A Colossal Catalog Adventure: Representing Indie Video Games and Game Creators in Library Catalogs

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Abstract:

Significant changes in how video games are made and distributed require catalogers to critically reflect on existing approaches for representing games in library catalogs. Digital distribution channels are quickly supplanting releases of games on physical media while also facilitating a dramatic increase in independent-made games that incorporate novel subject matter and styles of gameplay. This paper presents an action research project cataloging 18 independently-made digital games from a small publisher, Choice of Games, considering how descriptive cataloging, subject cataloging, and name authority control for these works compares to mainstream video games.

Keywords: Cataloging for digital resources | name authority records | subject cataloging | digital games | narrative games | managing electronic resources

Article:

Introduction

From the early days of the Magnavox Odyssey to the current proliferation of gaming systems and platforms, the popularity of video games has increased dramatically. No longer solely the province of nerds, video games comprise an expansive area of cultural production appreciated by diverse audiences for purposes ranging from serious study to serious play. Many have made the case that video game collections support the core missions of libraries of all kinds, including public librariesFootnote1 and academic libraries.¹ Indeed, all manner of libraries feature video games in their collections. For instance, Legend of Zelda: Breath of the Wild, the
highly touted 2017 installment in the popular Nintendo series, has been collected by hundreds of libraries of varying sizes and types. In addition to collections of current mainstream titles, libraries like the University of Michigan have developed extensive special collections of historic, obscure, and independently-made (indie) video games for the purposes of teaching and research. The Online Audiovisual Catalogers (OLAC) group, and specifically the Video Games Best Practices Task Force chaired by Greta de Groat, have made significant contributions in developing resources to more effectively catalog video games in ways that promote discovery and access. However, much of the work collecting and cataloging games to date has focused on mainstream video games from major publishers. While libraries can and should collect blockbuster titles like Breath of the Wild, libraries should also collect games from smaller publishers and independent creators representing different paradigms of play. Mia Consalvo and Christopher Paul argue that game studies take too narrow a view on what constitutes ‘real games,’ elevating games released for major platforms and produced by large studios while marginalizing games that do not fit this mold. A similar critique could be applied to the collections of games in libraries. The games that libraries collect need to reflect the broad diversity of the past, present, and future of video games—recognizing that not all types of games can be cataloged following the same approaches and best practices. How indie games are made as well as the subject matter and genre these games explore constitute significant differences from mainstream commercial games with important implications for cataloging these works.

All games—mainstream and indie—are increasingly distributed digitally through websites, cloud-based platforms, and online storefronts, with publishers of all sizes transitioning away from the production of video games as physical media objects. Steam, the most prominent online storefront for games, has distributed games digitally since 2005, and the major console manufacturers (Sony, Nintendo, and Microsoft) have integrated digital distribution services into their gaming platforms for nearly as long. Small game studios and independent creators have similarly embraced digital distribution via websites and online platforms as cheaper and more convenient channels for connecting with prospective gamers. For example, itch.io is a popular online distributor dedicated to promoting independent games and game development tools. Digital distribution has grown exponentially in recent years, with the Covid-19 shutdowns of in-person game stores further accelerating this existing trend. OLAC has responded to this change in the most recent revision of the best practices for cataloging games document with updated guidelines for cataloging digitally-distributed games.

The dramatic expansion of digital distribution methods has opened up video games by indie creators as a new area for libraries to collect, and this research considers how video game cataloging practices might need to adapt to better represent digitally-distributed indie games as part of library collections. Specifically, we focus on text-based narrative games, or story-driven games in which the player directly shapes the plot through their choices and interactions. We chose to focus on this subset of digital games not only because indie narrative games are increasingly popular, but also to compare these games with the literary works that libraries regularly collect and catalog. For this research, we created 17 original MARC records and significantly enhanced one existing record for a total of 18 games acquired digitally from the Steam Store released by Choice of Games, a small publisher of independently-made, text-based narrative games. We also added 33 original name authority records for the individuals involved in the production of these games to the Library of Congress Name Authority File (LCNAF), and edited four existing records to include details pertaining to those individuals’ game design work. Using action research methods, we have critically reflected on this work to compare the
considerations and practices involved in cataloging digitally-distributed indie narrative games against cataloging mainstream commercial games and other narrative works.

Related work

Cataloging video games

Although libraries have long collected video games, for much of this history, catalogers have lacked fully developed cataloging guidelines that address the aspects of video games that make them distinct from other types of library resources. In 2015, the OLAC Video Games Best Practices Task Force, chaired by de Groat, addressed this by publishing a set of best practices for applying Resource Description and Access (RDA) and MARC standards to represent the physical and technical characteristics of video games, with updated versions of the document released in 2018 and 2023. The Task Force offered recommendations for distinguishing between versions of a title released for different platforms, representing relationships between the myriad titles that make up long-running game franchises, and including artistic and technical credit for work that falls outside the traditional statement of responsibility. While subject cataloging was out of scope for the “Best Practices” document, OLAC undertook a separate effort to produce a controlled vocabulary of game genre terms to supplement the Library of Congress Genre/Form Terms vocabulary (LCGFT), which to that point did not include terminology for describing genres specific to video games like “Open world” or “Music and rhythm.”

Two other information organization research groups have created robust metadata resources for video games, with applications for supplementing library catalog records, representing games in other types of cultural heritage institutions, and conducting video game research. The Game Metadata and Citation Project (GAMECIP), an IMLS-funded effort involving collaborators at the University of California, Santa Cruz and Stanford University, produced the Core Metadata Schema for Cataloging Video Games as “a minimal element set relevant for producers, distributors, and libraries” that can be implemented in XML, MARC, or other data formats. GAMECIP developed controlled vocabularies for two elements in the schema, platform and media format, which are aspects of games where accurate representation is critical for identifying particular versions of games and ensuring technical accessibility to titles released across multiple systems. The GAME Research (GAMER) Group, an active research network based out of the University of Washington Information School, has produced the Video Game Metadata Schema along with controlled vocabularies for several elements, including gameplay mechanics, narrative tropes, and visual styles. As Abigail Chapman has demonstrated in her comparative analysis of the GAMECIP and GAMER metadata schema, along with the metadata schema from MobyGames, a community-driven game documentation website, and metadata used to describe games on the distribution platforms Steam and itch.io, important aspects of games like developer, platform, and game-specific genres can be accommodated by RDA in various ways and integrated into catalog records for video games. This existing work provides a necessary foundation for the creation of bibliographic records that better represent video games in library catalogs. However, video games constitute a diverse, dynamic, and relatively novel area of cultural production, and catalogers will need to adapt and build upon the existing best practices and controlled vocabularies as they catalog titles that range widely in terms of style, subject matter, and method of production. For instance,
catalogers would need to approach 80 Days, a game adaptation of the classic Jules Verne tale in which the player helps to chart Phineas Fogg’s journey around the world, quite differently than Breath of the Wild, an adventure game in which the player controls the swordsman Link to battle monsters and solve puzzles in dungeons and castles across the fantasy realm of Hyrule. Nintendo of America, Inc. gets credit as the creator of Breath of the Wild in library catalog records, standing in for the large team of individuals responsible for making the game. Many video games are collaborative creations of corporate entities, and according to OLAC guidelines, it is best practice to treat this entity as the authorized access point for creator. While inkle studios is billed as the creator of 80 Days, catalogers might also want to credit Meg Jayanth, the script writer for the dialogue that comprises the main content in this narrative game. While several terms from the OLAC Video Game Genre or GAMER gameplay mechanics vocabularies could be used to describe Breath of the Wild, 80 Days might also be aptly described using subject terms pertaining to literary fiction.

Much from the existing resources for cataloging video games certainly applies to indie games, but there are important aspects of indie games that are not fully addressed. As game collections in libraries grow and increasingly include digital games from small studios and independent creators, catalogers will need to flexibly apply schema, vocabularies, and standards to account for the myriad ways games are made and played. Catalogers have always worked in this way, adapting standards to represent both typical cases and outliers, though cataloging games is an emergent area of practice that has not yet been fully explored. This research aims to advance discussions on the particularities of game cataloging by taking a close look at digitally-distributed indie narrative games as a distinct subset within this broader domain.

Narrative games

The capacity for games to tell stories—and how games as a media for storytelling compares to other media like books and films—is among the most discussed topics in game studies and indeed in the gaming community more broadly. Marie-Laure Ryan argues that, while narratives can be elicited from even the earliest video games, the development of computer graphics and the maturation of game design have trended toward greater support for sophisticated storytelling, such that “in many independent art games and so-called serious games, the story being presented takes precedence over gameplay.” For example, Gone Home (2014), an award-winning indie game about a young girl returning home from college to find her family mysteriously disappeared, has been simultaneously praised by some critics and players for its rich storytelling and derided by others for lacking ‘real’ gameplay. ‘Walking simulator,’ the dismissive label used to describe immersive, story-rich 3D games, reflects deeper tensions among players, critics, and creators about what counts as a game—and raises questions for librarians about how best to represent these games that skirt typical expectations.

This narrative turn in independent-made graphical games builds on a much longer history of text-based, story-rich games. Variously referred to as text adventures and interactive fiction, digital games in which players advance through a narrative by entering text commands or selecting choices date back to the origins of computing and continue to attract vibrant communities of players and developers today. The Oregon Trail, an edutainment rite of passage for generations of elementary schoolers, was originally created in 1971 as a text game by Don Rawitsch, a teacher trying to get his students interested in US history. Infocom, the most prominent publisher of commercial text games, experienced great success during the 1980s with
titles like Zork and Planetfall before being subsumed by the popularity of graphical video games. Nick Montfort notes that Infocom emphasized the literary aspects of their text games, expressly framing these as works of fiction for which the prose and narrative play essential roles.\textsuperscript{30} Even as graphical games dominate the gaming industry, players and creators have kept interactive fiction vital through festivals and competitions featuring independent-made games that introduce innovative text-driven gameplay and tell new kinds of stories, ranging from the deeply personal to the wildly fantastical.\textsuperscript{31}

Corollary to the rise of successful independent-made graphical narrative games, text-based games have made a commercial comeback over the past decade. Choice of Games, the publisher we have focused on for this research, is one of several successful companies releasing narrative games in which the player advances the story by primarily interacting with text. Online storefronts facilitating digital distribution have been essential to this current boom period of indie games generally and narrative games specifically—at the time of this writing, Steam has over 4,000 titles tagged as ‘interactive fiction’ available for purchase.\textsuperscript{32} With the huge number of such games released every year, gamers are confronted with an admittedly good problem: how to find the game they really want to play out of a sea of potentially relevant titles.\textsuperscript{33} This problem, of course, is very similar to those that library catalogs have long addressed for books, films, and other narrative media. While catalogers are uniquely positioned to develop practices for organizing and providing access to large and complex collections of digitally-distributed narrative games, this will involve careful reflections on how best to describe the technical, esthetic, and bibliographic characteristics of works that differ in many key respects from mainstream commercial video games.

**Research design**

We used an action research approach to explore the potential issues involved in representing digitally-distributed indie narrative games in library catalogs, critically working through an applied project cataloging a sample of these games. Ernest T. Stringer and Alfredo Ortiz Aragón describe action research as an iterative method of “investigation that uses continuing cycles of observation, reflection, and action to reveal effective solutions to issues and problems experienced by people in their everyday lives.”\textsuperscript{34} These games present many new issues for catalogers to consider, but existing cataloging practice can be adapted in many cases to address these issues. To better understand these similarities and differences, we developed the following research questions as a way to guide our processes of observation, reflection, and action:

1. What are some of the major considerations involved in the descriptive cataloging of indie narrative games acquired through online storefronts? How does this compare to descriptive cataloging of a) other types of digitally-distributed electronic resources, b) electronic resources released on physical media, and c) analog or print resources?
2. What are some of the major considerations involved in the subject cataloging of indie narrative games? How does this compare to a) other types of video games and b) other types of narrative media?
3. What are some of the major considerations involved in creating name authority records for creators of digitally-distributed indie narrative games, and what is the role of name authority records for these kinds of titles?
We decided to focus our case study on titles from Choice of Games, a commercial publisher of independently-made text games. In the vein of the popular Choose Your Own Adventure series and similar gamebooks, Choice of Games titles thrust players into an exciting scenario, and players then make a series of choices that advance the story along various branching paths. The first Choice of Games title, Choice of the Dragon by company co-founders Dan Fabulich and Adam Strong-Morse, was released in 2009, and the publisher has since released dozens more games through a variety of digital-only distribution channels, including Steam, mobile device app stores, and its own website. Fabulich devised ChoiceScript as a programming language for developing choice-based narrative games, and Choice of Games has made this tool freely available for independent game creators to use. In addition to publishing games by established independent game designers, Choice of Games supports the Hosted Games platform as a space for aspiring game designers to share their work. This model, in which an independent author works with an editorial and production team to release a game, in some ways resembles small press book publishing more than mainstream game publishing, and in the research, we sought to explore the implications of this model for the bibliographic description of these titles. As mentioned in the example of Breath of the Wild, this mode of production differs markedly from mainstream commercial games, which are typically collaborative efforts of large teams with individuals taking on highly specialized roles in the creative process. We also selected Choice of Games to consider the implications for the subject cataloging of games that feature rich and complex narratives, similar to the literary works of print fiction that libraries have long collected and cataloged. Choice of Games titles have been recognized for their literary merit, especially in the domain of science fiction and fantasy, with several games finishing as finalists for the Nebula Award for Best Game Writing, putting these works in line with the notable fiction works that libraries of all kinds prioritize in their collection development.

Two of the coauthors cataloged the selected games. We worked on both bibliographic and name authority records using Connexion Client and then added local holdings information with WorldShare Management Services (WMS), the integrated library system used by our institution. As OCLC maintains both Connexion and WMS, these systems enable us to easily share our original records with libraries worldwide that collect these games. Along with the OLAC controlled vocabulary for game genres, we used ClassWeb to help research the appropriate Library of Congress Subject Headings (LCSH) terms. We used the RDA toolkit to guide our descriptive cataloging, supplementing this with the OLAC Best Practices guidelines referenced above. This cataloging work took place over the course of several months, interspersed with regular critical and reflective conversations with the full research team held in-person, over email, and via video conferencing software. For these conversations, we adapted the qualitative research method of semi-structured interviewing; we used our research questions as starting points, thinking through the catalog records that the catalogers had created as concrete examples, and then asked probing follow-up questions based on the catalogers’ responses to explore some of the nuances of their work. The full research team analyzed the data aggregated from these conversations to identify the trends and patterns in how we approached the cataloging of these games. Through the critical reflective framework of action research, this analysis helped to surface “the concepts and everyday theories that people use to describe or explain their conduct.” Bringing together the perspectives of professional catalogers and academic researchers was instrumental to this reflective process, as the academic researchers could ask questions that prompted the catalogers to articulate parts of the process that may otherwise have been taken for granted. Through this research method, the full research team co-constructed
knowledge on this emerging area relevant to both information science research and cataloging practice.

Overall, the cataloging work and critical reflective conversations have proven generative for the comparative analysis we wanted to pursue with this research. Digital narrative games are both similar to, and different from, video games more typical to library collections in key ways, and similar to, and different from, the narrative works on other media in library collections, raising fruitful questions about adapting existing cataloging practices and approaches. While Choice of Games is representative of digitally-distributed indie narrative games in many ways, this is also just one publisher in a broad and diverse field. To complement our critical reflections on cataloging Choice of Games titles and to begin to advance the conversation beyond the collection at our particular institution, we compared our sample of catalog records to the catalog records of digitally-distributed indie narrative games at the University of Michigan, the only other such significant collection that we were able to identify in our research.

Findings

In our research, we reflected on the major considerations of cataloging digitally-distributed indie narrative games for descriptive cataloging, subject cataloging, and creating name authority records. From the perspective of descriptive cataloging, digitally-distributed games greatly resemble other electronic resources that libraries have extensive experience representing in catalogs, and the OLAC guidelines for representing the digital distribution methods of these titles fully supported this aspect of the descriptive cataloging. We found that our approach to the subject analysis and cataloging of these narrative games was similar to cataloging novels as text-based narratives, though with the need to also describe the interactive nature of these games. The development of name authority records for the creators of the games proved to be a critical complement to the catalog records, highlighting facets of how independent narrative games are produced distinct from other types of games.

Descriptive cataloging

The shift from physical media releases to digital distribution channels has had profound effects on how players acquire and play games, enabling near instantaneous access to both the latest titles from major publishers and diverse offerings from indie creators. This shift has also greatly impacted the ability of libraries to collect games, as digital game platforms are designed primarily for single end users and lack site license options tailored for library needs. There is not yet an equivalent to ProQuest or EBSCO for licensing games to libraries. A full treatment of licensing digital games is beyond the scope of this paper, though for now it is relevant to note that libraries have been severely constrained in their ability to provide access to digital games. Although access to digitally-distributed games remains more constricted due to a lack of dedicated vendors and licensing solutions, the descriptive cataloging of these titles is similar in some ways to ebooks, databases, and other software represented in the catalog and similar in other ways to games released on physical media.

Comparable to other types of electronic resources, we have used the pertinent fixed fields and 336 Content Type field in the MARC records to describe these titles as computer programs, applying the appropriate code in the 007 field to represent these as games specifically. Following the OLAC guidelines, we added a second content type field to characterize the nature of the
game but selected “text” rather than the “two-dimensional moving image” or “three-dimensional moving image” types that are typically applied for describing mainstream games. This follows the OLAC best practices but represents a slight adaptation of the normal application to distinguish that these titles are text-based games. While the code in the 007 field indicates that these titles are games, we followed the Library of Congress-Program for Cooperative Cataloging RDA Metadata Guidance recommendation to record the interactivity mode in a 500 General Note field, representing that these are interactive text-based computer programs—in other words, digital narrative games.

As with many other mainstream digital video games, the indie digital games we cataloged are retrieved from Steam, an online platform designed to facilitate the continual updating of games in both major and minor ways. Per the OLAC guidelines, the platform for the game constitutes an edition, as the functionality and gameplay can differ depending on the platform, and so games released on multiple different platforms require separate catalog records. We recorded Steam as the platform in the 250 Edition Statement field, though we also drew information directly from the Choice of Games website for the 264 Production, Publication, Distribution, Manufacture, and Copyright Notice field. Choice of Games titles are again more like print media in this regard, listing credits similar to the copyright page of a book, providing relevant bibliographic information that is typically not readily available for mainstream commercial games, as we will discuss in more detail below. Choice of Games titles tend to be relatively stable over time, and following the OLAC best practices, minor patch updates and bug fixes do not represent different versions of the game and do not require different catalog records, so drawing on static bibliographic information provided by the publisher nicely complements the information provided by Steam.

While patch updates may not change the content of the work or necessitate new catalog records, this information is essential to maintaining access to digital games. The same vigilance needed to ensure that other online resources listed in the library catalog remain accessible also apply to digital games. Records for physically-released games may also increasingly require this sort of regular monitoring and updating, as most current games distributed on cartridges and disks also receive patch updates, offer players bonus downloadable content, or integrate online-only multiplayer modes. Online interactive play is essential to games like Animal Crossing: New Horizons, a title collected by 422 libraries at the time of this writing according to WorldCat, though this is only alluded to in the WorldCat record with the note that “this game may require internet access for updates.” In many such cases, the game cartridge only initiates access to the resource, the content of which may continue to evolve over months or years. Lines between physically and digitally-released games are blurring, with perpetual updating of games becoming the rule rather than the exception.

Subject cataloging

Narrative games occupy a hybrid position between more traditional forms of literature and video games, a “subgroup of creative media that has both readerly and playerly characteristics.” As interacting with the story is the focus of gameplay, catalog records need to both accurately capture the subject matter covered in the content of the game while distinguishing these games from other types of non-interactive narrative media. The subject cataloging of narrative games is also a different undertaking than describing the aboutness of typical video games. While Sonic is not really a work about hedgehogs and is better described in terms of its gameplay mechanics as
a fast-paced platforming game, the subjects of narrative games are often aptly covered by existing LCSH terms. In Rent-a-Vice by Natalia Theodoridou, for example, you play the role of a private detective investigating a case that takes you into the “seamy world of virtual experience... where ‘feeders’ sublet their own bodies, at the risk of their own lives, so that customers can safely enjoy extreme, potentially self-destructive vices.” We applied “Cyberpunk culture” and “Detectives” as subject headings, terms from the LCSH vocabulary commonly used for science fiction and noir literature, subdividing these terms with the “Computer games” heading to indicate that this title is an interactive game and not a sci-fi mystery novel. We also applied terms from the OLAC Video Game Genre Vocabulary to supplement the more literary terms derived from the LCSH vocabulary. For example, the game Luminous Underground by Phoebe Barton puts players in charge of a small business tasked with rooting out ghosts from a haunted subway system. As the player explores the world and fights monsters while managing character traits and stats that impact gameplay, Luminous Underground has elements characteristic of both adventure games and role-playing games, and so we used these terms from the OLAC vocabulary in the 655 Genre/Form field. We found the OLAC vocabulary to be especially useful in capturing the mechanical aspects of the game: what actions the player takes as they move through the narrative.

The LCSH and OLAC vocabularies provided a robust selection of terms to support subject access and position these titles in the contexts of both literature and games. However, we observed that the existing terms in both vocabularies for describing narrative games as an established category could be revised to better align with the terminology used by the community of narrative game creators and players. The LCSH term “Plot-your-own stories,” subdivided with “Computer games,” and the OLAC genre term “Interactive book video games” are the terms most apt for the categorical description of narrative games, but these terms are awkwardly out of sync with commonly-used terminology and fail to accurately express what narrative games are to people unfamiliar with the form. The scope note for “Plot-your-own stories” indicates that this term includes “works of fiction in which the reader chooses from a number of possible options for developing the story,” which is not an incorrect description for many types of narrative games, including Choice of Games titles; but this description does not indicate the additional interactive elements distinct to digital narrative games, like the ability to track stats or maintain dynamic inventories of objects, that set them apart from Choose Your own Adventure-style books. Similarly, “Interactive book video games” suggests that these games are akin to ebooks. While much of the OLAC vocabulary reflects established terminology for game genres used by the gaming community, ‘interactive book video game’ is not among these.

To address this issue, we included additional subject terms from outside these controlled vocabularies that reflect terminology used by the narrative games community: interactive fiction, text-based games, and interactive narrative games. ‘Interactive fiction,’ specifically, is a category label that has historically referred to text adventures where a player types in commands and receives text responses from the game software but has since become an umbrella term for “a kind of video game where the player’s interactions primarily involve text,” including choice-based games and games with some graphical elements that are primarily driven by interactions with text. Along similar lines, ‘text-based games’ and ‘interactive narrative games’ are general terms that position these works as games revolving around a narrative—rather than books that have been rendered interactive, as the LCSH and OLAC terms suggest. Importantly, these additional genre terms are those used by players, echoing user tags found on Steam and itch.io as
well as popular discourse around these games, and thus more likely to support discovery by a user looking for narrative games in the catalog.

For both narrative games and other genres, the OLAC vocabulary provides a great starting point for describing what games are about and highlighting important facets of gameplay mechanics and styles—but it is far from comprehensive. Given the diversity of gameplay and subject matter of indie games in both the realm of narrative games and beyond, the subject cataloging of digitally-distributed games more broadly will likely necessitate the flexible approach that we have adopted for these titles: mixing and matching from various controlled vocabularies and integrating uncontrolled terms critical for discovery and access that are derived directly from relevant gaming subcultures. In addition to the OLAC vocabulary, the controlled vocabularies developed by the GAMER Group mentioned above provide rich terminology for many different facets of games like setting, visual style, and character tropes. We conducted some exploratory searches in Connexion using the MARC Genre/Form source codes for the GAMER vocabularies as keywords, and the results of these queries suggest that these terms are being used by catalogers. A study undertaking a more thorough investigation of the adoption of these vocabularies would be a worthwhile follow-up to the present research. These vocabularies could prove to be incredibly valuable for cataloging a wide array of digital indie games beyond the narrative games discussed in this paper.

Name authority control

The production processes for indie narrative games dramatically impacted how we approached representing the creators of these games. Historically, commercial games from large studios released on physical disks and cartridges have lacked clear statements of responsibility. The names of the people leading the development of video games are usually not prominently displayed, typically appearing in the end credits that roll when a player beats the game. The game’s packaging or disk may include a logo for the publisher or developer but fail to include a straightforward statement of the role that entity played in the production of the game. For this reason, the OLAC guidelines recommend that a statement of responsibility in the 245 field only be included if an entity and role can be precisely identified, with more detailed credits for corporate and individual creative contributions recorded in a 508 Creation/Production Credits Note field. The digital distribution of games makes the statement of responsibility far easier to identify for both mainstream commercial games and indie titles. Users of Steam and other online storefronts browse through resource records for games containing rich metadata about a game’s production and publication; rather than hunting for this information in the fine print of a game box or in the end credits sequence, catalogers can directly translate this information into library catalog records. In contrast to mainstream commercial games, though, many indie titles are the product of much smaller teams, suggesting the need for an alternative approach to how catalogers represent the entities responsible for creating indie games.

In the case of Choice of Games, all works are credited to a primary author who is listed in a by-line along with the title of the game, with further credits detailing the other individuals involved, including cover artists, editors, and even beta testers. In addition to including this information in the bibliographic records, we decided to create Library of Congress name authority records for individuals involved in many of these creative and publishing roles. A few Choice of Games creators have worked in traditional publishing and had existing name authority records. Natalia Theodoridou, for instance, is an established science fiction and fantasy author
who already had a name authority record albeit lacking any mention of their game design work, and so we added their game Rent-a-Vice to the list of credits. However, many of the creators had no such existing record because so few indie narrative games have been collected and cataloged by libraries. By creating name authority records for not only the authors but also those responsible for editing, illustrating, and programming the technical systems, we have attempted to represent how Choice of Games functions as a publisher. These games tell stories conceived by individual authors but undergo a rigorous editorial review process and share in an underlying technical infrastructure maintained by the company. How Choice of Games publishes its titles differs from traditional fiction and video game publishing, even while it shares some similarities to both; name authority control for the full range of creators involved in these works communicates key characteristics about the distinct production processes for these games.

Along with accurately representing who is responsible for creating these games, adding name authority records for these creators to the LCNAF constituted a step toward the broader collecting and cataloging of indie narrative games. On a practical level, these records will ensure authority control as more libraries collect games by these creators and those catalogs can reference these existing authority records. As a Name Authority Cooperative Program (NACO) member library, we considered creating corresponding name authority records an important step in the original cataloging of these games. In addition to this enhancing name authority control, there is also value in recognizing creators of indie narrative games as agents in the bibliographic universe. Following the Library Reference Model (LRM), bibliographic records do not just represent individual items collected by the library but also represent the essential relationships between entities involved and establish the context needed to find, understand, and use bibliographic resources. As C. Rockelle Strader suggests, this context is “built by the relationships that emerge from authority work—respectfully establishing forms of name and maintaining controlled vocabularies and classifications for providing acceptable and up-to-date access points,” with the goal of creating bibliographic records that support core catalog user tasks, ensuring that the catalog is a tool for finding and exploring resources that drive research questions. As indie narrative games—and video games more generally—become increasingly important fixtures of library collections, bibliographic records can integrate these games and their creators into the rich web of relationships that make library catalogs such powerful tools for discovering books, films, music, and other types of bibliographic resources.

Discussion

Many mainstream games—especially those released on physical media—have been widely collected, and these titles already have high-quality MARC records that can be easily added to a local catalog. As very few libraries have collected digital indie narrative games, acquiring these titles and integrating them into the catalog requires creating original MARC records. As a step toward articulating guidelines tailored to digitally-distributed indie narrative games, we sought to compare our efforts to the digital narrative games that have already been cataloged. Through a WorldCat search for video game records with either “Plot-your-own stories” or “Interactive book video game” subject headings and described as “online resources,” we identified the University of Michigan as the only other substantial collection of digital narrative games in a US academic library. As mentioned above, Michigan’s expansive Computer and Video Game Archive makes this institution a leading collector of all types of video games, including digital narrative games; at the time of this writing, Michigan had catalog records for 76 digital narrative games in their
collection, most of which were created by individual game developers or small studios. We compared our catalog records to those at the University of Michigan on the various points discussed above.

Descriptive cataloging

In terms of descriptive cataloging, both sets of records follow the current OLAC best practices: describing the items as online resources, listing the relevant technical system requirements needed to access the game, and representing the distribution platform in the edition statement. One area for further consideration is how catalog records can best represent expanded updates or downloadable content that do dramatically alter the content of the game. The current OLAC guidelines call for game expansion packs to have distinct catalog records, with that record noting that the base game is required to play the expansion pack. Choice of Games titles, specifically, tend to be stable after the point of release, but one notable exception is an expanded version of *Crème de la Crème* by Hannah Powell-Smith, a “Silver Spoon Edition” that builds in hints and walkthroughs to reach more difficult achievements and obscured story paths. Games can also be re-released with expanded content built in. For example, Michigan has collected the original 2013 release of *The Stanley Parable* from Steam, a version that is only available for Windows, Macintosh, and Linux systems, and notably different from *The Stanley Parable: Ultra Deluxe*, an updated version released in 2022 for both PC and major consoles with retooled graphics and new storylines.

The current OLAC guidelines cover these existing cases, though other indie developers may not keep games as relatively stable over time as Choice of Games and may not distinguish between different versions of a game as clearly as *The Stanley Parable* to indicate which updates constitute minor fixes and which updates constitute substantially expanded versions. In addition to Steam, Michigan has collected games from independent storefronts like itch.io, which provide indie developers with greater control over how to roll out updates. Developers on itch.io typically release new versions of a game, including both major and minor updates, as distinct sets of downloadable files; this contrasts with Steam, where regularly released patches seamlessly integrate into games hosted by the platform. Indie developers are also increasingly turning to crowdfunding platforms like Kickstarter to promote and release new games, updates, and expansions. For instance, the small studio Cardboard Computer catalyzed the development of their narrative game *Kentucky Route Zero* through a Kickstarter campaign, and then proceeded to release the game as a series of discrete installments over the course of seven years in the form of numerous downloadable files distributed across various platforms, including materials distributed directly from the studio’s website. A version of the game that collects all installments has been released on Steam and consoles, which would be accommodated by the OLAC best practices, but a library wishing to collect and catalog the variegated releases may have more difficulty representing the relationships between all of these materials. For most use cases, cataloging the most recent release of a game from Steam will be sufficient, but catalogers may also wish to support emerging use cases in game design and game history research, where precise information about version and release history is critical. As the production and distribution methods of video games continue to evolve and as other use cases for catalog records develop, current descriptive cataloging rules may need to be supplemented with bibliographic descriptive practices that more finely characterize particular versions of a game,
akin to the specialized vocabularies and standards designed for rare book cataloging where the details of a particular copy are important to represent.

Subject cataloging

We did not collect any of the same titles as Michigan, so we cannot make any direct comparisons in how we approached subject cataloging, but there are broad similarities in the application of subject headings to highlight both narrative dimensions and gameplay mechanics. For example, Michigan has collected *Conversations We Have in My Head*, a 2015 game by Dietrich Squinkifer in which the player engages in an imagined interactive dialogue with a friend from high school as the pair reflects on challenges growing into their genderqueer identities. Michigan has described this title with LCSH terms “Imaginary conversations,” “Social interaction,” and “Gender identity,” along with the OLAC genre term “Interactive book video games.” As independent game designer and scholar Anna Anthropy details, digital distribution channels and readily available game design tools have made it possible for individual creators to make games about personal experiences. Queer creators like Anthropy and Squinkifer have carved out space to make games that challenge assumptions about what games can be about and whose experiences can be represented in games. The subject headings applied to *Conversations* not only highlight this important trend in indie games but also put this work into the broader context of literature exploring gender identity. A catalog user interested in queer studies but unaware of narrative games could nonetheless find this work in their research and make further connections from there.

Name authority control

Many of the digital narrative games in Michigan’s collection have been made by individual creators similar to Choice of Games titles, with others produced by small studios. Michigan’s records credit these creators in the 245 Statement of Responsibility field and include additional information in either a 700 Personal Name or 710 Corporate Name field, reflecting the process we followed in our records. Many of Michigan’s records list specific creative roles for both individual and corporate entities, including author, developer, director, and publisher, serving to represent the distinct production processes involved in creating games, as discussed above. However, relatively few of the creators represented in Michigan’s bibliographic records had corresponding LC name authority records; the few entities with name authority records were larger publishers like Valve or individual creators who have published work outside of games like fiction and comic book writer Ryan North. As relatively few digital indie narrative games have been collected, we might expect that few name authority files for independent game creators and small studios currently exist in the LCNAF—though we contend that making records for these creators is critical for integrating narrative games into the bibliographic universe represented through library catalogs. We also recognize that not all libraries have the ability or staff needed to create name authority records, which makes it even more important for these records to be created when possible to facilitate sharing across all institutions collecting independent-made games.

Generating name authority records for people involved in producing Choice of Games titles was relatively straightforward when the individual had a visible online presence, either in the form of a professional website or public social media profiles, that spotlighted their game
design work. We decided to make name authority records for people taking on many different roles in the production of the games, including illustrators, editors, and programmers, though we did not create name authority records for all credited roles, such as beta play tester. Choice of Games does list these other individuals, though we were often not able to find public online information about these people, and we determined that their contributions while valuable were ancillary to a game’s creation. In the related area of film and video, catalogers need to determine who among large casts and crews with varying degrees of celebrity and creative involvement are most important to represent based on the needs of their library users and available information.

Not all people involved in making a game can be represented in a bibliographic record and corresponding name authority records—community-driven databases like MobyGames provide far more exhaustive credits than we have included, as a point of comparison—but some authority control for the individuals or corporate entities most directly involved in writing, designing, and publishing games is critical for effectively organizing and enhancing access to games in library catalogs.

Catalogers involved in authority work for games could learn from models pursued for other types of non-book resources. For instance, librarians and archivists at the University of Nevada, Reno devised a collaborative, cross-departmental workflow to identify and research individuals represented in their archives and special collections in order to generate LC name authority records. This process has since been emulated in a similar effort at the University of Louisiana at Lafayette. Both cases recognize the benefit for name authority control for archives and special collections materials and leveraged rich metadata from MARC and other kinds of records along with subject area expertise from non-catalogers to develop LC name authority records. Similar efforts could be developed for expanding the representation of independent game creators in the LCNAF, as catalogers could work with media librarians or game studies scholars and students to identify and research individuals and corporate entities involved in game design, production, and distribution.

Conclusion

Video games have become an established cultural form: people around the world from all ages and backgrounds play games, and critics and scholars have broadly recognized the artistic potential and historic significance of games. Libraries continue to grow larger and more diverse game collections, but discussions around cataloging games have not kept pace with developments in how games are made and played outside of the mainstream. Digital indie narrative games, in particular, sit at the intersection of other types of materials that libraries have extensive experience collecting and cataloging, and thus provide valuable case studies for how existing cataloging practices for print books, electronic resources, and mainstream video games can be adapted to effectively represent digitally-distributed, independently-made games in library catalogs. Records for digital indie narrative games put these materials in the broader context of a multifarious bibliographic universe, demonstrating the deep connections between the history of video games and other narrative mediums.

Even as we can learn from strategies devised for cataloging games released on physical media or from approaches to cataloging other types of electronic resources, digital indie narrative games pose some new questions for catalogers that need to be further explored. As digital distribution channels for both mainstream commercial and indie games grow in scale and complexity, catalogers may need to update practices for accurately describing the manifestation
of the work currently held in their collection and distinguishing that version of the game from other iterations. Fortunately for catalogers, Choice of Games maintains clear and accurate bibliographic information for their releases, but this will not be the case for all indie game developers and publishers. LCSH and game-specific controlled vocabularies provide a wealth of terms for describing narrative subject matter and gameplay mechanics, though these vocabularies may benefit from integrating terminology used by players and makers of particular types of indie games. In the case of narrative games explored in this research, these vocabularies include terms out of sync with those used by the narrative game community. Finally, we found a significant gap in the LCNAF for people and corporate entities involved in producing and publishing digital indie narrative games, and we expect that this lack of representation holds for indie game creators more broadly. Games are part of library collections and game creators need to be embraced as part of the bibliographic universe.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes

3. See the WorldCat bibliographic record for this work, which lists holdings for 10 editions in 295 libraries at the time of this writing: Summary of library holdings for The Legend of Zelda: Breath of the Wild, OCLC, accessed November 1, 2023, https://www.worldcat.org/title/1187153989.
11. As an example of the growing interest in this area, Steam has hosted LudoNarraCon, an annual conference celebrating narrative games, especially from independent developers and small studios, since 2019: “LudoNarraCon,” Fellow Traveler, accessed November 1, 2023, https://www.ludonarracon.com/.


14. Greta de Groat et al., “Best Practices for Cataloging Video Games Using RDA and MARC21 Version 1.0,” OLAC Publications and Training Materials (Online Audiovisual Catalogers, Inc., 2015). For the cataloging work done in this research, we have used the most current version of the document, and we reference this version here to note its place in the history of video game cataloging.


16. The Game Metadata and Citation Project homepage, University of California, Santa Cruz, accessed November 1, 2023, https://gamecip.soe.ucsc.edu/.


28. Consalvo and Paul, Real Games, 113.
42. Stringer and Ortiz Aragón, Action Research, 164.
65. Itch.io store page for Conversations We Have in My Head, Squinky, last modified March 5, 2022, https://squinky.itch.io/conversations.
66. Bibliographic record for Conversations We Have in My Head, University of Michigan Library, accessed November 1, 2023, https://search.lib.umich.edu/catalog/record/990167322800106381.