



Journal *Hybrid*, n° 1

“Ephemeral Heritages”

## Video Games and Heritage: Amateur Preservation?

Benjamin Barbier

A PhD student in Information and Communication Sciences at Paris 8 University since 2012, Benjamin Barbier focuses on amateur heritage practices with a particular emphasis on the web and popular cultures. In previous works, he studied video games as forms of cultural mediation and the issue of digital museum. He is now a research associate at the Bibliothèque nationale de France where he draws on the institution’s collection to study the first French video games.

Translation: Nicolas Cognard.

**Abstract:** just like other forms of popular culture, video games are cultural objects that are but rarely integrated into the collections of major heritage institutions. This trend is now changing, as evidenced by recent exhibitions. Players have indeed developed certain forms of affection, such as the collection of video games and related items. This paper aims to study amateur practices —such as Internet-based circulation and emulation— as forms of heritage putting these objects in perspective with the recently changed notions of “heritage” and “granting a heritage status.” The objective is to study how preservation policies can be implemented through digital technologies outside the institutional context, and resort to both contribution and sharing.

**Keywords:** amateurs, digitization, heritage, popular culture, preservation, video games.

### Full text (PDF file)

Since their creation in the 1950s, video games have become popularized and made their way into many homes. Along with music, movies, books, comic books, they are one of the cultural products the French consume the most. Boasting a sixty-year old history and evolution, video games seem to have finally gained some recognition. There has been a noticeable increase in the number of scientific studies on video games, even outside the field of psychology, which traditionally analyzes the impact of video games on players from the perspective of graphic

violence. Moreover, there are now numerous works that attempt to trace the history of this medium.<sup>1</sup> Video games are also the object of exhibitions hosted by major cultural institutions,<sup>2</sup> among which are *Museo Games* at the Conservatoire national des arts et métiers (Cnam) and *Game Story* at the Grand Palais.

However, by the time video games arrived in museums and were acknowledged as a form of popular culture, we had already witnessed their appropriation and distribution by players. These games have been hacked by fans and transferred from their original format such as cartridges, CDs or cassettes to digital files that can easily be shared between computers. This may be the very first occurrence, albeit paradoxical, of the digitization of digital objects. In this respect, the gamers' community shows its ability to liberate itself from the original format and gaming requirements to create new ones, but also from the video games market. Specialized websites have been created which propose genuine collaborative games library expanded by these fans and made available to everyone in a semi-formal way. Software reproducing the functioning of the original consoles has also been created. Traditionally called emulators, they reproduce the functioning of historical consoles and therefore constitute a kind of computer archive too.

This phenomenon appears to grant video games a heritage status. We call "granting a heritage status" the process through which any object is imbued with a heritage quality. This is done by and for amateurs and although emulation is quite far from being a perfect means of preservation, it allows for the distribution of a heritage that, at least in part, would have been lost or unavailable to the public.<sup>3</sup> Despite numerous drawbacks, such as the loss of the original preservation format or alteration of the gaming experience, we have observed that emulation allows for the "viral" preservation of video games, for everyone can store a piece of that cultural heritage on their personal computer. Rather than taking a global stance on the process

---

1 To name but a few: Erwan Cario, *Start! La grande histoire des jeux vidéo*, Paris, La Martinière, 2011; Collectif (2011), *Game story. Une histoire du jeu vidéo* (Paris, Grand Palais, galerie sud-est, 10 November 2011-9 January 2012), Paris, RMN-Grand Palais, 2011; Philippe Roose, *L'Âge d'or... Histoire des consoles de jeux de salon*, Toulouse, Cepaduès, 2011; Daniel Ichbiah, *La Saga du jeu vidéo*, Paris, Pix'n'love, 2012 (5th edition).

2 As we recently observed with the exhibitions *MuseoGames* at the Conservatoire national des Arts et Métiers and *Game Story* at the Grand Palais. Besides, *Games Story* was organized in cooperation with non-state amateur-based organizations such as MO5. To take an example from abroad, let us mention MoMA's recent acquisition and exhibition of historical video games, such as PacMan, Tetris or DonkeyKong in their room dedicated to design.

3 For instance, arcade games have almost completely disappeared from public places. Moreover, their price is too prohibitive for private individuals.

through which video games are ascribed a heritage status<sup>4</sup>, this paper will deal with the emergence of an “amateur” heritage status.

## The notion of heritage

The process through which an object is granted a heritage status is a complex one. It consists in preserving objects of every nature, so as to pass them on to future generations. Heritage is the sum of all these preserved objects drawing a link between the past, present and future. This very notion is much discussed with regards to its authenticity as a research object: shall we ascribe every object a heritage status? What are the limits, if any, of this field that seems bound to spread endlessly?

In France, although we have adopted an administrative perspective on this topic since the issue in 1830 of the Guizot report —then Secretary of the Interior— calling for the appointment of a historical monuments inspector,<sup>5</sup> heritage is both an administrative and scientific movement characterized by verticality. Integration into the national heritage is decided by a state institution, which is the only authority in terms of heritage status.

However, limiting the issue of heritage to their depositary institutions would be simplistic. Heritage, and by extension the process of granting the heritage status, have far more general definitions. Indeed, heritage can be defined as a “*social construct*: heritage is what agents regard as heritage”<sup>6</sup> and owners, depositaries and users may deservedly be considered as agents. Therefore, it is the community that initiates the process of granting heritage status or, more precisely, it is the community which, through its action, determines what is likely to become heritage. Therefore, the act of granting the heritage status defines what becomes heritage, not the intrinsic value of the object. This definition allows to broaden this notion from the mere field of arts to heritage beyond the historical and esthetic dimensions of objects, whatever they may be. We then pass from heritage to heritages. As pointed out by Francesco Bandarin, Director of the UNESCO World Heritage Centre: “Through the notion of intangible heritage, we have established that the value of heritage is not necessarily defined in the light of a universal scale of values, but in the light of the value it is ascribed by the communities that determine heritage according

---

4 A stance taken by authors such as Hovig Ter Minassian in his article: Hovig Ter Minassian, “Les jeux vidéo,” *Géographie et cultures*, no. 82, 2012. [On line] <http://gc.revues.org/1393> [accessed 14th November 2013].

5 Jean-Pierre Babelon and André Chastel, *La Notion de patrimoine*, Paris, L. Levi, 2008, p. 72.

6 Jean Davallon, “Comment se fabrique le patrimoine: deux régimes de patrimonialisation,” in Chérif Khaznadar (ed.), *Le Patrimoine, oui, mais quel patrimoine?*, Arles, Actes Sud, 2012, p. 41.

to the feeling of identity and continuity they derive from it”.<sup>7</sup> It is indeed the integration of intangible heritage that confirmed this notional swing.

Consequently, as foreseen as early as 1903 by Alois Riegl in *Le Culte moderne des monuments*<sup>8</sup> [*The Modern Cult of Monuments*], we are heading towards the all-embracing heritage. In this sense, it is quite irrelevant to wonder what is likely to be—not to say worthy of being—considered as heritage. As soon as a given community is willing to preserve and pass on to its future generations, there is heritage. We have switched from an essentially vertical process, according which prescribers would determine what was to be preserved, to a more horizontal process through which users grant their goods a heritage status on their own. Institutions such as UNESCO are playing the role of guides rather than prescribers. Contrary to the 19th century, when historical monuments inspectors would criss-cross France to identify what real estate was likely to be listed as a historical monument—however arbitrary this method could have been—the process of granting a heritage status is no longer based on choice but on the identification of objects, or customs in the case of intangible heritage, that are likely to be integrated into the world heritage and preserved as such.

As a result, the link between the recognition as heritage and legitimization, in the way Pierre Bourdieu<sup>9</sup> and Bernard Lahire<sup>10</sup> define it, is thinner and thinner. Admittedly, whenever a cultural object is showcased in a museum exhibition, it is granted a form of recognition (as is the case of non-occidental arts<sup>11</sup> or comics), yet the current definition of heritage clouds the issue. In the absence of an institution in charge of legitimization, the process of granting heritage status to an object no longer results in the nearly systematic categorization of the latter as a legitimate cultural object. Even if a protected monument is undeniably conferred an aura by its heritage status, this does not apply to video games, which even when granted a heritage status, remain illegitimate forms of culture, as this status is not conferred or supported by an institution endowed with enough “legitimizing power” to induce a change in the status of the object. In this respect, legitimization becomes a process that is more dissociated than the granting of heritage status and whose implementation requires adapted tools.

---

7 Francesco Bandarin, “Notes d’ouverture,” in Chérif Khaznadar (ed.), *Le Patrimoine, oui, mais quel patrimoine?*, Arles, Actes Sud, 2012, p. 17.

8 Alois Riegl, *Le Culte moderne des monuments: son essence et sa genèse*, Paris, Seuil, 1984.

9 Pierre Bourdieu, *La Distinction: critique sociale du jugement*, Paris, Minuit, 1979.

10 Bernard Lahire, *La Culture des individus: dissonances culturelles et distinction de soi*, Paris, La Découverte, 2004.

11 Nathalie Heinich, “Les arts premiers,” in Nathalie Heinich, Roberta Shapiro and François Brunet, *De l’artification: enquêtes sur le passage à l’art*, Paris, Éditions de l’EHESS, 2012.

As stated in the introduction, it appears that numerous recent events —some of which we have already mentioned— hint at the recognition of video games as heritage. However, as video games fall within popular culture, we could wonder who the main agents are. In fact, are we not confronted with a movement initiated by users themselves, with public authorities only playing a secondary role and barely involved in a process that first developed autonomously?

## Popular cultures and granting a heritage status

Video games are cultural products characterized by the fact that they pertain to popular culture, just like comics and some cinematographic works. Hardly ever supported by heritage institutions, most often it is amateurs who grant this cultural field a heritage status.

According to Jean Davallon,<sup>12</sup> this process is composed of six steps:

1. the ‘find’,
2. the study of the object,
3. the statement,
4. the representation of the original world through the object,
5. the access of the community to the object,
6. transmission.<sup>13</sup>

The rise of the digital enables amateurs to take charge of some —if not all— of these steps. As Patrice Flichy states in his work entitled *Le Sacre de l'amateur: sociologie des passions ordinaires à l'ère du numérique*, thanks to the internet, amateurs have acquired great visibility in many areas of interest,<sup>14</sup> ranging from electronic music to digital photography, including writing, politics and medicine. This list is ever-expanding. Although Patrice Flichy does not formulate this question explicitly, we could wonder why amateurs would put aside heritage? Why suppose that they would not actively participate in the preservation of what constitutes one of their pastimes?

We can already find numerous examples of this kind of practices outside the field of video games. In the case of comics, we can already find noteworthy websites such as the *Grand Comics Database*,<sup>15</sup> which lists around 900 000 comic books. The community that has gathered on this platform has also scanned and uploaded over 430 000 covers, so much so that it is now a reference website for all the researchers working on this

---

13 Jean Davallon, “Comment se fabrique le patrimoine: deux régimes de patrimonialisation,” in Chérif Khaznadar (ed.), *Le Patrimoine, oui, mais quel patrimoine?*, Arles, Actes Sud, 2012, p. 44 sq.

14 Patrice Flichy, *Le Sacre de l'amateur: sociologie des passions ordinaires à l'ère numérique*, Paris, Seuil, 2010.

15 [online] <http://www.comics.org/> [accessed November 2013].

type of publications.<sup>16</sup> In the same way, the *Inducks*<sup>17</sup> website lists all the Disney comics and *pulp magazines project*<sup>18</sup> all the so-called *pulp* magazines. The digitization of covers on the latter is quite considerable.

By analogy with these websites, we witness in the field of video games the emergence of websites dedicated to emulation, which host thousands of dematerialized games. When used in the context of video games, the term emulation refers to the reproduction of the functioning of a console via a computer program. This program allows players to read ROM (Read-Only Memory) files<sup>19</sup> taken from original formats such as cartridges, CDs or tapes and run games that were originally designed for arcade cabinets or consoles on personal computers. Contrary to websites that list different kinds of comic books, they offer complete access to the object and not only to metadata on the object. They are “digitized” video games, so to speak, that computer users can easily share.

Similarly, only this time in the field of computer games, we find websites dedicated to what is called *abandonware*. *Abandonware* has no legal status. It constitutes some kind of tacit agreement between the fans and publishers/designers of relatively old video games. In a field where software is soon obsolete, the objective of such websites is to provide gamers with products that are no longer available on the market—although protected by literary and artistic property rights for 70 years—yet still interest a certain audience. Amateurs who upload these objects under the label *abandonware* are committed to delete them from the internet, should they be commercialized again. These websites offer fewer games than the ones dedicated to emulation. However, they have the merit of adopting a more thoughtful stance on law, although as we have already mentioned, *abandonware* has no legal status (unlike licenses like *Creative Commons*). However, games like the first *Alone in the Dark* or *Captain Blood* admittedly fall within this category.

In this particular case, the steps of Jean Davallon’s categorization involved are number 5 “the access of the community to the object” and number 6 “transmission,” both of which are directly implemented by amateurs. The other four steps require the involvement of a greater number of agents.

We have only begun our research work on the latter, but it seems that, given the success of this industry, “the find” partly

---

<sup>16</sup> Like other references, this one is taken from an article posted on Patrick Pecatte’s blog. He is an associate researcher for the EHESS and uses them as food for thought [online]: <http://culturevisuelle.org/dejavu/1222> [accessed November 2013].

<sup>17</sup> [online] <http://inducks.org/> [accessed November 2013].

<sup>18</sup> [online] <http://www.pulpmags.org/about.html> [accessed November 2013].

<sup>19</sup> This particular type of memory only allows for reading, writing is impossible.

results from an awareness of public authorities,<sup>20</sup> which eventually find video games economically attractive, for they are now fully acknowledged as cultural products, just like music, cinema or comics. We may also attribute “the find” —the quotation marks being particularly relevant in this case— to the very age of the object, which makes it all the more valuable to the audience’s eyes. This audience does indeed idealize old games and considers them as “more pure” because they are more difficult, less focused on graphic innovation than gameplay. Today, video games are old enough to undergo a process that is similar to the one affecting other cultural objects, that is to say that, throughout the ages the present time has been held responsible for mediocrity and the lack of new masterpieces. We keep on glorifying past works, not only because their value inherently increases with age, but also because critics have gained enough hindsight to make a selection and retain only the works they have deemed worthy of interest.<sup>21</sup> Concerning this step, we could also mention the publishers of video games who increase the value of their past products on their own by republishing them on more recent platforms, or the cultural agents producing musical or cinematographic works that potentially draw on video games and therefore contribute to this change in their status.

The second step, called “the study of the object,” seems to result from the age of scholars rather than that of the object. The generation now accessing academic positions has grown up playing video games and is not prejudiced against them. On the contrary, inspired by Anglo-Saxon researchers’ works, they strive to overcome the initial complaints made against video games, such as violence and addiction, to point out other perspectives contributing to the academic recognition of this object.<sup>22</sup>

The third step in this process, that is “the statement,” mainly results from associations like MO5.com, which we have already mentioned, but also from state institutions that contribute to the change in perspectives on video games through exhibitions or

---

20 A task force on video games was recently established by the Ministry of Culture and Ministry of Digital Economy, the communication is available online: <http://www.culturecommunication.gouv.fr/Espace-Presses/Communiqués/Aurelie-FILIPPETTI-et-Fleur-PELLERIN-donnent-le-coup-d-envoi-du-groupe-de-travail-jeu-video> [accessed August 31st 2013].

21 In this sense, the switch from 2D to 3D games made possible by the commercialization of 32-bit consoles in the late 1990s, is often held responsible for the end of the “golden age” of video games, coming close to movies and giving in the “show” requirements through newly acquired technical characteristics, to the detriment of the gameplay.

22 For three years now, the OMNSH (Observatoire des Mondes Numériques en Sciences Humaines) and the junior laboratory Level Up! have been organizing a symposium called “Game Studies? À la française,” which aims to gather and encourage French-speaking researchers in this field.

preservation, making them part of evolution, of a historical process in which each game becomes a trace, a sign that is likely to be preserved as such.

Concerning the fourth step, that is “the representation of the original world through the object,” it results from the same kind of process as “the find.” It is “the find” that ascribes the object with value and confirms the obligation to preserve it.

## Emulation and preservation

As we have already mentioned, the online availability of ROMs does not come without legal issues, for every connected user can download them. The operators of these websites justify themselves by resorting to the fact that downloading such game is legal, as long as the user owns a material copy of it. Given that it is impossible for copyright owners to check whether every person downloading a game owns a legal copy or not, this service remains available online with a semi-legal status.

In this case, we are interested in the fact that these websites hosting ROMs constitute genuinely open video games archives. Moreover, these archives are created and maintained by amateurs keen on sharing —passing on— the games they own. These objects may be obsolete from the market perspective, still they interest gamers. Would the “*retro-gaming*” culture be this successful without the *abandonware* websites? Just like consoles, the formats of the games are not everlasting. By cutting loose from material formats, emulation allows to preserve these games through copying.

Although this phenomenon can only be partially explained by the gamers’ desire to preserve what is part of their cultural heritage, it demonstrates their attachment to these historical objects, most of which are now unavailable on the market or hard to get. The success of emulation websites is the expression of the gamers’ wish to replay old video games. They are indeed ascribed a certain value as, from a technical point of view, these games can be considered as obsolete. They also show that the people who have invested themselves to upload these games have technical skills —although the uploading process is way easier nowadays<sup>23</sup>— and a strong will to ensure the durability and transmission of these games. In fact, in the long-term, the entire global video games library could be stored using this method.

Emulation also raises issues with regards to preservation itself. The original format is indeed lost. All that remains is a

---

23 For instance, USB cartridge-drives were developed and commercialized in the 16-bit era, which made it way easier for hackers to transfer a game from its original format to a computer. Before this development, they had to build their own device with electronic components and printed circuits. Again, this is the expression of the gamers’ true desire to play video games that are considered as oldies. This interest makes the commercialization of such games profitable.

game file, no packaging or user's guide... For technical reasons, emulation does not convey the same feelings. Playing on a computer is not the same as playing in one's living-room, in front of one's cathode-ray screen. The differences are even bigger with arcade games. In the same way as reading a medieval manuscript on Gallica has absolutely nothing to do with holding this manuscript in one's own hands, playing video games on an emulator only gives access to part of the original content.

However, to extend the analogy with digitization, emulation can be considered as a preventive preservation means allowing for the preservation of the original objects and for their storage in an adapted place, by restricting the access to these objects and providing players with a substitute. One of the main problems video games are facing is exhibition: it makes absolutely no sense to exhibit video games if they cannot be played. As demonstrated with the *Museo Games* exhibition, games can be used as scenery props, but in no way their sole presence is enough to satisfy the visitor. One cannot simply watch a game, even when played by someone else, as evidenced by the fact that one of the very first consoles, that which featured the game *Pong*, was originally designed as a socializing object, which allowed several people to play simultaneously. Video games, even more than what we call traditional heritage, is an object that is destroyed when exhibited, for the act of exhibiting them implies that they are handled by a large audience. Emulation could then serve as a protective display, as a substitute for the material handling of the games, just like we find facsimiles in museums, so that the visitors can touch them and will not feel frustrated.

Video games are inherently digital. Just like other digital products, they are subjected to obsolescence, which is the result of the frantic evolution of technologies. In this sense, their ephemeral nature originates from obsolescence. However, unlike purely utilitarian software products, they are cultural products that arouse their users' attachment, which in turn results in a desire to preserve the said objects. In this sense, these users have created processes resembling heritage policies and allowing them to make up for the obsolescence of their favorite games, by providing another means to play. This implies a shift in the ways these games are played, from the family TV set to the personal computer. They may even become "nomad" games as a result of the development of laptops.

This has also led to new practices such as the modification of ROM files, the retrieval of their content —namely their graphic content— in order to give them a new twist or develop different software products. We still need to study the new practices resulting from these amateur preservation methods. The notion of obsolescence partly accounts for the amateur preservation of

video games. However, as we have already mentioned in this paper, these practices —especially digitization— also exist in other fields. From a research perspective, it would be interesting to study the similarities in the methods used by these different forms of collaborative granting of heritage status, to observe the potential exchanges between the various communities of Internet users. We also think it would be relevant to question these practices with regards to those initiated by institutions, namely the issue of the choices made in terms of indexation, categorization and metadata collection. The issue of the audiences is also one to further explore: who are these amateurs? What is the proportion of contributors to the total number of users? What are the logical processes behind the development of these platforms?

Throughout this article, we have tried to show how the notion of heritage has evolved over time, but also the increasingly deep involvement of communities of amateurs through digital technologies, which resulted in what we regard as one of the very first occurrences of amateur granting of heritage status and preservation of this heritage. Today, as the issue of the establishment or re-establishment of a video games museum is discussed, it must be noted that their virtual museum is already online.

## Bibliographie

BABELON Jean-Pierre and CHASTEL André, *La Notion de patrimoine*, Paris, L. Levi, 2008.

*BLOG de Patrick Pecatte*. [Online] <http://culturevisuelle.org/dejavu/1222> [accessed in November 2013].

BOURDIEU Pierre, *La Distinction: critique sociale du jugement*, Paris, Minuit, 1979.

CARIO Erwan, *Start! La grande histoire des jeux vidéo*, Paris, La Martinière, 2011.

COLLECTIF, *Game story. Une histoire du jeu vidéo*, Paris, Grand Palais, galerie sud-est, 10 November 2011-9 January 2012, Paris, RMN-Grand Palais, 2011.

*COMICS database*. [Online] <http://www.comics.org/> [accessed in November 2013].

FLICHY Patrice, *Le Sacre de l'amateur: sociologie des passions ordinaires à l'ère numérique*, Paris, Seuil, 2010.

HEINICH Nathalie, SHAPIRO Roberta and BRUNET François, *De l'artification: enquêtes sur le passage à l'art*, Paris, Éditions de l'EHESS, 2012.

ICHBIAH Daniel, *La Saga du jeu vidéo*, Paris, Pix'n'love, 2012 (5th édition).

*INDUCKS*. [Online] <http://inducks.org/> [accessed in November 2013].

KHAZNADAR Chérif (ed.), *Le Patrimoine, oui, mais quel patrimoine?*, Arles, Actes Sud, 2012.

LAHIRE Bernard, *La Culture des individus: dissonances culturelles et distinction de soi*, Paris, La Découverte, 2004.

PULPMAGS. [Online] <http://www.pulpmags.org/about.html> [accessed in November 2013].

RIEGL Aloïs, *Le Culte moderne des monuments: son essence et sa genèse*, Paris, Seuil, 1984.

ROOSE Philippe, *L'Âge d'or... Histoire des consoles de jeux de salon*, Toulouse, Cépaduès, 2011.

TER MINASSIAN Hovig, « Les jeux vidéo », *Géographie et cultures*, no. 82, 2012. [Online] <http://gc.revues.org/1393> [accessed on November 14 2013].