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Authorship Metadata for Video Games: “Collaborator”, “Creator”, or “Auteur”?

Abstract

Author information is one of the primary access points for information users to find relevant items. While this information is straightforward in most cases, it is not easy to identify and conceptualize who the “author” or “creator” is for collaborative creative works, such as video games. In this exploratory study, we review and compare current practices of authorship representations in knowledge organization systems, focusing on video games as a case study. We find that a video game publisher’s name is often used in the author/contributor fields in library records. As we discuss how video game creators’ information should be recorded in knowledge organization systems, we also explore the applicability of the auteur theory from film studies to solve the collaborative authorship representation problems in video games.

Introduction and Problem Statement

Video games have become an increasingly prevalent part of culture since their first launch nearly fifty years ago. In its early decades, the video game medium’s technological and aesthetic capabilities were limited, and games generally featured simplistic effects, limited narrative arcs, and siloed, often solo or at most locally-situated play with two opponents. More recently, however, video games have emerged as a multifaceted form of entertainment adaptable to a variety of sociocultural ends. Public and critical perceptions have evolved as the games themselves have changed, and video games are today acknowledged not merely as frivolous entertainment, but also as art forms featuring complex storylines, immersive gameplay, and technological feats rivaling the cinematographic effects in high-budget Hollywood blockbusters. The intellectual work, featuring a mix of creativity and skill, is now undertaken, in many cases, by enormous organizations employing top-level talent in programming, dialogue and story writing, art direction, and graphic and sound design (O’Donnell 2014).

As complex creative works, video games are often the products of diffuse, distributed authorship. The Online Audiovisual Catalogers (2018) drew together experts to recommend best practices for cataloging video games using Resource Description and Access (RDA); these include supplying information about statement of responsibility in the MARC 245\$c and the appropriate credits in the 508 (Online Audiovisual Catalogers 2018) as well as a controlled vocabulary of video game genres (<https://www.olacinc.org/olac-video-game-vocabulary>). The video game best practice guidelines (https://olacinc.org/sites/capc_files/GameBestPractices.pdf) for both the statement of responsibility and credits suggest practice that generally supplies

information about corporate body names in lieu of names of individuals, stemming from the fact that “games seldom have a clear statement of responsibility and many have no credits at all” (Online Audiovisual Catalogers 2018, 62). A cursory review of library catalogs reveals that their video game metadata generally does not include the name of individuals who are primarily responsible for the creative work; in fact, there is an alarming paucity of information in library metadata on video games. The most consistently supplied information, other than title, is information about the required console.

In this paper, we question and explore how the author/contributor information of collaborative creative works, such as video games, should be integrated into knowledge organization (KO) approaches through an exploration of the literature in conjunction with an analysis of video game metadata in library systems. Although our current scope addresses video games in particular, we envision that our findings can be easily expanded to other types of multi-creator information resources that raise similar collaborative authorship questions in KO.

Review of Existing Practices

Using OCLC WorldCat (<https://www.worldcat.org/>) as a point of departure, the popular 2020 Nintendo game *Animal Crossing: New Horizons* (<https://animal-crossing.com/new-horizons/>) is used to identify baseline practice for video game metadata in library catalogs. A search for ti: “animal crossing new horizons” in 2020 yields hits for a variety of formats, including books and articles about the game. When limiting to the three formats most reasonably associated with video games (i.e., “Game,” “Computer file,” and “Video”), 7 manifestations are retained (see *Figure 1*). In the master records displayed for these 7 “game-like” manifestations, not only does the author field become predictably less varied, but it only includes the names of the corporate body author (and only in three of the records total), that is to say, the game’s *publisher*, Nintendo.

The role of the publisher is unquestionably important for the game; it often helps indicate what physical hardware a user will need to experience the game, and so serves as a shorthand of sorts to indicate the name of the system in use (in this case, the Nintendo Switch). Furthermore, game studios often cultivate consistent game mechanic or art styles that are important to gamers’ understanding of the medium. However, the publisher is not synonymous with the creative individuals who oversee all aspects of gameplay design, storyline, and artistic vision. These records are failing to answer the basic question, “who made this?”. Further, inconsistencies in the set of hits are notable in terms of 1) the way the format is recorded, 2) the form of the access point for the corporate body Nintendo, and 3) the conflicting information about audience level (mention of which appears in seven of seven records).

The record with the largest number of holdings at the time of writing (June 10, 2021) is held in 314 libraries (https://www.worldcat.org/title/animal-crossing-new-horizons/oclc/1199077043&referer=brief_results). The master record is coded in WorldCat with a format “Game” and it displays 8 subject terms:

Animals -- Computer games.

Islands -- Computer games.
 Building -- Computer games.
 Video games.
 Nintendo video games.
 Animals.
 Building.
 Islands.

Information relating to the video game system is provided in the masterrecord, along with a summary in accordance with best practices. A total of four editions are merged in displaying this masterrecord, and a review of holding libraries indicates that the bulk of them are public libraries.

Of greatest interest to the present discussion is the author field for this masterrecord, which contains the authorized access point: Nintendo of America Inc. This is different from practices that have evolved around cataloging other complex AV materials like films, where best practices include recording information about the writer, producer, and director, frequently provided along with the names of relevant corporate bodies and actors.

How do library records compare to other metadata sources in terms of crediting individuals for creatorship? A stark contrast emerges when the authorial credit supplied in the principal masterrecord in WorldCat for Nintendo's Animal Crossing: New Horizon is compared against the crowdsourced metadata for the video game available through MobyGames (<https://www.mobygames.com>), MobyGames contributors indicate that Nintendo is the publisher and developer of the game, and then go on to credit 517 individuals, a list comprised of 480 developers and 37 individuals who are thanked. Included are the director (Aya Kyogoku), the art director (Koji Takahashi), the sound director (Kazumi Totaka), two programming directors (Yoshitaka Takeshita and Hiromichi Miyake), plus many, many others. All are mentioned by name, and all are hyperlinked within the system, allowing the user to search by individual (See *figure 2* for a screenshot of the main page for Aya Kyogoku in MobyGames). MobyGames is not atypical; meticulously documented crowdsourced information sources are now available online for many types of creative media, e.g., IMDB for films and Discogs for recorded music. Of course, it is probably unreasonable to expect library systems to integrate every one

Figure 1. [WorldCat results](#) for *ti:"animal crossing new horizons"* in 2020, limited to three possible formats for video games.

The screenshot shows a search results interface with two main sections: 'Format' and 'Refine Your Search'.

Format

- All Formats (23)
- Book (11)
- Print book (9)
- eBook (5)
- Game (5)
- Article (4)
- Computer file (1)
- Journal, magazine (1)
- Video (1)

Refine Your Search

Author

- [Nintendo](#) (1)
- [Nintendo Of Ameri...](#) (1)
- [Nintend\(Macr\)O Ka...](#) (1)

Year

- [All Years](#)
- 2020

Language

- [English](#) (4)
- [German](#) (2)
- [French](#) (1)

Audience

- [Juvenile](#) (1)
- [Non-Juvenile](#) (6)

of these hundreds of creative assistants into library records, but the mere existence of such exhaustive catalogs speaks to a substantial user warrant for more detailed creator crediting. If this is indicative of the type of, and the rigor of, author/creator information that video game users want, it is plain from a cursory exploration that most library databases do not meet this expectation even at the most fundamental of levels.

Figure 2. [MobyGames data for Aya Kyogoku](#), director of *Animal Crossing: New Horizon* (2020).

Aya Kyogoku Contribute

Main Credits Biography Portraits

Game Credits

Production

Animal Crossing: New Horizons (2020)	(Director)
Super Smash Bros. Ultimate (2018)	(Original Game Supervisors (Nintendo))
Animal Crossing: Happy Home Designer (2015)	(Producers)
Animal Crossing: New Leaf (2012)	(Directors)
Wizardry: Tale of the Forsaken Land (2001)	(Assistant Director)

Design

deSpiria (2001)	(Assistant Planner)
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Writers

The Legend of Zelda: Twilight Princess (2006)	(Script)
The Legend of Zelda: Four Swords Adventures (2004)	(Script)

Other

Animal Crossing: City Folk (2008)	(Sequence Director)
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Portrait

If you have a portrait of this person, you can upload it to the MobyGames database. [add portrait]

Related Sites

There are no related websites on file for this developer. If you know of any related websites for the person, please consider contributing them. [add website]

Antstream arcade
PLAY TODAY!
 Antstream arcade is a FREE officially licensed retro game streaming platform with 1000+ titles to play, challenges & global tournaments.

Discussion: Can Auteur Theory Provide a Solution?

What do other relevant metadata schemas suggest for handling creator information relating to video games? Dublin Core Metadata Initiative's most relevant element is Creator (<https://www.dublincore.org/specifications/dublin-core/dcmi-terms/elements/1/creator/>), but that element can be used for corporate bodies as well as individuals, and it is not clear whom information professionals working with video games should regard as "entities primarily responsible for making" a game. Schema.org, the web-based initiative for providing structured data, includes a vocabulary for organizing information about video games (<https://schema.org/VideoGame>). The ability to record information about individuals is present (e.g., author, creator), but what is also evident is a tendency to borrow metadata terminology from film. The Video Games schema includes the properties (i.e., elements) actor, director, trailer, and recordedAt, as well as the property editEIDR which is "An EIDR (Entertainment Identifier Registry) identifier representing a specific edit/edition for a work of film or television" (<https://schema.org/editEIDR>). The overlap between video games and films in these schemas indicates a natural process of analogizing between media perceived as similar, both in terms of physical format (typically a digital optical disk) and creative product (original audiovisual works).

Is there a lesson to be learned from film and film studies if libraries wish to enhance access to video games? With films, attention is widely paid to the talents of the screenwriter, the director, and actors, and the foresight of the producers of the project. The director, however, has come to be seen by critics as more responsible than all the others, with the success or failure of the entire project commonly ascribed to the director. Cinema studies have used auteur (from the French, meaning “author”) theory to explain this form of primary responsibility. In complex products like films, numerous contributors produce effort that is distilled into a single “final, ‘coherent’ vision” (Wollen 1981, 146). Auteur theory focuses on the oeuvre of individual directors whose success “could be ascribed to the force of the director’s personality and unique obsessions expressing themselves through the film despite the constraints” (Caughie 1981, 11); this, despite the active contributions of the writers, producers, actors, and all those involved with the quality of the production and its distribution in most Hollywood films. Auteur theory seeks to elevate Hollywood films as high art. In the process, a kind of cult of personality arises around the director, who emerges as one who comes to embody the familiar trope of the lone romantic artist (Wollen 1981; Caughie 1981) in a field that is fundamentally creating works of diffuse authorship.

As noted above, the video game has come to be recognized as a culturally and aesthetically important medium of expression in the past few decades, just as film did over the span of the twentieth century. Alongside this transformation, writers began to import auteur theory into video game scholarship and criticism, and major game designers such as Shigeru Miyamoto, Hideo Kojima, and Sid Meier have been compared to film directors associated with the idea of auteurism. The auteur notion contrasts with the general position of game studios, which typically subsume creative attribution under the umbrella of the development studio rather than individual designers, and the interests of game users (as revealed in crowdsourced projects like MobyGames), which hint at a wider understanding of collaborative creation in their breadth of coverage. These can be envisioned as three distinct paradigms for thinking about video game creation, each of which suggests different possible avenues for carrying out classification and information-organization tasks in practice.

Does the adoption of the auteur philosophy help solve the problems of recording author information for collaborative creative works? Would applying auteur theory to video games, and identifying, selecting, and recording auteur figures for games in library records, help close the gap between a thin, corporate/publisher-only model of creation and the more user-sensitive but labor- and expertise-intensive model adopted by the crowdsourced information systems? It might reduce the severity of the authorship representation problems, theoretically, by at least presenting a few names who are responsible for a creation. However, this creates a new set of problems and questions. Who should be identified as the auteur of a work? Video game credits are not always as well-standardized as they are in film, and so identifying individuals simply by role (as can be done for film with e.g. director and producer) can be more difficult. Furthermore, if one person is named as a responsible and representative creator for a collaborative work, this could disregard the creative roles of other contributors, which replicates metadata problems already present in the library handling of film. Directors, producers, and top-billed cast are sometimes credited in library records for video holdings, an indication that there is already general recognition of

how auteur theory insufficiently models creativity even for film. Yet other creative personnel (such as screenwriters, cinematographers, score composers, and costume designers), who may be important loci for user discovery, are given short shrift.

Ideally, the author/creator information of video games should be organized and recorded in a way that allows users interested in finding video games to search games in a convenient manner. Video game users may want to find games with particular visuals created by their favorite illustrators, or with voice actors whose work they enjoy. Seeking to meet these diverse user needs, several studies have created organizational schema for video games based on subject relationship information, such as gameplay mechanics, frame of reference, narrative content, setting, and visual style (Cho et al. 2018; Cho et al. 2020; Lee et al. 2017). However, authorship or creatorship in the realm of video games is not always easy to discern, or even conceptualize, which may have contributed to the de facto standard practice of recording game studios' names in the author field.

Conclusion

In this exploratory study, we have reviewed and compared metadata records of video games to understand how author/contributor information is presented in current knowledge organization systems. What we observed is a severe information discrepancy between a crowdsourced database and library records. Cultural and artistic works created by multiple contributors do not have robust and properly-formatted author/contributor information in the current library records examined, and individual names responsible for different creations are not represented in the systems. As we came to understand the difficulties of recording hundreds of personnel who are responsible for creating one video game, we delved into the potential usability of applying auteur theory to video games, and considered whether recording well-known creative names might reduce the severity of the problem.

Our hypothesis remains active. Looking into the auteur theory has created a set of new questions for us: if the auteur theory can be applied to video games, who is the auteur of a game? Is the role filled by a game director, game producer, game designer, lead programmer, or script writer, to name a few possibilities? In addition, if we provide authorial credits to a few creative people, what about the rest of the game contributors? What amount of creator information sufficiently sates user needs without inundating catalogers with demands for more metadata field population and domain expertise?

While we have concentrated on a user-centered, pragmatic approach to the problem of video game authorship, other possible ideological approaches for addressing the issue suggest themselves, including theories of justice and moral desert for creators, critiques of capitalism/corporate authorship, and critical knowledge organization studies (Soos and Leazer 2020). We leave these as open questions. What is manifest is the persistence of the collaborative work authorship problem, which will continue to impact future KO practices and end users' search experiences as collaborative creation grows. This does not merely concern video games, but also other forms of multimedia and digital media resources that have more than a single author or contributor. We

invite the KO community and the broader information science community to address these questions together in future studies.

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