ABSTRACT
The preservation of ergodic digital artifacts, such as videogames, is a complex and uncertain archival task. This study examines how fan fiction metadata can facilitate the preservation of digital experiences. Based on a preliminary assessment of fan fiction associated with the videogame Mass Effect, collections of fan fiction metadata constitute a promising resource to identify and document player experiences, particularly those involving game characters and their relationships.

Keywords
Digital libraries - archives and museums, information behavior, fan fiction, metadata, videogames.

INTRODUCTION
For many individuals attempting to theorize digital games as a medium, the defining quality of such games is choice. The ability for a player to interact with and decide on the sequence of events takes most games out of the realm of traditional narrative media and into the realm of what Espen Aarseth (1997) calls “ergodic literature.” Ergodic literature, in contrast to non-ergodic literature, requires non-trivial effort to traverse the text. Choice relates to readerly effort in that choice makes effort necessary. Without options, traversing a text would be trivial. Will Wright, designer of SimCity and The Sims games, introduces the mathematical term “possibility space” to describe this complex system of nearly endless choices by the player (as cited in Jensen, 2013).

The same qualities that make these texts difficult to assemble for reading make them difficult to assemble for preservation. Canonical strategies for archiving focus on ensuring authenticity and integrity (Eastwood, 1992; Lynch, 2000; Todd, 2006), but what happens when the authentic object cannot exist without human involvement? In this poster, I examine the potential for aggregate fan fiction metadata to capture assembled texts for preservation, looking specifically at a fan fiction collection about the digital game series Mass Effect.

THEORETICAL BACKGROUND
In traditional archival theory, records serve as evidence of organic processes. In a guide to processing and arrangement, American archivist Theodore Schellenberg (1984) asserts that “records … have a value for the evidence they contain of the actions that resulted in their production” (p. 12). In order for records to serve as evidence, however, they must be proven to be authentic. Establishing the authenticity of a record requires three elements. First, the record needs to exist. Second, the record needs to be a product of the ostensible creator. Third, the record needs to be produced by the creator as a result of the assumed process. It is this final stage that presents the most interesting problem for this research, because it is difficult to define “the process” when it comes to an interactive work. Should the record capture the creative process of designing the game? Should the record capture the creative process of playing the game? And finally, how does one establish authenticity when the original artifact requires interaction from a reader in order to be complete?

This shift in attention demands a shift in the subject of preservation work: instead of digital games as software objects, we begin to see them as affective experiences mediated through digital forms. At the end of the day, people play games, and it is the stories of their experiences that form the cultural landscape around the game. An orientation to experience draws heavily on humanities approaches to game studies and offers a new approach to game archivists, one not incompatible with existing methods. When interpreting games as experiences of players instead of as software objects or sets of rules, the archival quality of authenticity does not disappear. It only shifts onto the authenticity of that player’s subjective engagement with the game, which cannot be verified in the standard ways.

I argue that the best assessment of authenticity of game-played experience comes from an interpretive community that shares the values and expectations of the particular player (Fish, 1980). If a community uses standardized language and evaluation techniques to assess which experiences are more authentic than others, so much the better. Established online fan communities rely on both of these techniques and offer a perfect sample for testing the proposed research question: How well can fan fiction metadata capture the possibility space of a digital game when it comes to narrative elements such as character?
RESEARCH SETTING

The Organization for Transformative Works is a non-profit fan-run organization that supports the creative and transformative work done by fans. The OTW runs a hosting archive for the distribution of fan fiction, in addition to running the journal *Transformative Works and Cultures* and many other initiatives to advocate for fans creating transformative works. The archive of fan fiction—*Archive of Our Own*, or AO3—is a major fan fiction site, with several of the major fan communities featuring tens of thousands of creative works.

The tagging and metadata system which forms the backbone of an interpretive community such as AO3 forms the basis for my research. Tags are meaningless without agreement, and fan fiction accommodates a variety of tagging practices (Johnson, 2014). On the other hand, user-generated tags are highly variable and often range in their descriptive utility (Marshall, 2009). AO3’s tagging system combines author-generated tags with moderation by a team of volunteers (the “tag wranglers”). AO3 does not use a controlled vocabulary like some other sites, but relies on the behind-the-scenes moderation to corral the tags into a meaningful system (Johnson, 2014). “User primacy” is one of the fundamental principles of this moderation team; as described on a page of AO3 listing “Wrangling Guidelines,” this principle means that:

“The users create the tags; we just sort them. … We do not change the tags on a user's work unless they directly violate the Terms of Service, and then only with specific instruction from the Abuse committee.”

AO3 does, however, combine tags with controlled categories in order to facilitate the classification and filtering of texts (see Figure 1 for AO3’s tag and category interfaces). Johnson (2014) describes this combination of user-generated tags and moderated tags in AO3 as one of three models of tags in her study of fan fiction archives.

For my study, I examine a collection of fan fiction and metadata created around the three-part role-playing digital game *Mass Effect*, published by Bioware from 2007 to 2012. *Mass Effect* takes place in a science-fictional universe populated by several alien races, although the protagonist,
last name Shepard, is human. *Mass Effect* also represents a particular kind of role-playing game with high character customization and narrative choice. At the start of the game, the player designs the physical appearance of their Shepard by adjusting a large number of minute sliders that affect everything from lipstick color to musculature. Players also select whether Shepard is male or female. There is no singular Shepard with a particular appearance. In addition, at the start of the game a player must also select one of three backstories for their character and a first name. In order to preserve every Shepard properly, an archivist would be doomed to saving thousands or millions of digital files, or recording the appearance and transformation of every character, or giving up entirely and simply preserving the code corresponding to the character creation process without reference to any actual player’s character.

Instead of this swamped lone arranger, the community of fan fiction writers represented on AO3 has produced over six thousand fan works related to the *Mass Effect* trilogy. Many of these works also include reference to actual side characters in the *Mass Effect* trilogy, a convention of fan fiction. Within *Mass Effect*, your protagonist may pursue romantic relationships with many of the side characters. A common use of fan fiction is “shipping,” or the creation of stories depicting the romantic involvement of characters who may or may not be involved according to the original creator. The overlap between *Mass Effect*’s choice of romantic relationship and this fan fiction community’s choice of “ships” to represent in text adds context and nuance to the possible relationships within the game. For example, the highest number of fan works are tagged with the “Female Shepard/Garrus Vakarian” relationship tag (see Table 1), which is in fact a relationship that a player can pursue after the first installment in the trilogy.

This community produces thousands of creative works representing these characters in different ways, and augments these creative works with author-applied tags. What do these author-applied tags communicate, and what usefulness do these tags have for preservation efforts?

### EVALUATING THE COLLECTION

There are two main elements to my evaluation. First, I note general observations about the *Mass Effect* fan fiction collection. These observations are limited to metadata elements common to the entire collection, namely, author-applied tags. Second, I note specific observations about a smaller sample drawn from this collection. With this smaller sample I paid particular attention to the elements of character that emerge from metadata elements in contrast to the fan fiction works themselves. In other words, what aspects of player experience can be read in the stories, and what aspects can be read in the metadata? With these two elements, I seek to begin answering the larger question of archival usefulness.

Most works in the collection involve the in-game protagonist, Shepard. As already mentioned, the choice of a first name is up to the player, and this reflects in the tagging of works. Many fan fiction works involving Shepard are tagged both with “male Shepard” or “female Shepard” and with the full name of that author’s Shepard. If the full name is not used in a tag, it tends to appear within the work itself. Fan fiction authors, like the game designers, recognize the value in having a consistent last name for the protagonist while also valuing the opportunity for customization. Ethnographer and media theorist Ian Condry (2013) has argued that characters act as generative platforms for fan participation and creation. For the fan fiction creators represented in the *Mass Effect* collection, Shepard—a customizable character in the source material—is one of the most generative platforms. Other characters in the original games, though less customizable in appearance and personality, are similarly generative. It is not surprising that character-based tags are nearly universal in the *Mass Effect* collection metadata. Tables 1 shows the frequency of the ten most common relationship tags, which place two characters in a pairing. Each relationship represented in the table is either possible or heavily implied in *Mass Effect*.

<table>
<thead>
<tr>
<th>Relationship Pairing</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Shepard/Garrus Vakarian</td>
<td>1378</td>
</tr>
<tr>
<td>Kaidan Alenko/Male Shepard</td>
<td>971</td>
</tr>
<tr>
<td>Kaidan Alenko/Female Shepard</td>
<td>970</td>
</tr>
<tr>
<td>Female Shepard/Liara T’Soni</td>
<td>441</td>
</tr>
<tr>
<td>Kaidan Alenko/Shepard</td>
<td>359</td>
</tr>
<tr>
<td>Thane Krios/Female Shepard</td>
<td>338</td>
</tr>
<tr>
<td>Shepard/Garrus Vakarian</td>
<td>219</td>
</tr>
<tr>
<td>EDI/Jeff &quot;Joker&quot; Moreau</td>
<td>207</td>
</tr>
<tr>
<td>Garrus Vakarian/Tali’Zorah nar Rayya</td>
<td>174</td>
</tr>
<tr>
<td>Female Shepard/James Vega</td>
<td>118</td>
</tr>
</tbody>
</table>

Table 1: Relationship Tags in Mass Effect Collection

In order to evaluate fan fiction as a potential archival resource, I selected a sample of 33 works from the online archive. For each of these 33 works, I scraped their titles, tagsets, summaries, and authors’ notes using a pre-written script. Out of 33 works selected, 22 works took advantage of the notes capability in order to add paratextual information and often, some context of authorship. All 33 works included a summary of the contents, although these summaries varied greatly in detail. All 33 works included at least one “Character” tag; these tags are standardized across the site. 25 out of 33 works included at least one tag in addition to the “Character” tags. This last set of tags is referred to in the site as “Freeform” tags, and little standardization occurs through these. For example, one work in my sample features the following freeform tag set: “Hurt, Regret, Reconciliation Sex, horizon - Freeform, Normandy SR-2 - Freeform, Romance, Explicit Sex, Slash, Angst, Fluff, Cerberus - Freeform, Citadel Coup, Trust, Misunderstandings, Some departures from canon.” Tags indicating plot elements, such as “Citadel Coup,” exist side-by-side with thematic tags like “Hurt” and “Regret.” The author also includes a disclaimer, by tagging this work with
“Some departures from canon,” indicating that readers should not expect the work to represent accurately events in the game. The existence of tags like these, however, hint at community norms of authenticity.

**DISCUSSION**

Given that fan fiction metadata elements have some correspondence to game properties, what usefulness might they have for preservation use? Moreover, are there particular metadata elements that are better suited to preservation? In a study of user-generated metadata for shared digital photographs, Marshall (2009) identifies four categories to describe the content of user-generated metadata: “place, artifact, context, and story.” Similarly, I divide user-generated fan fiction metadata into two preliminary categories: (1) character and relationship tags, and (2) other expressive freeform tags. These two categories, though reductive, also follow the efforts of the tag wranglers—the first category is also the highly standardized category, referring to characters and relationships that exist within the game’s possibility space. On the other hand, highly expressive and contextual tags such as “Misunderstandings” are perhaps less useful from an archival perspective. Instead of considering tags for their retrieval or system interactional value, I treat tags as significant descriptors that can inform preservation work. In particular, fan fiction metadata elements can impact areas of preservation work beyond simply collection and appraisal, such as archival description.

Archival description is a complex task where the archivist must construct a comprehensible context for an artifact. Often the archivist must provide details around the artifact such as the creator’s biography, or an account of historical events. For example, an archivist attempting to describe the *Mass Effect* series might include a short description of Bioware, the studio that designed and published the games. The archivist might also provide a summary of the narrative and visual style for each of the games in the series. Finally, the archivist may describe its cultural relevance and justify why it has been chosen as a preservation object.

These actions, however, only capture a limited segment of the game’s lifecycle. Again taking the imagined archivist’s labor as our example, we see a record of the game’s development, its appearance, and perhaps some sense of audience reception. We do not, however, see a record of experiences within the game. Might fan fiction metadata, like the tags I describe above, not provide some sense of player experiences, especially in situations with limited access to other records of player experience, such as video recordings or walkthroughs? In addition, the variability of experience represented by looking at a large collection of metadata accounts for some of the variability and choice built into games as a feature of their design. Thus these metadata provide an authentic record of the game as design object: an object designed to have variability and choice.

Further research is necessary to investigate the utility of fan fiction metadata to categories other than character, and to develop a more thorough taxonomy of existing fan fiction metadata.

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**REFERENCES**


