How to Reference a Digital Game

Stefano Gualeni

Institute of Digital Games University of Malta (Msida, Malta) stefano.gualeni@um.edu.mt

Riccardo Fassone

Jonas Linderoth

Dipartimento di Studi Umanistici Università di Torino (Torino, Italy) riccardo.fassone@unito.it Department of Game Development University of Skövde (Skövde, Sweden) jonas.linderot@his.se

ABSTRACT

The question of what constitutes a game as a social object is famously problematic. The alleged impossibility of formulating a complete analytical definition for what constitutes a game is perhaps the most evident symptom of that difficulty. One expression of this problem that has been entirely overlooked by academia is the scholarly practice of referencing games.

This paper addresses game referencing as a practice that is implicated with- and constitutive for- the ways in which we conceptualize and assign cultural value to games. Focusing on the conceptual framing of games, on game authorship, and on the historical dimensions of both, we will discuss referencing games as an act that is inevitably political. On these premises, we will provide foundational guidelines for thinking about one's decisions concerning referencing and about the meaning and relevance of those decisions.

Keywords

Digital Games, References, Academic Referencing, Authorship, Game Definitions, Framing

INTRODUCTION

When approaching games from an academic perspective, scholars engage with a range of activities, objects, agents, and perspectives that often have little in common with one another (Aarseth and Calleja 2015; Arjoranta 2014). Ludwig Wittgenstein's 1953 *Philosophical Investigations* specifically points at games as prime examples of a concept that is bound together by 'family resemblances': with the word 'games' we nominally indicate a set composed by members (i.e. individual games) that have many overlapping similarities among them, and yet no single feature – or set of features – that is shared by all.

As a consequence of the conceptual ambiguity about what constitutes a game, academics whose work involves games and game cultures are regularly confronted with both ontological disagreements and methodological problems. These issues can emerge from working across various and often discordant disciplinary frames of reference. The apparent impossibility of articulating a complete analytical definition of the objects and

Proceedings of DiGRA 2019

© 2019 Authors & Digital Games Research Association DiGRA. Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.

phenomena that are central to the interests of game scholars (i.e. of conclusively answering the question of what a game is) is arguably the most frequently discussed among these framing issue.

Another manifestation of the ambiguity inherent in the discourse surrounding and involving games can be identified in the practice of academically referencing digital games, toys, role-playing games, and board games. Unlike the debates about game definitions and game ontologies, the problem of referencing games has been almost completely overlooked by academia.

Presently, the field of game studies neither implements shared standards when it comes to referencing games, nor does it offer guidance with regard to how to better approach the decisions involved in this academic practice. In the absence of shared guidelines on how to reference games, scholars typically decide how to act on the basis of their academic background, their personal preferences, and what appears to be rhetorically convenient for the kind of output in question.

In analogy with the situation outlined above, it should be clear that the problem of how to academically reference a game transcends the boundaries of game studies and affects a variety of disciplines that have needs and interests in mentioning and discussing games. Presumably as a consequence of the conceptual mess outlined earlier, academic writing-style guides like APA or MLA do not currently recommend guidelines or canonized solutions to the problem of how to reference a game. Both, however, offer clear instructions about how to cite and reference other digital media contents such as online videos, individual blogposts, databases, webpages, tweets, and forum comments.

This paper aspires to initiate a structured discussion concerning the various challenges posed by the question of how to reference a digital game in particular. The reason we decided to address the problem of referencing specifically in relation to digital games is twofold.

- In the first place, a specific focus granted a higher degree of control over the scope of our academic inquiry, making our exploratory work more manageable.
- Secondly, we consider digital games to materialize some of the most ambiguous 'somethings' among the many 'somethings' that we presently refer to as 'games'. As many game scholars have argued, games draw upon a number of different cultural forms (see Aarseth 2012; Linderoth 2015; Ryan 2009) and the often-large amount of people and technical components involved, make the problem of authorship particularly awkward, and thus particularly interesting to examine (Jennings 2016). Another feature that characterizes the current production and use of digital games is their technical instability: their customary being updated, extended, patched, and modified during their existence as social objects. Beside the problem of their instability as social objects, the socio-technical dynamism of digital games is also emphasized by their rapid technical obsolescence, which systematically makes relatively old games difficult to access. These phenomena occur very rarely in the cases of toys and board games, and makes digital games additionally problematic to both archive incrementally and reference accurately. To put this second point in a somewhat simpler way: we decided to tackle the specific problem of 'how to academically reference digital games' because we believe that the

reflections and suggestions that will be elaborated in relation to them will be portable to less ambiguous and less historically and technically dynamic types of games.

In this paper, we will examine and discuss how to reference digital games from three interrelated standpoints. Through these three conceptual 'lenses', we will argue that choosing how to reference digital games (and games in general) must be inevitably recognized as a political decision that is constitutive of the ways in which we collectively conceptualize and assign meaning and value to digital games. The three standpoints are:

- The conceptual framing of digital games (from which we will look at referencing as a social practice that is implicated in the very ways we understand what games are as well as their cultural relevance).
- Attribution and authorship of digital games (where, inspired by philosophical anthropology and philosophy of technology, we will unpack the notion of 'authorship' and scrutinize its significance when referencing digital games).
- The historical trajectory of reference practices concerning digital games (where we will discuss how game studies have addressed the issue of referencing games in the past, and how these practices were informed by and, to a degree, informed the academic understanding of games).

THE CONCEPTUAL FRAMING OF DIGITAL GAMES

A reference can be described as a link between two texts (or, more in general, between two sources) that is established in accordance to some form of system (Uhnoo 2012). Researchers can have different motives for creating such link. An academic text referencing an email exchange or a personal conversation could function, for example, as a method to give credit for an idea or a particular way of phrasing something. Referencing an ephemeral and transient event like a specific concert or an individual theatrical performance could be a way to establish a textual 'trace' of the event itself. More commonly, scholars make use of references to ground their own work historically, or to contribute to an ongoing process of argumentation (Jacobsson and Rombach 1994). Central to the practice of referencing, when understood in light of this last and common purpose, is the idea that the reader should be able to find the source that the authors are referring to, as to make it possible to evaluate claims in relation to their origins, their academic tradition, or the factual evidence that a certain source embodies or testifies. This aspiration poses a specific challenge in relation to digital sources such as digital games or webpages, as those sources can be updated and hence substantially changed over time, and can become unavailable or even no longer possible to be accessed. Encountering these kinds of reference-related problems is almost a certainty for someone working in a field such as game studies. As the International Game Developers Association's special interest group on game preservation pointed out:

"Digital media have a shockingly short life span due to the natural decay of the original materials and the rapid obsolescence of older media forms, as well as the failure and obsolescence of the hardware necessary to run them." (Lowood et. al 2009, 140)

Being a relatively young cultural form, digital games also give rise to a number of problems in relation to existing reference systems. Based on an analysis of gaming magazines from 1981 to 1995, Kirkpatrick (2012) argued that the cultural niche that gaming carved out is surrounded by different tensions, such as those between art and technology, or their role in the upbringing and education of children and relative health-and psychology-related hazards.

These framing issues are also commonly encountered in the academic discourse surrounding games. They emerge with particular evidence in arguments over what the proper unit of analysis should be when analyzing and discussing games, and what existing academic field(s) should be allowed to theorize and study them. The infamous ludology - narratology debate was, ultimately, a 'frame conflict' (Goffman 1974, 300-44; Linderoth 2015). As already suggested, part of this problem is related to the multimodality of games and to their historical and conceptual relation to other cultural forms. In that sense, the emergence of game studies as a separate academic field can be interpreted as an expression of the need for specific ways of framing digital games on the basis of their distinctive affordances.

This frame-ambiguity poses a peculiar problem to the game scholar: if the reference system that they use does not clearly state how a game should be referenced, then it is up to the editors of a specific publication (or even down to the individual scholar) to select what cultural form games should be associated with. In the practice of referencing, in other words, a choice needs to be made in relation to what 'family resemblances' should be given priority to, as – to be discussed - a game needs to be first conceptually framed as 'something'.

While not being systematically studied on a large scale, there are some indications that this has been a challenge in the game studies field. Olsson (2013), for example, analyzed citation practices in relation to games, and looked into reference practices in seven game studies journals, three game studies conferences, and 22 canonical game studies books. The guidelines for referencing games that were recommended in those sources were analyzed and related to the different ways in which game references had been made in practice. The results showed that guidelines were rarely enforced. Olsson (ibid.) additionally identified five recurrent and non-exclusive strategies that the authors employed to deal with the problem of referencing games:

- 0) No references were given for the games mentioned in the text.
- 1) Only some specific games were referenced. The rule of thumb seemed to be that classical were expected to be known and hence not referenced.
- 2) Games were referenced as something different than bibliographic sources. In those cases, games were referenced in separate ludographies and/or were highlighted within the text (for instance by capitalizing or italicizing the name of the game).
- 3) Games were cited together with other sources, using the same referencing format that was employed for the books and fulms that were referenced in the same text.
- 4) Games were cited on the basis of the specificities of its cultural form. In line with what was already mentioned in point number 3, special guidelines for games were recommended. Examples of such guidelines include, for example, stating that one should include the platform that the game was played on in brackets after the name of the game, or that one should mention the date when the game was played at the end of the reference.

These observations illustrate one of the central arguments of this paper: the need to recognize that the decisions taken when referencing games are far from trivial, and that

their importance transcends individual taste and bibliometric needs. Additionally, we posit that the question of how to reference a game has several conceptual analogies with those involved in the game definition debate. Stenros' (2017) extensive review of the game definition literature concluded that the definitions that scholars use are disparate and incongruous, and that the only thing that the literature on game definitions seems to agree upon is that games have rules. As will be articulated in later sections in this paper, game referencing has a historical dimension in which different aspects of digital games are highlighted or omitted depending on convenience, tradition, and context. The ways in which authorship, authenticity, and attribution are ascribed to games in different contexts also testify a great variety of approaches. The decisions made by scholars with regard to referencing games and digital games, thus, inevitably makes their work part of the processes that socio-culturally constitute games as 'something'.

This last point should be further emphasized, adding that the discursive practices where games are constituted as a cultural form can have far reaching consequences. For example, in the debate on game addiction (see Enevold, Thorhauge, and Gregersen 2018), digital games are often compared to unhealthy substances. This particular rhetorical way of understanding digital games competes, as a discourse, with other perspectives such as those that propose to understand games as educational tools or as more widely contributing to contemporary culture. Framing decisions like the one that was just outlined can be used to influence both the general public as well as people with the power to regulate how digital games are rated, sold, accessed, consumed, etc.

AUTHORSHIP AND ATTRIBUTION OF DIGITAL GAMES

The adoption of a frame of reference was recognized in the previous section of this paper as a necessary conceptual step to rationalize and manage the 'mess' that characterizes all cultural forms, and digital games in particular (see Bogost 2009). Different approaches to framing what a digital game can be and what a digital game can mean also scaffold the ways in which we understand what it means to be the author (or among the authors) of one. Some of the people involved in the creation of a digital game will be recognized as more or less central to its constitution and, consequently, as a more or less relevant figure to mention when referencing that game academically. For example, if we are discussing a digital game in its capacity to interactively disclose specific meanings and experiences, we might be tempted to attribute a primary authorial role to the people with responsibility over its creative contents (for example the game designers or the creative directors). If, on the other hand, we approach a digital game with a specific interest in some of its technical qualities, our focus will likely shift onto other professional figures such as the technical directors.

What we are trying to emphasize here is that any kind of framing is an inherently political act, and the same holds true when trying to determine who (or what) is the author of a certain thing or performance: authorship is a culturally constructed category, and it is deeply ideological and fraught with issues of power (Jennings 2016). Emphasizing the cultural and political relevance of this question does not, however, exhaust the problem that we are trying to disentangle. With the objective of understanding what authorship can mean in our technological world, we propose to look at the work of German philosopher Gunther Anders. The texts written by Anders that are of interest for this paper were published in the fifties, a period in which Anders's philosophical production focused on the increased involvement of technology in human practices, and on how this process already rendered several established mental categories obsolete (Anders 1956a; Anders 1956b). His understanding of this form of 'obsolescence' is vividly exemplified in the 1956 essay 'Reflections on the H Bomb', in which Anders declared the very idea of a 'moral standing' to be one of those

concepts that no longer had a place in our technological world, as it was progressively engineered away [1].

In analogy with Anders's insights, and given the systemic and technically-involved ways in which most of our creative and productive activities take place, it could also be argued that nowadays the very notion of authorship might not be applicable or useful any longer. Asking 'who are the authors of a digital game?' would make as much sense as asking 'who authored that shopping mall?' The scale and complexity of the sociotechnical activities and objects that are mentioned here as examples (a digital game and a mall) should be considered mere quantitative factors. To make this point clearer and more intuitive, we prompt the reader to consider that even a more modest question such as 'who made this cup of coffee?' is also impossible to answer unambiguously, as it is always the product of a particular way to frame our object of interest [2].

Barthes' articulation of the "death of the author" (1967) highlights the problem of attributing responsibility for the meanings of a literary piece in a very similar fashion. Against the tradition of literary criticism, Barthes argued that authorship constitutes "a multi-dimensional space" which cannot be "deciphered" and described objectively, but can only be "disentangled". Where Barthes focused on perception and interpretation as way to criticize the notion of the author, Foucault discussed the ambiguity and the cultural significance of authorship from the point of view of 'production'. In a way that is considered by many to be a response to Barthes, Foucault identifies the author as an intricate, ideological 'function of discourse' by means of which our culture shapes, excludes, and embraces meanings (Foucault 2001).

Ulterior complications with issues of authorship and attribution emerge from the fact that our technical artefacts are often modified, extended, appropriated, and repurposed in ways that can transcend the intentions of the original creators, and that tend to involve additional 'authors' [3].

In line with Anders's work as well as with the wider tradition of philosophy of technology (see De Mul 2002, 30), we understand our interactions and involvement with technologies to be impossible to completely disentangle and separate from social processes, meaning that the specific question of technical authorship is bound to remain an open one. Those problems and impossibilities are evidently also at work in the case of the authorship of digital games. In the face of what was just outlined, we propose a working approach that bypasses aspects of authorship that are concerned with the technical components of a game. What we recommend is, in simpler words, to artificially separate the 'hows' of digital games (their technical contents) from their 'whats' (their creative contents), and exclusively consider the second group. Taking a digital game as an example, our decision in this paper is not to include who created the controller that is used to play that particular game in our discussion, or who authored the firmware that controls the activation of the whirring fan that prevents the processing units from overheating. Both are needed components of 'how' we play that game and can definitely be considered to contribute to the overall experience, but they are aspects of authorship that are not particularly interesting in terms of qualitatively experiencing and analyzing digital game contents.

Focusing on a digital game's creative authorship, we argue that in the context of large commercial enterprises, authorship can be understood as an effectively obsolete analytical category. In those productions, the possibility of authorial attribution can be understood as having effectively been 'engineered away' during its ramified and vastly distributed production processes (see Jennings 2016) [4]. For game releases by independent developers and for digital games of any size that are characterized by a specific and identifiable creative vision, instead, authorship might still be considered a

relatively unambiguous way of framing authenticity and attribution that can be helpful in the process of referencing. On the basis of this conceptual dichotomy, in the concluding section of this paper we will advance a few recommendations on how scholars could position themselves in relation to the attribution problem posed by digital games.

THE HISTORICAL TRAJECTORY OF REFERENCE PRACTICE CONCERNING DIGITAL GAMES

For large sections of the humanities, the practice of referencing is historically standardized, and thus very rarely discussed. Other areas and disciplines, instead, explicitly address the pragmatic, political, and cultural implications of referencing methods as a part of their methodological foundations. Various branches of philology, for example, employ – and often re-discuss – methods for referencing and citing in order to accommodate different versions of a text, its annotations, translations, variants, etc. While this ongoing cultural negotiation with unstable texts may not provide any insight on how to reference digital games, it serves as a reminder that "all writing is multimodal" (Ball and Charlton 2015, 42), and that its complexity cannot be thoroughly captured and exhaustively framed by any referencing system.

These observations imply that all acts of cultural production need to undergo a process of simplification in order to be referenced and attributed in a somewhat unambiguous manner. This process is influenced by factors that may be both endogenous to the discipline (such as the adoption of a certain writing-style guide for a major publication) and/or contextual (for example the perceived cultural relevance of a certain text or author). It acts along historical arcs of several decades, and can thus be discussed only diachronically.

For the reason discussed above, it may be useful to analyze the characteristics and historical trajectories of digital games referencing, and - along the way - compare them with the ways in which other (and arguably comparable) media objects that have come to find a relatively stable method for referencing. This section will thus present a short overview of how digital games have (or have not) been referenced in the past using a small sample of case studies, and suggest analogies with similar processes relating to media such as film, software, and analog games. It should be noted that these comparisons are based on assumptions that constitute *in themselves* a form of cultural politics. This *caveat* notwithstanding, we argue that the comparison of these historical perspectives may lead us to initiate a fruitful discussion on the implications of referencing games.

Game studies as an academic discipline is usually dated back to the second half of the 1990s, with the publication of now-canonical texts such as Aarseth's (1997) and Murray's (1997). Nevertheless, disciplines such as social psychology, computer science, and cultural sociology had started to include digital games among the objects of their inquiry as early as in the 1970s. Richard D. Duke's 1974 book *Gaming: The Future's Language* is possibly the first scholarly text to concern itself with the problem of how to reference digital games. While Duke's treatise discusses for the most part analog simulations, two of the games that are analyzed in the text (*Metropolis* and *Metro/Apex*) were implemented into computers (Duke 2011), which possibly makes them the first computer games to be referenced in a scientific publication. *Gaming: The Future's Language* features an appendix titled "List of cited games", which is separated from the traditional references, and in which Duke lists the games in the following format:

METROPOLIS Richard D. Duke Radius International, Inc. 321 Parklake Ann Arbor, Mich. 48103 (1969)

Both computer-run simulations and commercial board games (e.g. *Monopoly*) are referenced in the same way:

MONOPOLY Charles W. Darrow Parker Brothers, Inc. 190 Bridge Street Salem, Mass. 01970 (© 1935)

Duke's approach to referencing highlights the articulation of a double concern. On the one hand, the prominence of the author's name (although apocryphal, as in the case of Darrow) seems to stress the necessity of recognizing the authorship of the designer of a system; on the other hand, the inclusion of company data – 'Radius International, Inc.', and 'Parker Brothers, Inc.' – testifies a tension to represent games as products of legitimate institutions. This way of referencing may be interpreted as being indebted to referencing systems that are typically used in the humanities, systems in which the author is mentioned alongside the publisher. This gesture towards more established forms of referencing seems to reinforce the idea that *Gaming: The Future's Language* attempted to validate games as tools for sociological inquiry, a goal that Duke and his colleagues were pursuing since the foundation of the journal *Simulation and Gaming* in 1970.

It should not be surprising that one of game studies' founding texts, Murray's *Hamlet on the Holodeck* (whose main argument relies on framing digital games as legitimate storytelling tools), adopts a similar strategy. For example, in her references list for "Digital works", Murray's entry pertaining to *Zork* reads:

Zork. Created by Mark S. Blank, P. David Lebling, and Timothy A. Anderson (mainframe version 1977). Released by Infocom for personal computers, 1980. Available from Activision. Text-based adventure game. (315)

Murray's attempts to culturally validate games are similar to Duke's in that they employ a reference format that, although highly idiosyncratic, is designed to characterize the medium as being characterized by both artistic and technical components. While the inclusion of different versions and platforms clearly derives from reference practices that typically occur when referencing software, the inclusion of the authors' names (preceded by a rather telling "created by") locates creative authorship in the effort of individuals.

While Duke's preoccupation was that of legitimizing games – and, more generally, modeling software –, a portion of game-related research in the 1980s aimed at assessing the social hazards presented by digital games. An article published in 1986, titled *Affect of the Game Player: Short-Term Effects of Highly and Mildly Aggressive Video Games* (Anderson and Ford 1986), describes a series of experiments performed on players regarding the short-term effects of playing digital games in relation to aggressiveness. *Affect of the Game Player* cites two games – *Centipede* and *Zaxxon* – as they are used

as test-objects in the experiments. The games are not referenced in the article's bibliography nor in a separate list, and - even more strikingly - their titles are neither italicized in the text, nor followed by any form of description in parentheses. Moreover, the authors never refer to the versions of the games they used, although it is possible to infer them by analyzing their technical setup [5].

These notable omissions may be attributed to a cultural climate in which commercial games were perceived as essentially author-less objects (Montfort and Bogost 2009, 59). This erasure seems to reinforce the perception – at least within academia – that digital games somehow descend from - or are adjacent to - analog games, a cultural form that, in the 1970s and 1980s was very rarely systematically referenced (see, for example, Avedon and Sutton-Smith 1971).

It should be noted that explicit attempts at cultural validation such as Murray's or Duke's echo a tradition that possibly originates in early digital game design cultures. As discussed previously, in response to the widespread industrial practice of not crediting authors in early console games (Whalen 2012, 73), designers such as Warren Robinett started 'hiding' their names in secret or inaccessible areas of the games they produced, with the overt intent of reasserting authorship over their work [6]. Other early digital game designers, usually working in more independent circles, such as Jeff Minter or Dino Dini, made sure to have their name appear on the splash screen of their games.

This tendency towards erasure is not found only in works that seem to respond to the waves of moral panic generated by the global success of digital games since the 1970s, but also in texts that attempt to formulate theoretical arguments about the medium. It is the case of both Crawford's *The Art of Computer Game Design* (1984), a progenitor of game studies, and Kinder's *Playing with Power* (1991). The latter, stimulated by the rising popularity of digital games, attempted to build a theory of popular media around the notion of 'supersystem'. In both cases, only the titles of the games were mentioned in the texts, and no information on either authorship or the context of production were offered. Neither Crawford nor Kinder included games in the reference section of their work, or in a specifically dedicated section [7]. This general disregard towards referencing practices for digital games is particularly counter-intuitive to be encountered in texts that are not citing games in passing, but were explicitly focusing on their constitution and effects. This dissonance could, however, be explained by the relative newness of the medium.

While discussing *new* media in terms of novelty and currentness is often misleading (Balbi and Magaudda 2018), it should be noted that these examples of proto-game studies were investigating a medium whose protocols (Gitelman 2006) and 'best practices' had not yet been established into guidelines and canons. Referencing practices had not yet coalesced into a shared vocabulary, and neither had specific terminologies pertaining to formats, platforms, and genres (Kirkpatrick 2015). Situating the practice of referencing games within a historical trajectory is thus essential for the understanding of different diachronic factors that informed and influenced the ways in which we currently reference (or omit referencing) games. A historical contextualization proved necessary in order to understand how the changes in digital games' cultural status, the acceptance of game studies within academia, and more general contextual factors contributed to the contemporary debate on referencing methods for digital games.

CONCLUSIONS

Discussing the ways in which we reference digital games and bringing the constitutive role of referencing to the fore of the current discourse on games and game cultures is not a mere speculative *divertissement*, nor a purely academic concern. As we observed in this paper, the constitutive processes of game referencing, or refraining from referencing games, is deeply ideological and fraught with issues of power.

Erving Goffman (1986) famously stated that social interactions and the way people go on with their everyday affairs is an implicit answer to the question of what the participants in the social encounter think is going on (i.e. in which way they frame a specific situation). Similarly, reference practices can be understood as practical ways to settle disputes such as: what are games? Who is the main author/creator of a game? What status should digital games have in regard to other cultural forms? Etc.

The main takeaway of this paper is that game scholars should be aware of the constitutive role of their referencing methods. While not trying to enforce a specific way of citing games, in this concluding section we will discuss some questions and implications that we deem central to the practice of digital game referencing. In some cases we have chosen to suggest possible guidelines and criteria for referencing digital games. In those instances, our recommendations should not be received as prescriptions.

We want to argue, as a conclusion, that when referencing a digital game the scholars should consider the following questions:

What kind of family resemblances and association am I implying and enforcing, using a specific reference method for digital games?

As already discussed, digital games have been referenced in the past in ways that established associations with other cultural forms such as films, software, analog games, etc. Any citation method that borrows the referencing style used for another source (or part thereof) suggests a conceptual analogy between that source and digital games, hence implicitly stating that games should be framed as that specific 'something'. This 'something' could be books, technical artifacts, analog games, etc. While not enforcing one particular family resemblance over another we here stress the importance of not refraining from referencing to games, as that is the only course of action that directly undermines the cultural relevance of digital games, an issue that also resonates with our answer to the next question.

What cultural status do we ascribe to digital games by opting for a certain reference method?

An issue that is central to our answer, here, is whether scholars ought to list the games and digital games that they cite in their texts in a separate ludography, or if they should be included in one indistinct reference section that groups together all kinds of sources. Separating games and digital games from other forms might position them as deviant and not worthy to be side by side with literature. In other circumstances, for example as it is often the case in film studies, a separate reference list can suggest that the exclusively-referenced cultural form is particularly relevant. Grouping games with books, films, and academic articles in one common bibliography is likely the safest strategy to not downplay the cultural status of games. Also viable would be to list each and every form separately. The rule of thumb should anyway be to carefully consider how the reference strategy positions digital games in relation to other cultural forms.

What are we saying about digital game authorship with our ways of referencing?

In the 'Authorship and Attribution of Digital Games' section of this paper, we posited a separation between digital games for which authorship can be considered a relevant trait and those for which that was not the case. On the basis of that conceptual dichotomy, we invite the scholars who intend to reference a digital game to carefully consider the possibility to meaningfully isolate and identify creative authorship in the title in question, and to adopt a referencing style that matches their assessment. The possibility to subjectively distinguish works of 'identifiable authorship' from works of 'distributed authorship' invites the adoption of a dual canon for referencing

The possibility to subjectively distinguish works of 'identifiable authorship' from works of 'distributed authorship' invites the adoption of a dual canon for referencing digital games. This approach resonates with how writing-style guides such as APA and MLA currently recommend to separate large, corporate productions from small, independent ones when it comes to referencing films. In the case of the former, the name of the production house is a film's primary attribution, while in the case of the latter, the name corresponding to the main author is that of the movie director.

How does the reference method we adopt relate to the historical dimension of the game form?

In the 'history' section of the paper we outlined how referencing styles are influenced by (and, in turn, may influence) the academic interest in games and the socio-cultural value that is attributed to games more generally. These processes were analyzed as historical phases or shifts, but it is important to keep in mind that choosing a referencing style over another inevitably characterizes games as a certain 'something', and that that 'something' has specific uses, meanings, and reputations within contemporary culture. In this sense, by looking at how early referencing practices addressed digital games, and by analyzing the implicit rhetorical stances found in those methods, it is possible to recognize similar patterns and rhetorical stances in contemporary scholarship.

How should we deal with information that specifically characterize digital games (such as its software version or the platform on which a particular game was played)?

At the date when this paper was published, the submission guidelines of *Game Studies* – *The International Journal of Computer Game Research* (a prominent, online journal in the field of game studies) recommends the following citation style for the games that are referenced in its articles:

STYLE: Developer. (Year). *Title*. [Platform], Release City and Country: Publisher, played month day, year, .

EXAMPLE: Atari. (1980). BattleZone. [Arcade], USA: Atari.

We consider that *Game Studies*'s recommendation of mentioning the platform on which a particular title was accessed and experienced is a useful addition and an important discriminant when it comes to referencing digital games. A piece of information that we deem, instead, poorly indicative is the date on which the game in question was played. Differently from the web-page standard that this citation style presumably refers to, in digital games a date does not necessarily correspond to a specific version of its software. Rather than mentioning the date of play at the end of a reference, we would recommend to specify the software version that was discussed in

the text, which is an unambiguous indication of what kind of content was encountered during gameplay. Information concerning software versions and corresponding release dates might, however, not always be accessible. This poses a problem with referencing digital games that has the potential to become more severe and widespread with the rise of data-driven game-development and the diffusion of a 'games as a service' model (such as the recently-announced *Google Stadia*). Should this be the case, we might want to re-evaluate our position towards using a date as a valid citation coordinate.

Going back to the submission guidelines of *Game Studies*, and in a way that is reminiscent of the difficulties and ambiguities of attributing authorship, we consider the mention of the city and the country of the publisher to be both difficult to be determined exactly and rather irrelevant in today's age of globalized media industries. As a case in point, *Game Studies* could not determine the city and the country of the publishers in most of the example references proposed in their submission guidelines.

Are there any practical recommendations that we could follow to reference a digital game?

As already mentioned, the proposal below is not meant as a prescription, but as a recommendation and a preference that we developed in relation to the various questions and issues raised in this paper. We propose the adoption of a dual canon for referencing, in which we ask the scholar to make a subjective decision with regard to the relevance of authorship of the digital game in question. We will begin by suggesting a reference method for digital games in which the scholars consider that a distinct, individual authorial vision is possible to be identified:

RECOGNIZABLE AUTHORSHIP STYLE: Author. (Version, Year) [Year of original release if different]. Title [Platform]. Digital game developed by developer, published by publisher.

RECOGNIZABLE AUTHORSHIP EXAMPLE 1: Blow, J. (v. 1, 2016). *The Witness* [PS4]. Digital game developed by Thekla, Inc., published by Thekla, Inc.

RECOGNIZABLE AUTHORSHIP EXAMPLE 2: Gualeni, S. (v 1.1, 2017). *Something Something Something*. Digital game developed by Kniestedt, I.; Fassone, R.; Schellekens, J. Available online at: http://soup.gua-le-ni.com.

For digital games in which a distinctive authorial vision is not possible to be discerned, we would recommend the following:

DISTRIBUTED AUTHORSHIP STYLE: Developer. (Version, Year) [Year of original release if different]. Title [Platform]. Digital game directed by director, published by publisher.

DISTRIBUTED AUTHORSHIP EXAMPLE: Blizzard Entertainment. (v. 2.4.1, 2008) [2007]. *World of Warcraft: The Burning Crusade* [Microsoft Windows]. Digital game directed by Rob Pardo, Jeff Kaplan, and Tom Chilton, published by Blizzard Entertainment.

Please note that in the case of works of distributed authorship, and in analogy to various stylistic conventions used in referencing films, we decided to substitute the notion of

the author with that of the director. In the games industry, this role is typically listed in the credits as 'creative director' or 'game director', and is broadly responsible for developing and maintaining the general creative vision for the game throughout its development.

Should the scholars need to reference a specific figure (or figures) in relation to a component of the digital game in question (say, for instance, the composer of a particular score), our recommendation is to refer to their work in the form of an extended in-line citation. As an example for this referencing solution, we suggest to attribute the writing for the cinematic sequences of *World of Warcraft: The Burning Crusade* to Chris Metzen as follows: (Metzen, C. in Blizzard Entertainment, v. 2.4.1, 2008).

To conclude, we want to emphasize that what we are suggesting is based on the principle that a reference concerning a digital game should be as unambiguous as possible – thus the advice of adding platform and version as parts of the reference. Our recommendations are also mindful of the specific hybrid nature of the medium in question. In this sense, we consider it is important to address the various forms of authorship that can be attached to a digital game. Finally, the suggested style should be regarded as fundamentally contextual, meaning that depending on a number of factors – the kind of publication, its relation with game studies as a discipline, and possibly the author's specific rhetorical intent – it can be revised and adapted.

ENDNOTES

- 1. For Anders, the action of detonating an H bomb is not irresponsible in the ordinary sense of the term, since to call it irresponsible "still falls within the realm of the morally discussible, while here we are confronted with something for which no one can even be held accountable." (Anders 1956, 151) He further explained that "[b]ecause the chain of events leading up to the explosion is composed of so many links, the process has involved so many different agencies, so many intermediate steps and partial actions, none of which is the crucial one, [...] no one can be regarded as the agent. Everyone has a good conscience, because no conscience was required at any point." (ibid., 149)
- 2. To clarify: the question 'who made this cup of coffee?' might be understood as nominally addressing the last link of the production chain (i.e. 'who can be considered responsible for this particular brew?'). However, taking a broader analytical perspective (such as ANT or, for example, one inspired by post-phenomenology), we might be wondering if the people who decided to purchase a specific coffee machine also need to be considered partially responsible for that cup of coffee. And the people who chose that particular coffee blend? And the ones who roasted the beans that are ground in it? And those who planted those the plants from where those beans were taken? Should the 15th century Yemenite traders who originally popularized the beverage also be included? In this light, the list of the co-authors of a cup of coffee is potentially endless.
- 3. Besides the already mentioned extensions, updates, patches, and modifications, the computer mediation of the perceptions and playful interactions that characterize our relationships with digital games introduce yet another fascinating and medium-specific problem concerning the attribution of authorship: that of machine-agency. Unlike our actual, physical interactions with coffee-cups, books, board-games, and malls, non-catastrophic technical malfunctions and unexpected

- behaviours of computers can generate artefacts and elicit behaviours that were not originally anticipated by the human developers.
- 4. The 'engineering away' of authorship can be further emphasized, here, by referring to practices like outsourcing and sub-contracting that are common in every media industry.
- 5. The authors claim that "A Radio Shack Color Computer was connected to a 13-in. television screen. Both *Centipede* and *Zaxxon* are played with a joystick" (396), which probably indicates that the machine used to run the games was a TRS-80 Colour Computer.
- 6. Famously, Robinett created a secret room within the game *Adventure* (Atari, 1979), with a floating chunk of text reading "Created by Warren Robinett".
- 7. It should be mentioned that Crawford's work is intended as a manual of sorts, but also offers a number of theoretical arguments about the nature of games. While it is not necessarily expected that a publication of this kind adopts a referencing system, the authors consider Crawford's omission of any data about the games except for their titles notable.

ACKNOWLEDGMENTS

The authors would like to thank, first and foremost, the reading group at the Institute of Digital Games (University of Malta) for their support and constructive criticism, and in particular Daniel Vella and Melinda Sue Mangion for their additional proof-reading. We also want to express our gratitude to Camilla Olsson and Nele Van De Mosselaer for making this paper sharper and more complete with critical discussions and thoughtful suggestions, and for helping with the final drafts. Stefano would also like to thank the Centre for Digital Humanities at the University of Gothenburg (Sweden) for hosting him during the last editing passages of this paper.

CITATIONS AND REFERENCES

- Aarseth, E.J. 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore, MD: JHU Press.
- Aarseth, E.J. 2012. "A narrative theory of games". In *Proceedings of the International Conference on the Foundations of Digital Games* (FDG 2012), 129-33. Raleigh, NC.
- Aarseth, E.J., and Calleja, G. 2015. "The Word Game: The ontology of an undefinable object". In *Proceedings of the 10th International Conference on the Foundations of Digital Games* (FDG 2015). Pacific Grove, California, CA.
- Anders, G. 1956a. "Reflections on the H Bomb". *Dissent.* 3 (2), translated by Norbert Guterman, 146–155.
- Anders, G. 1956b. Die Antiquiertheit des Menschen 1: Über die Seele im Zeitalter der zweiten industriellen Revolution. Munich. DE: C.H. Beck.

- Anderson, C.A., and Ford, C.M. 1986. "Affect of the Game Player: Short-Term Effects of Highly and Mildly Aggressive Video Games". *Personality and Social Psychology Bulletin*. 12 (4), 390–402.
- Arjoranta, J. 2014. "Game definitions: A Wittgensteinian approach". *Game Studies: The International Journal of Games Research*. 14 (1). http://gamestudies.org/1401/articles/arjoranta
- Avedon, E.M., and Sutton-Smith, B. 1971. *The Study of Games*. New York, NY: John Wiley.
- Balbi, G., and Magaudda, P. 2018. A History of Digital Media: An Intermedia and Global Perspective. London, UK: Routledge.
- Ball, C.E., and Charlton, C. 2015. "All Writing is Multimodal". *Naming What We Know. Threshold Concepts of Writing Studies*, edited by L Adler-Kassner and E. Wardle, 42. Logan, UT: Utah State University Press.
- Blizzard Entertainment. (v. 2.4.1, 2008) [2007]. World of Warcraft: The Burning Crusade [Microsoft Windows]. Digital game directed by Rob Pardo, Jeff Kaplan, and Tom Chilton, published by Blizzard Entertainment.
- Blow, J. (v. 1, 2016). *The Witness* [PS4]. Digital game developed by Thekla, Inc., published by Thekla, Inc.
- Bogost, I. 2009. "Videogames are a Mess. My DiGRA 2009 Keynote on Videogames and Ontology" http://www. Bogost.com/writing/videogames_are_a_mess.shtml (last accessed on Feburaty the 2nd, 2019).
- Barthes, R. 2002 [1967]. "The Death of the Author". *The Book History Reader*, 2, 277-280.
- Crawford, C. 1984. *The Art of Computer Game Design*. New York, NY: McGraw-Hill, Inc.
- De Mul, J. 2002. "Een introductie". *Filosofie in Cyberspace: Reflectie op de informatie- en communicatietechnologie*, edited by J. De Mul, 9-44. Kampen, The Netherlands: Klement.
- Duke, R.D. 1974. Gaming: The Future's Language. London, UK: Sage Publications.
- Duke, R.D. 2011. "Origin and Evolution of Policy Simulation: A Personal Journey". *Simulation & Gaming*. 42 (3), 342–358.
- Enevold, J., Thorhauge A.M., and Gregersen, A. 2018. *What's the problem in problem gaming? Nordic research perspectives.* Gothenburg, Sweden: Nordicom.
- Foucault, M. 2001 [1969]. "What is an Author?". Contributions in Philosophy. 83, 9-22.
- Gitelman, L. 2006. *Always Already New: Media, History and the Data of Culture*. Cambridge, MA: The MIT Press.

- Goffman, E. 1974. Frame Analysis: an Essay on the Organization of Experience. New York, NY: Harper & Row.
- Gualeni, S. (v 1.1, 2017). *Something Something Soup Something*. Digital game developed by I. Kniestedt, R. Fassone, and J. Schellekens. http://soup.gua-le-ni.com
- Jacobsson, B. and Rombach, B. 1994. "Cosi fan tutti (men varför?)". *Med Hänvisning till Andra: en Bok om Refererandet i Samhällsvetenskapliga Texter*, edited by B. Romback, 30-53. Stockholm, SE: Nerenius & Santérus.
- Jennings, S.C. 2016. "Co-Creation and the Distributed Authorship of Video Games". In *Examining the Evolution of Gaming and Its Impact on Social, Cultural, and Political Perspectives*, edited by K.D. Valentine and L.J. Jensen, 123-146. Hershey, PA: IGI Global.
- Kinder, M. 1991. Playing with Power in Movies, Television, and Video Games: From Muppet Babies to Teenage Mutant Ninja Turtles. Berkeley, CA: University of California Press.
- Kirkpatrick, G. 2012. "Constitutive Tensions of Gaming's Field: UK Gaming Magazines and the Formation of Gaming Culture 1981-1995." *Game Studies: The International Journal of Games Research.* 12 (1). http://gamestudies.org /1201/articles/kirkpatrick (last accessed on February the 2nd, 2019)
- Kirkpatrick, G. 2015. The Formation of Gaming Culture: UK Gaming Magazines, 1981-1995. New York, NY: Springer.
- Linderoth, J. 2015. "Creating stories for a composite form: Video game design as frame orchestration". *Journal of Gaming and Virtual Worlds*. 7 (3), 279-298.
- Lowood, H., Monnens, D., Vowell, Z., Ruggill, J., McAllister, N., and Armstrong, A. 2009. "Before It's too Late: A Digital Game Preservation White Paper". *American Journal of Play.* 2 (2), 139-166. https://digitalcommons.calpoly.edu/lib_fac/107/
- Montfort, N., and Bogost, I. 2009. *Racing the Beam: The Atari Video Computer System*. Cambridge, MA: The MIT Press.
- Murray, J.H. 1997. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Cambridge, MA: The MIT Press.
- Olsson, C. 2013. Spelreferenser i akademiska publikationer. En kartläggning av referenspraktiker inom spelvetenskap. Bachelor thesis (2013:4), Swedish School of Library and Information Science, University of Borås.
- Ryan, M.-L. 2009. "From narrative games to playable stories: Towards a poetics of interactive narrative". *Storyworlds: A Journal of Narrative Studies*. 1 (1), 433–460.
- Stenros, J. 2017. "The Game Definition Game: A Review". *Games and Culture*. 12 (6), 499-520.
- Uhnoo, D. 2012. "Dunkla vanor: om teori och referenspraktik i samhällsvetenskaplig forskning". PhD. Dissertation, University of Gothenburg.

Whalen, Z. 2012. "Channel F for Forgotten: The Fairchild Video Entertainment System". *Before the Crash. Early Video Game History*, edited by M. Wolf, 60-80. Detroit, MI: Wayne State University Press.

Wittgenstein, L. 1953. Philosophical investigations. Oxford, UK: Blackwell.