involving aromantic and asexual people entail a careful negotiation of romantic and sexual boundaries because they deviate from the normative scripts governing those desires (Przybyło 2019, 5-6). Thus, the same techniques used for bi modding, such as making lines of dialogue available to any player character, do not function for aroace modding. One could follow the model offered by "mild romance scenes" to desexualize intimate encounters, or even skip such content entirely, yet this still operates from a logic of loss and lack. While closely associated with popular notions of asexuality and aromanticism, as queer scholars like Ela Przybyło have asserted, this is a reductive perspective. These are capacious identities, experiences, and lifeworlds defined not by a dearth of intimacy but by its non-normative, queered reconfiguration (Przybyło, 2-3, 113).

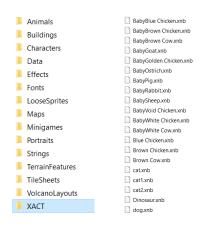
Such reconfigurations require access: the ability to change mechanics, rewrite dialogue, alter intimate animations, and afford a level of complexity and variance that can only be achieved by working with data and code at a level that few computer games permit. The low, abstract, apolitical, and neutral technical levels of a game's software are implicated in constituting representational possibility— and when those levels are made porous and penetrable, aroace modding becomes more readily realizable.

Exemplary of this is Eric Barone's *Stardew Valley* (2016). This farming simulator and role-playing game features a customizable protagonist who becomes disillusioned with their corporate desk job and moves to a countryside village called Pelican Town. There, they start a farm, plant crops, gather resources, fight monsters in mines, and meet, befriend, and even marry their neighbors, all while restoring their new home's sense of community. Compared to other games of the farming sim genre, *Stardew Valley* (SDV) has a particularly vibrant and active modding community. By number of unique downloads, it is the fifth most popular game to mod on NexusMods, a well-known mod hosting website. It is outranked only by Bethesda games like *Skyrim* and *Fallout: New Vegas*, owing in no small part to the fact that it, like these Bethesda games, is known for being easy to mod.

This ease is partially attributable to the fact that *SDV* was made without a game engine. Game engines are software that facilitate game development as a base computational layer on top of which developers scaffold their own code, assets, and gameplay systems. Because of this primacy, game engines are sites of delimitation and control, restricting not only game development possibilities but modding ones as well (Freedman 2020). The game engine dictates how all the disparate game components, from visual assets to shaders to AI scripts to object placement data, are compiled and "built" into an executable file. Thus, the game engine is responsible for flattening the game's layers into the single textual surface with which players interact. Modding requires piercing through the presentation of cohesion and extracting, modifying, and repackaging components of the game.

SDV, however, was made without a game engine. Nearly all of it was coded from the ground-up by Barone himself with only the lightweight platform Microsoft XNA as a foundation (Barone 2013). This contributed to the game's lengthy and at times exhausting development period, but without a game engine's interference in the final product, SDV is accessible to its modders no matter what component they want to modify, be it an asset, a piece of game data, or a fundamental mechanic (Schreier 2018, 63-86).

If one has the knowledge to locate *SDV*'s installation folder on their computer, the game's file system opens up as a kind of sandbox, a space for playing freely and intimately with data. Navigating to the correct directory reveals a wealth of well-organized and clearly-identifiable XNB files (see figures 4 & 5) which can be easily converted into more legible JSON files using a third-party application. From here, with a little bit of cross-referencing and guesswork, modders can edit data to their heart's content. Figure 6, for example, shows how *SDV* encodes the gift preferences of NPCs— specifically, those gifts that every villager likes and dislikes regardless of their own personal preferences. Each number corresponds to a specific item, which a modder can look up in a file called ObjectInformation. The first universal love, 74, is a very rare and valuable item called a prismatic shard (see figure 7). However, if I swapped 74 with, say, 306, I could give everyone in Pelican Town an inexplicable love for mayonnaise.



Figures 4 and 5: Screenshots of text from NPCGiftTasts.xnb and ObjectInformation.xnb (converted to JSON). Taken by author.

```
"content": {
    "Universal_Love": "74 446 797 373 279",
    "Universal_Like": "-2 -7 -26 -75 -80 72 395 613 634 635 636 637 638 724 459 873",
```

"73": "Golden Walnut/250/-300/Basic/Golden Walnut/To the parrots of Ginger Island, this nut is the finest delicacy.",
"74": "Prismatic Shard/2000/-300/Minerals -2/Prismatic Shard/A very rare and powerful substance with unknown origins.",

Figures 6 and 7: Screenshots of text from NPCGiftTasts.xnb and ObjectInformation.xnb (converted to JSON). Taken by author.

Finding and altering game code is a little more complicated than interfacing directly with data files. Such mods are most commonly created through a fan-made Application Programming Interface called SMAPI, a tool which allows fans to effectively code SDV as Eric Barone would have. 6 Modders can alter existing objects, classes, and methods or write new ones in C#, only a few steps removed from altering the game's source code directly. Furthermore, they can use this source code as a reference. Normally, players can only directly access and read game code if the developers have publicly released it. However, because XNA is so unobtrusive as a game engine, SDV's code can be reverse-engineered with surprising ease through a technical process known as "decompiling". This version of SDV's code does not run given the inherent imperfections in the decompiling process, but it nonetheless provides mechanical modders with an immense boon. They can use the decompiled source code as an easy reference for all of the classes, properties, and functions that Barone himself wrote, and call on them in their own code as needed. A mod titled "Family Planning" (loe2run), for example, rewrites the base game's BirthingEvent.cs file to expand the possibilities for having children, including the ability to adopt a child with an NPC who is a roommate rather than a spouse. Few games or engines allow their code to be so readily accessed and altered.

In asserting the significance of this accessibility, then, it is worth considering the counterexample: a game engine that restricts modding possibilities— with consequences for the representation of sexuality. For example, the previously discussed expansiveness of bi mods for *Dragon Age: Origins* is contrasted by the restrictiveness of sexuality mods for a later game in the franchise, *Dragon Age: Inquisition* (BioWare, 2014). *Inquisition* was built using Electronic Arts' proprietary game engine, which has been a source of contention among BioWare developers (BioWare being an EA subsidiary) as well as fans seeking to mod Frostbite games

(Schreier 2017, 150-54). Inquisition's files cannot be so easily opened and edited, nor its code decompiled as an easy reference, and even official modders' tools, like the popular Frosty Tools Suite, can only do so much to render these files legible. Compare the straightforwardness of SDV's data files to Inquisition's (fig. 8). The difficulty of modding Frostbite—resulting from how the engine hides, obfuscates, fragments, and encodes data in the game's finalized form—has ramifications for representing queerness. Inquisition introduced the franchise's first gay male and lesbian romance options, which some modders sought to make available to player characters of the opposite gender. Rather than making these NPCs bisexual, however, they are effectively straightened, unable to be romanced by player characters of the same gender while the mod is installed. As the author of one such mod explains it, this is a direct consequence of the game engine's underlying encoding. Underlying encoding.

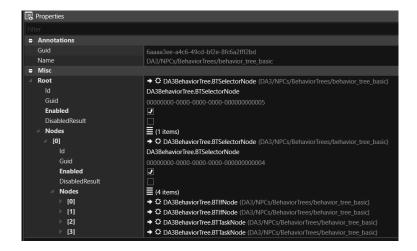


Figure 10: Screenshot of the properties of the behavior_tree_basic asset in EBX format in the Frosty Editor. Taken by author.

To play in file system playgrounds is to play within encoded norms of game design and architecture. *SDV*'s comparative accessibility turns the game into a platform playground in and of itself. It becomes a basis for creative computational production enabling anything from making the game more racially diverse to entire expansion packs with new NPCs, locations, quests, and more.¹¹ This includes some of the only aromantic and asexual mods out there.

ARO/ACE MODDING PRACTICES

In concluding this essay, I use one such mod, Platonic Partners and Friendships by NexusMods user Amaranthacyan, as a case study for understanding what aroace modding looks like, emphasizing its playful but also labor-intensive entanglements with game data.12 Designed by an aromantic asexual modder, Platonic Partners and Friendships (PPAF) trades romance for platonic life partnership and removes sexually suggestive lines of dialogue. Because its changes target game data, and specifically dialogue, it is a cosmetic enhancement mod in Welch's terms, also known as a content patch within the *SDV* modding community. Far from a superficial engagement, PPAF shifts how intimate relationships and sexuality function within the game. This shift is achieved through detailed and intimate interaction with the

game's data, afforded by the radical openness of *SDV* itself. In enabling aromantic and asexual partnerships and engaging deeply with files and data, PPAF complicates how queer modding practices have been understood thus far in queer games studies.

Relationships with villagers form an important part of *SDV*'s gameplay, allowing players to learn more about the characters and form friendships which are mechanically represented as "hearts" indicating the strength of a given relationship. For most villagers, relationships max out at ten hearts, except for the twelve villagers who can be romanced. Their relationship with the player character maxes out at 8 unless they are courted, which unlocks the last two hearts. Furthermore, at 10, the player character can propose to them, and after marriage, an additional four hearts open up, forming the relationship's capstone. This trajectory includes special cutscenes or events that trigger at 8, 10, and 14 hearts to show the deepening relationship between the player character and their chosen significant other. Marriage itself consists of a ceremony officiated by the town's mayor, after which the NPC moves into the player character's farm, and the two can eventually have (or adopt) children.

Player characters of any gender can pursue a romantic relationship with one of six women and six men in Pelican Town. Thus SDV does not contain the conditional and binary logic used by a game like Dragon Age: Origins to enforce a given character's sexuality, but SDV sexuality mods still abound. Some resemble the mods discussed thus far, such as Free Love, which enables polyamory, Horny Bachelors, which changes male characters' daily schedules to include time for masturbation, and LewdDew Valley, which adds explicit content and relationship mechanics for the female love interests.13 Against this backdrop, work of Platonic Partners and Friendships is unique. PPAF changes the relationship trajectory described above by introducing the possibility of pursuing a strictly platonic higher-heart relationship with NPCs. Rather than becoming boyfriend or girlfriend, PPAF allows players to become best friends, and rather than becoming spouses, PPAF allows for committed platonic partnerships. This is achieved through a series of cosmetic enhancements to the game's dialogue, altering everything from how NPCs react to being proposed to and broken up with to how their family members react to the developing relationship. For example, if the player character is platonic partners with Abigail, one of the village's eligible bachelorettes, the line of dialogue where her father refers to them as his child-in-law has been replaced with a more neutral address. The player is also able to specify the language used around their relationship, such as the relationship label for their platonic partner or the term of endearment that platonic partners will use for them. Again drawing from the example of Abigail, rather than her mother asking the player character how married life is, she will reference life as the specified relationship label (see figures 8 & 9).

```
"Mon_inlaw_Abigail": "Hi, @. Are you enjoying the married life? I hope so!",

"Action": "EditData",
"Target": "Characters/Dialogue/Caroline",
"Entries":
{
    "Mon_inlaw_Abigail": "Hi, @. Are you and Abby enjoying life as {{RelationshipLabel}}? I hope so!",
    "Mon_roommate_Abigail": "Hi, @. Are you and Abby enjoying life as {{RelationshipLabel}}? I hope so!",
},
```

Figures 9 & 10: Screenshots of text from the original Caroline.xnb (converted to JSON) and Amaranthacyan's Abigail.json. Taken by author.

Indeed, the customizability of PPAF is one of its most notable characteristics. By leveraging some light conditional logic, PPAF doubles as both an aromantic and an asexual mod and permits any combination thereof. If a player specifies that they want an asexual partnership, the mod removes sexually or physically suggestive lines of dialogue. However, this choice can be made independent of whether the relationship is romantic or aromantic. Players can even make these choices for each individual eligible NPC, and deeper platonic relationships can themselves be customized by "proposing" with either the base-game "Mermaid's Pendant" or the custom "Friendship Bracelet," which permits a more casual roommate relationship.

In addition to the flexibility that it enables, perhaps the most extensive work that PPAF does is in rewriting each relevant NPC's 8 and 10-heart event, which required not only writing new lines of dialogue but rewriting the event data which scripts SDV's cutscenes. These long strings of text combine camera movements, sound effects, sprite animations, portrait changes, and dialogue into a single unit of information for the game to parse, and PPAF painstakingly edits them in the spirit of aromantic and asexual sensibilities. Take, for example, the new culminating 10-heart scene for another villager, Penny. PPAF offers two new options, one which includes more suggestive blushing portraits (""UseLovePortraits": true") and one which does not (""UseLovePortraits": false"), each of which has to be encoded separately, distinguished merely by using one animation flag (\$8) over another (\$6) (fig. 11). This reflects the mod's and its author's commitment to detailed customization as a precondition for aromantic and asexual expressivity and representation. More substantial are the changes to the scene's dialogue. Originally an intimate spa encounter in which Penny confesses her feelings for the player character, both versions of the new scene keep the setting and choreography but pivot to Penny musing on her difficult relationship with her mother. The emotional climax of the scene, then, is not the consolidation of a romantic relationship, but the catharsis of a woman realizing that she can build a better family for her own future child— and asking the player character to be their godparent. This type of rewriting onto the text of the game itself represents a queer, playful capacity for authorship which few other games—particularly those that are voiced—could enable or sustain.

```
"Action": "EditData",
"Target": "Data/Events/BathHouse_Pool",
"Entries":
{
    "38/f Penny 2500/t 1900 2400/n pennySpa": null,
    "38/f Penny 2500/t 1200 1800/n pennySpa": "echos/-
    "pennyHeartbroken": "move Penny 0 -2 0/faceDirecti
},
"When":
{
    "UseLovePortraits": true,
}

"Action": "EditData",
"Target": "Data/Events/BathHouse_Pool",
"Entries":
{
    "38/f Penny 2500/t 1900 2400/n pennySpa": null,
    "38/f Penny 2500/t 1200 1800/n pennySpa": "echos/-
    "pennyHeartbroken": "move Penny 0 -2 0/faceDirecti
},
"When":
{
    "UseLovePortraits": false,
}
```

Figure 11: Screenshot of Amaranthacyan's Penny.json. Taken by author.

These changes, and this detailed level of customizability, unfold over thousands of lines across dozens of JSON files. The labor that went into implementing these changes, from concept to execution, is extensive. The dialogue rewrites for individual scenes may be small, representing light edits to overtly romantic or sexual content, but they accumulate across the twelve eligible partners. Making each relationship customizable complicates things further, requiring even more work—work clearly undertaken from a place of passion and community support. On the mod's download page, creator Amaranthacyan remarks: "I'm aroace myself, and I did my best to make these partnerships feel validating for fellow aromantics. My hope is that [the configurability] will help with customizing the 'vibe' of the relationship" (2023). This was a massive undertaking that entailed a deep entanglement with and remediation of the game's data. This work also reframes how sexuality is constituted within the game itself: as comprised not only of formal relationship mechanics but also of the immense data required to render and give meaning to said mechanics.

CONCLUSION

This is the troubling of the surface/depth binarism: the nexus of code and representation in which game data and the mods that alter it cannot be identified at any one level of the game's registers. PPAF is a cosmetic enhancement, and yet its cosmetics are dependent upon a profound intimacy with the game itself— a precise penetration of its files, an intervention into and remediation of its data even as its code remains intact. PPAF notably maintains the problematic straight mechanic of quantified relationship accumulation. It continues to rely upon the built-in formal logics which anchor the game's relationship milestones, even needing to use the same object-based "proposal" system to advance platonic relationships to cohabitation. This paper argues, however, that the relationship between code and representation is more complex than the former narrowly delimiting the latter.

By studying PPAF's multilayered engagement with data, some of the entanglements of code and representation are revealed. PPAF's overhauled, queered, aromantic and asexual data may be read by code, but it is also this data that gives meaning to

the code. If PPAF had simply deleted Penny's 10-heart event instead, or any of the other of thousands of lines that it edits—if it had operated on a logic of absence that so often defines aromantic and asexual representation—the code underpinning SDV's relationships, modded or otherwise, would cease to represent much of anything at all. Instead, the end goal of these mechanics—a romantic, sexual, reproductive, monogamous relationship—are complexified. There is not one straight line of desire, but many customizable queer ones, weaving in and out of SDV's file system.

Mods are valuable objects of inquiry for gueer games studies, as much for their representational and mechanical capacities as for their legibility and structure as technical objects. Modders' work is not only at the level of games as executable file and finished text but also at the levels beneath, offering a glimpse of the constitutive structures that software keeps hidden (Chun 2008). This is an intimate kind of play, mediating relationships between modder, player, game, developer, and even the tools used in the game's creation, such as EA's proprietary Frostbite Engine or Microsoft XNA. The results of this intimacy are not always representationally queer, and can, indeed, work directly to foreclose upon queerness, yet in understanding not only what mods do, but also how they do it, the 'queer' of queer games studies is expanded. It is located not only in narratives and mechanics but the code and data that sustain them, the architectures that permit or restrict access to them, and their interactions and inter-penetrations. The space, then, of Lauteria's utopian vision of queer modding as free play twists through, across, and between software registers for those, of course, with the prerequisite technical savvy. Acknowledging the limitations of modding's potential, what this paper offers queer games studies is a conceptual shift in how games themselves can be understood and interacted with in their composite filesystem playgrounds. The aim of queer games studies is to imagine games differently. Queer modding exposes one such possibility.

NOTES

1 For example, the website ModHQ (https://modhq.org/, accessed 2/24/2024), an offshoot of the far-right gaming forum RPGHQ (https://rpghq.org/, accessed 2/24/2024), links to mods for *Baldur's Gate 3* that replace the game's most prominent Black character with a white model (i.e., orinEsque, "Alternate Wyll Revamped," https://rpghq.org/forums/viewtopic.php?p=32468-alternate-wyll-revamped-2-2-0-baldur-s-gate-3, last updated January 21, 2024). The site's "No Alphabets" mod excises any reference in the game to LGBTQ people and identities, including replacing a lesbian character with a man using Al-generated audio and removing the game's built-in gender customization options for a custom characters, under the guise of accurately representing the game's medieval setting (orinEsque, "No Alphabets," https://rpghq.org/forums/viewtopic.php?p=34884-no-alphabets-4-4-1-baldur-s-gate-3, last updated February 22, 2022).

- 2 Kamajii, "Equal Love," https://www.nexusmods.com/dragonage/mods/429, last updated March 27, 2010.
- 3 GoesOnGhost, "Complete Bi Overhaul," https://www.nexusmods.com/dragonage/mods/4659, last updated May 22, 2018.
- 4 For example, NexusMods user sapphim's Sebastian Revisited mod for Dragon Age 2 (Electronic Arts 2011), warns that the new queer romance route includes unvoiced

dialogue from the player character and misgendering from Sebastian: https://www.nexusmods.com/dragonage2/mods/4199 (accessed 11/14/2023).

5 tmp7044, "mild romance scenes," https://www.moddb.com/mods/tmp7704/downloads/mild-romance-scenes, last updated September 12, 2016.

6 "SMAPI," https://smapi.io/, accessed 11/14/2023.

7 loe2run, "Family Planning," https://www.nexusmods.com/stardewvalley/mods/4515, last updated December 13, 2019.

loe2run, "FamilyPlanningMod: CustomBirthingEvents.cs," last updated January 23, 2020.

https://github.com/loe2run/FamilyPlanningMod/blob/master/FamilyPlanning/CustomBirthingEvent.cs.

veywrn, "StardewValley: BirthingEvents.cs," last updated December 30, 2020, https://github.com/veywrn/StardewValley/blob/master/StardewValley/Events/BirthingEvent.cs.

8 For a small sample of fan commentary to this effect, one can consider posts on Reddit

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https://www.reddit.com/r/dragonage/comments/k9r4t8/pc_no_spoilers_is_installing_mods_in_dai_really/) and Tumblr (https://sapphim.tumblr.com/post/619082226239422464/hi-sapphim-wanted-to-ask-you-for-an-advise-if), as well as forums specific to other games that use Frostbite, like the Madden PC franchise (https://www.footballidiot.com/forum/viewtopic.php?t=21260).

- 9 GalaxyEham, "FrostyToolSuite," https://github.com/GalaxyEham/FrostyToolSuite, accessed 3/9/2024.
- 10 Atherisz, "Dorian Romance for Female Inquisitor," https://www.nexusmods.com/dragonageinquisition/mods/616, last updated June 29, 2015.
- 11 "Diverse Stardew Valley," https://diversestardewvalley.weebly.com/, accessed 11/14/2023.

FlashShifter, "Stardew Valley Expanded," https://www.nexusmods.com/stardewvalley/mods/3753, last updated July 4, 2023.

- 12 Amaranthacyan, "Platonic Partners and Friendships," https://www.nexusmods.com/stardewvalley/mods/8146, last updated July 14, 2023.
- 13 aedenthorn, "Free Love," https://www.nexusmods.com/stardewvalley/mods/10021, last updated August 13, 2023.

Girafarig, "Horny Bachelors," https://www.nexusmods.com/stardewvalley/mods/791, last updated September 24, 2017.

Shurmash, "LewdDew Valley," https://www.nexusmods.com/stardewvalley/mods/7222, last updated July 8, 2023.

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