

# Local Practices in Digital Gaming Heritage: An Interview with Maurizio Banavage and Andrea Dresseno

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## Abstract

*This article engages with the experiences of two small-scale computer/game heritage curators, in Malta and Italy. The interviews delve into their aspirations and concerns, as well as practices and values. We situate their voices in relation to other examples and to recent and current debates in the area of digital heritage, memory studies, and nostalgia, with particular regard to the specific issues facing such smaller initiatives.*

If *Pac-Man* and the games that followed in its wake mean anything to us, if they are central switching stations through which thousands of our most important memories are routed, it is our duty to dig deeper. (Weiss, 2003, p. 7)

Considering the pace of ongoing changes in computing and transmission technologies, considering how recent the development of computer games, and considering the generational demographic of the heaviest computer game users, the future of things past has never been more promising. (Uricchio, 2005, p. 336)

William Uricchio is here referring to the ability of digital games to handle and transform historical and historiographical practices and materials. However, with growing interest in the “retro”, which casts its attention “on the recent past” (Garda, 2013a, p. 1), his claim could also be applied to the history of digital games and computers themselves.<sup>1</sup> Moreover, digital games cannot but join the so-called fetishization and consumption of the past (see De Groot, 2009) brought to the foreground also by the recent “retro” trend, remediating memories and commodifying nostalgia (Sloan, 2014). At the same time, they can (and do) take part, as memory artefacts themselves, in the increasing “musealisation”<sup>2</sup> of the past everyday life (Macdonald, 2002; Cappai, 2020) once they reach their afterlife (Guins, 2014). As the Weiss

epigraph suggests, this “afterlife” is both personal and cultural, initially maintained through memory; their place in our lives and the associated emotions make digital games themselves the vehicles for and shapers of memory. The efforts to unearth and preserve past technologies respond to a perceived (and sometimes deeply-felt) duty and necessity.

As the transformation of digital games into historical artefacts rushes on apace, collectors and curators respond to the challenge of maintaining this newly burgeoning area of heritage, preserving them for posterity—with amateur efforts often leading the way before professional interests caught on. In the words of Malta’s Vintage Computer Club (hereafter VCCM)’s mission statement: “We preserve today’s technology for future generations” (VCCM, 2020); similarly, the Videogame Archive (Archivio Videoludico, hereafter AV) of Bologna described its mission as “preserving the past while looking at the future” (AV, 2020). Both these declarations clearly demonstrate the collectors’ “sense of responsibility or custodianship towards the objects they acquire” (Swalwell, 2007, p. 263), as well as towards history and cultural memory practices, in which a wider public is invited to participate. We interviewed representatives from both initiatives in order to gain a deeper appreciation of their role in conservation, curatorship, education, transmission, and ensuring access—through insights into how they themselves perceive and understand this.

The VCCM is run by Maurizio Banavage, Rodney Xerri, David Vella, and Klaus Conrad. We interviewed founding member Maurizio Banavage to discuss their role and struggles. Banavage informed us that the VCCM’s main focus is hardware, but original software (especially boxed) is welcome. Games were not the VCCM’s central focus; they were nonetheless crucial in other ways. Games are used, for example, to facilitate public outreach: “to attract people

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Krista Bonello Rutter Giappone is a Visiting Senior Lecturer at the University of Malta, and a Research Fellow with the Centre for Critical Thought at the University of Kent. She occasionally teaches at the Institute of Digital Games (University of Malta), and has taught in the area of heritage and games at the Jagiellonian University. She recently co-organised, with Stefano Caselli, a workshop on Forgetting and Remembering in Digital Games for the 2020 FDG Conference. She has written and published several articles on video games and is currently co-editing the volume *Video Games and Comedy* (Palgrave Macmillan, 2021).

Stefano Caselli is a PhD student at the Institute of Digital Games (University of Malta). His research is focused on the role of memory in digital games, concerning both collective and individual memory studies, existential ludology, and philosophy of technology. As a part of his research, he has recently written a paper about memory and digital games’ aesthetics and co-organized with Krista Bonello Rutter Giappone the “Forgetting and Remembering” workshop at the international conference FDG 2020. He is a teacher of video game screen-writing at the Academy of Fine Arts SantaGiulia in Brescia (Italy). Since 2017, he has collaborated with the Italian Cultural Association IVIPRO—Italian Videogame Program, a national and cross-regional project that aims at mapping Italy from a videogame-oriented perspective, identifying locations and stories that are suitable for virtual worlds, and entertaining a continuous dialogue with software houses, local institutions and museums, in order to understand their needs and help them in discovering how to promote the Italian heritage inside videogames.

and students. Our aim is more educational, than gaming.” The VCCM’s origin lies in Banavage’s schooldays, when a school project developed into a personal project, followed by a club: “[It] all started back in 1996, when I had a school project and placed an advert on the notice board for any old computers. All the other students donated their old computer and after the school project the idea to open a virtual online club just came into my mind.” The AV is run by Andrea Dresseno, who is also a founding member and curator. Differently from the VCCM, the AV was interested equally in both hardware and software and aims at preserving both physical original objects and digital copies of software. We interviewed Dresseno to find out more about how he too tackles the challenges of preserving digital game heritage.

In particular, the combined aim of these interviews and related commentary is to delve deeper into both the theoretical aspects of preservation and memory-making of video game heritage (with a focus on its narrativization and the part played therein by nostalgia and the “retro”) and the practical challenges of such practices. Among the various aspects, particular emphasis will be given to the inherent “transience” of the digital medium and the challenge it represents for the smaller-scale archivers, who have to undertake and meet the demands of increasing digitalization, while lacking institutional support, and contending with business-oriented interests. The ensuing discussion also highlights the experience of precarity in their positions, rendered even more acute by the COVID crisis, which has closed off many of the public avenues that support their existence.

The first section of the paper focuses on presenting the activities of the VCCM and AV, with a specific focus on their collections, their educational aims, and the events they organize or have organized over time; the following section focuses on the major challenges of software/hardware preservation that both initiatives face on a daily basis. In the third section, we will therefore see how such practices and related forms of memory-making or historicization engage with nostalgia as a way to attract their public or to shape their collections, and especially how nostalgia tends to be supported by, and in turn supports, the recent so-called “retro trend” in the digital gaming industry and community. The link between such trends and the community of players or hobbyists will also be questioned. The last section of the paper is dedicated to the need of institutional support for preservation and memory-making.

### **Introducing the Initiatives: Collections, Events, and Public Reception**

The AV is part of a broader cultural institution, the Foundation Cineteca di Bologna (Bologna Film Library). The AV has no budget of its own, and it is supported by the Cineteca with the participation of the municipality of Bologna, and it is therefore a non-profit project co-existing with other archives within the Cineteca (the film archive, the photographic archive, the library, and so on). Reflecting its more personal and hobbyist beginnings, Banavage describes the VCCM as a “community” rather than an organization: “a community of people who, although they like to experiment with and preserve old technology, also venture to fill in the missing gaps of old technology [through] today’s technology. For example FP-

GAs [Field Programmable Gate Arrays] can emulate old technology so we study its core to achieve this.” The group is “more [...] general” in its focus (on computing) than “particular” (on gaming), it is non-profit, and “all the revenue comes mostly from the founders”. They do have a presence at “various sites such as a University of Malta heritage room, Attard club and MCAST [Malta College of Arts, Science and Technology] exhibition visits”, but they lack “a centralized place where students can visit us, do their research, see with their eyes and develop their gaming or hardware ideas”.

We asked Banavage and Dresseno about the collections. We firstly enquired about their range – the oldest, and the most recent item in their collection. On one hand, VCCM’s oldest item is the PDP-8, dated 1969, and the AV’s oldest is the ATARI 2600, dated 1977. The most recent items are a DL580 G7 (2010) for VCCM, and new releases such as recently published games for AV. Dresseno also shared with us the first things that entered the AV collection: “I think that the [first items we acquired] are stuff from publishers’ cellars such as Game Boy Advance games, or such as *Secret of Mana* [Square, 1993] for SNES, or launch games for PSX.”

Building a collection has been foundational to both the projects, but it is also an ongoing quest. We asked Banavage and Dresseno how the VCCM and the AV find and acquire items for their collections. Banavage told us:

Usually through donation, but it’s getting more difficult each year. People come over and ask for money, but the prices are far more than the current market price, and we decline them. We still receive a good number of donations each year, but as I said it is getting more difficult every year.

Similarly, Dresseno highlighted that donations are still the standard way to acquire new pieces of hardware or software, and commented on how the lack of budget affects the chance to collect older items:

Something may be donated by private owners and users, something else may be purchased through online or physical stores (such as Amazon for example). Most of the collection is courtesy of publishers (something like 90% of the collection), and the rest come from [individual] hobbyists, players, and private owners. A minor part is what I purchase or decide to preserve with the budget I have. It is of course easier to preserve contemporary devices/software, because I usually lack the budget to acquire older things. By “contemporary hardware/software”, I mean the PlayStation era of gaming—usually things before PS are more expensive, harder to find, and therefore to preserve. It is relatively easy to buy (and therefore to archive) contemporary software or hardware; retroactive preservation is much harder to deal with.

The transmission of knowledge emerges as key to the rationale of preservation for Dresseno and Banavage and his colleagues, who foreground the present and future, alongside the past. The benefits are two-way, with the ability to cast light on our contemporary technology by laying bare its historical development and continuity.

We asked Banavage what he feels children gain from learning about the history of technology:

Many people ask me this question—how can someone learn from old computers? Well, all computers work on the same basis. It is true that there are differences, but once you understand old technology, it becomes easier to understand how a computer works today. Children will learn and have fun experimenting on old technology, while learning how a computer works. There is also the element of emulation and programming which will later be useful when more complex programming is needed.

Along the same lines, Dresseno from the AV claimed that:

Our primary concern is to preserve and to make accessible video game heritage. Other than that, of course we also have educational aims: we give classes and workshops in primary/secondary schools, and also at the University. It is not a primary aim, but we deal with that. Where children are concerned, we do not aim to teach them the history of technology, but rather to make them recognize that the video game is something complex, multifaceted, and rich. We aim to show them that the video game is a complex cultural medium. This, of course, through the history of the medium itself.

Public engagement features prominently in both VCCM and AV's mission statements. We asked about the popularity and reception of their events. Banavage told us that: "The most popular one has been the Open Day we did [pre-COVID], but also at the MRO [Malta Robotics Olympiad] the response is always good. We really enjoy it when we see people and children having fun with old computers and hands-on activities."

Links have also been established, in both cases, with the academic sector (such collections have the potential to play an important role in academic research—see, for example, Pederson, 2010, p. 91; Barwick et al., 2011, p. 374). The VCCM has an academic "home", having set up a Heritage Room in the University of Malta's IT department, although it takes this in a more pedagogical direction: "The Heritage Room is doing quite well. Students come over while visiting the university and always get excited when they're visiting the heritage room, and we start explaining how the computers work." Dresseno told us about two of their regular events:

We have co-organized and hosted SVILUPPARTY for years. It was born as a small event created by amateurs, and in ten years it became a well-known event in the Italian indie scene. There has been a great increase in interest and participation over the years. Another event is Far Game, an annual seminar/conference falling between an academic and generalist meeting. We hosted and organized it for two years (also featuring important guests and lecturers such as representatives from Remedy, Tale of Tales, Molleindustria). It was sponsored by Microsoft, Sony, and Nintendo. The most frequented meeting of Far Game was "Eat and Play", a public dinner in which we served and ate dishes inspired by video games. We usually had 100 guests for that. We supervise the "Premio AV", which is aimed at promoting research on games by

giving a small prize to emergent researchers.

Games enjoy a special centrality in these events due to the opportunities they provide for interaction with the exhibits, particularly in outreach-oriented events. Banavage agrees that “games always attract people, and [...] Usually we use it as a tool to attract people and then expose our ideas to the public”; Dresseno further elaborated by admitting that “[games] are increasingly popular amongst the public. [...] People want to play contemporary software most of all, and I can testify to an increasing interest in the indie scene.” Of course, nonetheless, as Dresseno reminds us, the popularity of games may itself depend on the heterogeneity of the public: “I think that ‘public’ is pivotal here, and in your question too. What do we mean by ‘public’? We can refer to institutions, to individuals, to fans...”

We asked Banavage which older games have proven most popular with contemporary visitors: “The most famous ones are *Sensible World of Soccer* [Sensible Software, 1994], *Chiller* [Exidy, 1986], *Pitstop* [Epyx, 1984], *Pacman* [Namco, 1980], *Space Invaders* [Taito, 1978], and *Centipede* [Atari, Inc., 1981].” The fact that games tend to be a “disappearing” medium (Newman, 2012, pp. 1–40), under pressure to keep changing, may cause them to acquire Walter Benjamin’s “aura” (Garda, 2013a, p. 3; Swalwell, 2007, p. 263)—a renewed reverence and wonder, as they are made “rare” again despite having been mass-produced in a market demanding innovation.

Yet, whereas the Benjaminian aura implies distance (Benjamin, 1969, pp. 233, 243), there is something special perhaps about such events and exhibitions, different from the “typical” expectations for museum experience—visitors could engage in hands-on interaction with and use of the exhibits, “theoretically” allowing them to “re-define what the game is by playing it” (Nylund et al., 2021, p. 270). Nylund et al. however question this practice, as potentially de-contextualizing the game and activity away from its socio-cultural significance<sup>3</sup>; the examples in our study arguably go some way towards addressing this by restoring a local, communal (and even intergenerational) dimension to the shared experience of play that they attempt to offer. We asked Banavage what the response to this interaction with the exhibits has been:

This is the main attraction in an exhibition, and if they come over to the club after this, they look for the hands-on section again. Children and parents both love it, and parents are excited to show their children their favorite games and the computers that they used during their childhood.

This interactive model is crucial to the VCCM’s museum project:

The idea is simple. While there is a static display, anyone who wishes to try and experiment can use our workshop and have a go on our emulators. We primarily use emulation to give them that experience, but in big events we do switch on the original at some point. We have been doing this at the club and the model is working.

Of course, current circumstances brought such live activities and events to a halt, and both the VCCM and AV are struggling to find viable alternatives:

Unfortunately, COVID-19 killed the presence of students and visits as the current place [we have at VCCM] is too small to accommodate COVID-safe needs. We are currently trying to find an online alternative but still the models we have will not [equal or replace] the real live experience. (Banavage)

We had to close the videogame archive [AV] due to COVID-19, and we are trying to make the collection accessible for small numbers of people at a time. We are also striving to help researchers or students to access the collection online, consulting them via mail or organizing online meetings to meet their needs. (Dresseno)

### Preserving Game Heritage: Challenges

Both the curators we interviewed encounter challenges particular to the process of restoration and preservation (even salvaging) of hardware and software. On one hand, Banavage fights against the material obsolescence of hardware:

The main challenge is to find component spare parts, especially when they are custom-made such as integrated circuits or boards produced by the same mother company. Buttons and knobs are also a challenge as those are not mass-produced and are mainly custom-made as well.

On the other hand, Dresseno—being equally concerned with both hardware and software—faces the issue of other kinds of obsolescence as well, such as digital caducity and transience:

We face a lot of challenges to be honest, especially where preservation is concerned (we don't deal with restoration at all). Maybe one of the biggest challenges is the increasing shift to digital storage, which becomes more and more substantial as time passes by. We have recently been receiving almost exclusively digital copies of the games we archive, and this is determining a sharp shift of the collection towards digitality. One of our main concerns with digitality is that digital stores often close down and make software inaccessible, or at times cut off games that violate their policies. Digital software is really hard to preserve, because basically you are not the one most able to preserve it: You can purchase a digital game, but it will [almost] always belong to third party stores, or publishers, that will be free to delete it or to make it inaccessible at any time. In other words, you just cannot archive it (if by "archiving" we mean "preserving it from the erasure of time").

Chandler (2014) described computer games as being half-in-love with their own impending obsolescence, fascinated by this vision of decay, aestheticizing and thematizing it in ruins as game spaces to be explored. He compellingly argues that games are "products of a technology always trying to delay its inevitable crawl toward obsolescence." There is a very real concern about the durability of the physical medium: "If the game is not copied in time to a different medium it will eventually be lost" (Garda, 2013a, p. 3), a "transitory" quality that seems to attach to both videogame hardware and software (Swalwell, 2007, p. 259).<sup>4</sup> Interestingly, this drift towards obsolescence has been seen as a characteristic that the medium shares with memory (Heineman, 2014, p. 4).

Players may be entirely unaware of such drift. Dresseno felt that the majority of users do not understand this transitoriness of game heritage at all:

I think that people do not perceive the passing of time and the rapidity of loss at all, at least where technological/video game heritage is concerned. Digitalization has contributed to the loss of this sense of time for sure. I don't think that the public (whatever public it is) is aware of the urgency of preserving hardware/software at all.

It seems that every archiver in the digital age, and especially those who face the increasing digitalization of their collections on daily basis like Dresseno, is called upon to deal not only with the opportunities afforded by digital archives but also, and perhaps more importantly (and counterintuitively) with the intrinsic threats implied by digital memory. Of course, “[o]ur digital assets may be more fragile than we think. Many people are unaware of the complex technical, institutional and political decisions that determine the nature of our archives” (Van House & Churchill, 2008, p. 296). It is not surprising that the effects of digitalization and digital technologies on memory is one of the main concerns of both digital memory studies (Hoskins, 2017; Mayer-Schönberger, 2009; Schwarz, 2013) and contemporary philosophy of technology (Lagerkvist, 2019; Romele & Terrone, 2018). Software does not only store or transmit information as a neutral carrier but, more importantly, it manipulates it through each reiteration (*ibid.*). Such manipulation happens both for technological reasons, such as algorithms and the role they play in the storage or transformation of data (Beer, 2009), and for economic interests. In fact, as outlined by Heineman, the growing interest in older digital games has increasingly resulted in the repackaging, grouping, and even reimagining of the past of the gaming industry (Heineman, 2014, p.2). What Dresseno and Banavage each note is that preservation in digital gaming heritage may be more business-oriented than expected, and therefore, in a way, nothing more than incidental (at least from the perspective of software houses). Digital storage provided by stores consequently tends to be volatile and to follow digital gaming markets without dealing with preservation. On the other hand, digital storage is sometimes the only way to preserve certain pieces of software.

### Nostalgia and the “Retro” Trend

Both the VCCM and AV’s Mission Statements dissociate preservation from nostalgia, embracing the former over the latter. The anxiety surrounding loss may however be intimately related to nostalgia—the term was after all originally coined to describe homesickness, a distancing from roots, diagnosing it as a medical condition. Nostalgia could nonetheless also convey comforting familiarity (see: Sloan, 2016; Menke, 2017). Therefore, nostalgia cannot be discounted as a source of appeal—frequently being cited as an initial motivator for those involved, and triggering a deeply felt personal attachment in older visitors (see also Heineman, 2014, p. 7).

Hutcheon (2000) commented that nostalgia rarely invokes “the past as actually experienced, of course; it is the past as imagined, as idealised through memory and desire” (p. 195). This also explains why nostalgia is often associated with memory and memory studies (Legg,



2004) rather than with “history”: Nostalgia refers to a past that gets remediated and re-imagined by present identities, both individual and collective (to which it also contributes formatively). Most importantly, this link between nostalgia and productive, non-objective, re-imagined pasts sheds a light on the relationship between preservation, museology, and nostalgia addressed by Arnold-de Simine (2013).

The VCCM’s emphasis on preservation and commitment to sharing knowledge attempts to counteract or mitigate (while nonetheless frequently evoking) the nostalgia effect by bringing visitors face-to-face with the physical artefact. We enquired whether Banavage has observed a difference between the responses of those for whom the object/activity evokes childhood memory, and of those who are encountering past technological artefacts perhaps for the very first time?

Banavage located himself in the first category: “Usually you start collecting because of nostalgia and childhood memory. Those who collect go deep into how the computer works.” Of course, as archivers both Banavage and Dresseno focus on preservation more than on nostalgia—particularly since commodified nostalgia tends to be subject to the vagaries of fashion, and may therefore even actively conflict with the interests of preservation. Dresseno said:

As an archiver, I preserve items to foster research around games, I am not interested in nostalgia or childhood memories. I think that the historical value of software and hardware survives nostalgia, and is therefore more important to consider.

Despite this, they recognize the usefulness of nostalgia for attracting the public. Dresseno claimed that:

Nonetheless I usually use nostalgia to get in touch with the public of enthusiasts. This happens during the exhibitions for example: here the “retro” feeling is indeed present, but is nothing more than incidental. Accessibility and historical value are more important, I think.

As for what concerns the public, generation-specific knowledge is seen to impart a kind of duty of transmission. Banavage told us:

As for children [today], when they come over, they usually look for the main unit as they cannot understand that most home computers have their motherboard enclosed under the keyboard, and they are surprised when I tell them that that’s the whole computer.

Dresseno told how this duty is especially present within the exchange of knowledge and memory between parents and children:

When parents pass by with their children, they often recall memories of old technologies with them, by saying things like “You see, when I was a child like you, I used to play with one of these!”. Gaming enthusiasts pass by and acknowledge the value of the collection, and they usually focus on the “nostalgia effect” of some items as well. The “old guard” is much more bound to the past and tends to recall memories, while younger ones are obviously disinterested in such things. The most beautiful thing is when these two different generations meet, or talk, such as between parents and

children: The former share their memories, and the latter are encouraged to look at old items in a different way.

The new initiates' wonder and curiosity are presented as being rewarding in themselves. Their response, both the archivists imply, brings with it a certain openness that could enable a sharing of roots, even where these have not been directly experienced. By gaining an awareness of how we've arrived where we are today, children may come to feel included in that experience—not merely vicariously, but by being let in on a collective memory that, we may add, is (even for older generations) to some degree constructed, idealized, or intrinsically mediated by retro trends, objects, or personal memories of experience. Both Dresseno and Banavage are clear, however, that nostalgia alone is not sufficient.

The retro trend also tends to be influenced by consumer-oriented models. A kind of nostalgia is in fact expressed for the stability of past technology, perceived as being in opposition to more recent technological products—such later products being seen as more standardized and less durable. When we asked whether the preservation of technology is a race against time, deterioration and out-of-datedness—with its artefacts liable to fall victim to rapid progress—Banavage identified an intervening difference:

Well to be quite honest, today's technology deteriorates faster than older technology did. In a way, yes, it is [a race against obsolescence], but older technologies had their own design and fashion. Today they all look the same, so there isn't that feeling of preservation or of collection for [the technology produced] now.

This perception of lack of “character”—“character” as the idea of a distinctive “design and fashion” and associated with stability—would also implicitly seem to apply where “retro-products” appeal to nostalgia by borrowing older styles in a “plundering” (Harvey, 1990, p. 54) (of) fashion.<sup>5</sup> However, the retro (which suggests an attitude as well as a mode of reproduction) still retains a strong relation to nostalgia.

We asked whether the retro trend has had an impact on public interest in older technology. “To be honest, I don't know,” admitted Dresseno from the AV:

I don't know if the interest is increasing over the years at all. [...] Of course, video games are something that are played more and more, and discussed from different perspectives. The interest may even have increased since years ago, but I don't know if the “retro” trend has something to do with that.

Banavage fears that the new popularity comes at a cost of increasing commercialization, which is opposed to the enthusiast's spirit of sharing and making accessible; nonetheless, he holds onto hope (a hope that VCCM, and other independent enterprises like it, actively strive to justify and realize). Banavage recalled that some years ago there was a stronger culture of openness and sharing, but observed that this has shifted to one of increased monetisation. Both software and hardware are harder to access for free (see above, where even donations are giving way to expectations of monetary compensation):

It's in all sectors but mostly in selling and software. As regards software, games used to be free and the source code was available to change as needed. Nowadays they

charge you. As for the old hardware, prices are becoming ridiculously high. I used to buy a Commodore 64 for 20 euros, but nowadays it's being sold for 120–150 euros. While I cannot complain as my collection is rated higher, my concerns are that there are people out there [who] are not real passionate collectors, but sellers and they can ruin this market with fake or damaged products to gain money easily.

He goes on to say, more optimistically: “There is still hope though, as projects such as Retropie and Emulationstation are still available.”

The phenomenon of temporal contraction characterizes the retro in Reynolds' (2011) view of its “convulsive logic”. Reynolds noted (pp. 27–28) that this “feverish” logic has driven “retrospectives” to be increasingly anticipatory rather than backward-looking, as if tripping over themselves and overtaking the very thing they were supposed to be commemorating. We asked Banavage whether in his view, this intensification of retro-interest stems from an increased urgency, because of the perceived rapidity of loss (mentioned above)?

Banavage rejects the idea that the consumer-oriented side of the retro trend is motivated by the same desire for preservation: “Definitely it is not [about stemming or slowing down] loss, but more for business.” Moreover, Banavage contrasted this with genuine “passion”:

To be quite honest I don't like it as there is no passion, and I am afraid that sooner or later everything will finish and only a few will continue. I hope I am wrong, but when I see people and collectors selling their equipment it shows that they are doing it mainly for money and to [capitalize on] nostalgia for that time. I am not saying it is wrong, but to be honest I don't like it.

There is a particular paradox in the idea that technology, so often governed by the relentless “rhetoric of the new”—“the impression that, in the new media discourse, the past functions solely as something worse or less sophisticated, something that has to be left behind and practically forgotten” (Parikka & Suominen, 2006)—should itself be subject to retro-fetishization, which Banavage has carefully distinguished from the kind of curated preservation the VCCM engages in. Garda (2013a, p. 9) put it succinctly: “Videogames were the avant-garde of the new media technology, now the avant-garde of videogames is looking back at the history of media. It has turned into an *arrière-garde*, as [Simon] Reynolds calls it.” We therefore asked Dresseno and Banavage whether it is difficult to convey the excitement of a time when these devices and games were new and cutting-edge. Dresseno confessed to being sceptical about this:

Excitement is a very subjective feeling. I think that the excitement surrounding old items or states of things, for example, is forever lost in generational shifts and cannot be restored—the wow! effect for technological advancements, for example. I remember that I played the first *Ridge Racer* (Namco, 1993) [on PSX]<sup>6</sup> for months, enthusiastic about the fact that it came with a race track—it looked like I had the arcade in my own house! I don't think that excitement could be revived now. It is therefore almost impossible to convey that excitement to new generations of players or to a different public that has different experiences or backgrounds.

Banavage, on the other hand, is rather adamant that the investment, emotional attachment, and accompanying excitement don't go away: "The excitement for me is the same as if it is new. Maybe it's true, when I own it, I keep it stored, but once it's part of the collection it will not be sold or given away."

The commercialization of the retro has for some time been fueling and responding to a "growing market demand" (Heineman, 2014, p. 2). In answer to our question, "do you feel that 'retro' products like the C64 mini are in competition with what you do?", Banavage emphasised that the VCCM does not participate in the same consumer-oriented market: "Not at all, we encourage them, but I think it's on a high price tag and you can tell as it starts on a high price and reduces drastically after just a few months."

Dresseno's answer was similar. He likewise encourages them from a distance,<sup>7</sup> in a way that maintains a separation between retro and preservation; and between the market and hobbyists engaging in public interest endeavours:

I think they don't deal with preservation at all. On the other hand, of course, they are marketing operations that could prove useful to trigger interest towards retro gaming. In other words, they are not helpful in preserving games or technology, but they can favour curiosity and autonomous individual research. They are indeed pure marketing products, but I don't think they could be problematic for us. At most, they can be neutral or lead to good things. I would not preserve them, we always try to have the original consoles, but I don't see them as being in competition with what we do. During exhibitions they can be useful, in order to keep safe the original consoles, and to make old games accessible to new generations!

### **The community**

Garda (2013a, p. 9) has suggested that interest in the retro more generally has "its origins in the [participatory] phenomenon of fandom." The efforts of the "hobbyist community" (Suominen et al., 2015, p. 90; see also Swalwell, 2007, p. 263) have been crucial in collecting, archiving, maintaining, curating, and making accessible the history of computing. Banavage attests to this, from the basis of his experience: "The hobbyist and real collectors are important as they scan, preserve and investigate how these computers work. Without these people, the retro community would not exist."

Dresseno from the AV identifies two different kinds of hobbyist—those who take part in a collective effort to preserve digital games or gaming culture, and those who, conversely, only dedicate themselves to their own private collections:

There are at least two levels to consider. Some hobbyists give items to our collection and want to share their things/collections with the community, and this is a really good practice. On the other hand, there are hobbyists who collect items privately without sharing anything, and this is not useful for public collections or archives.

One cannot say, however, if they will eventually make their collections public sometime in the future. I think that the fact that they privately archive, maintain, curate, and so on is still better than nothing. Since the majority of users are passive, hobbyists and pirates are pretty useful and deliver a great service to the preservation of games.

Private collections can become part of a wider collective effort to preserve cultural memory of (and through) digital games. In addition to this, hobbyists can also contribute to the survival of obsolescent hardware or transient digital software. In relation to this, Dresseno further suggested that “maybe piracy will save video games: emulators, private owners, mods, and privately shared back-ups of existing games can be helpful in preserving a record of what risks being lost. Developers, publishers, marketers, producers, and institutions seem totally uninterested in preserving games.”

Concerted and collaborative efforts of course require coordination and networking beyond the local sphere: “The Internet became an essential platform for retro game related communities who organized online game archives, ‘museums’, collections, conventions, publications and so forth” (Suominen et al., 2015, p. 87). We asked Banavage whether the VCCM is in touch with other collectors and hobbyist communities around the world:

Certainly, without help you cannot do much; we have several contacts with other clubs and entities where we join forces to help each other in propagating this hobby around the world.

Of course, issues may arise here too—the view of the Internet as a commons, albeit one under constant threat of enclosure, has its limits, and knowledge-sharing could be better supported by localized infrastructures (Lynch, 2021). In our case studies, local institutional support for these small community efforts would help to ground their engagement with the global network of hobbyists. In fact, the AV on the other hand progressively lost its contacts due to the lack of institutional support:

When we started, I contacted several communities around the world, both private and public. We aimed to start a network of mutual exchange between different collections. For various reasons, the collaborations eventually fell apart. I think that collaborations make sense if they have a real utility, and not if they are just abstract without providing any actual exchange. (Dresseno)

### **Institutional Support**

Dresseno emphasizes how the preservation of digital games or gaming culture is favoured neither by institutions nor by software houses:

The fact is that both institutions and software houses seem to be uninterested in [preserving] video games. We strive to preserve as much as we can, but we have (and we can have) no long-term plans of preservation. There is just no way to be sure that software will be preserved. [Preservation] is urgent, and the media deterioration is often discussed, but there is no way to handle it. How can we contend with this urgen-

cy? There are no practical long-term plans, at least in Italy, to avoid the risk of losing both hardware and software.

Such localized efforts connect hobbyist communities with a public dimension and combine highly specialized knowledge with personal interest and commitment. In many cases, they have almost singlehandedly sustained the burden of unofficial curatorship. They occur at a site of tension and contention, their interests, authority, and reserves of knowledge competing with those of industry (Heineman, 2014, p. 2) and other official institutional efforts. Hobbyist efforts are “vernacular” and memory-based (Heineman, 2014, p. 2) in opposition to these more “official” shapers of the past.

On the one hand, however, there would seem to be a natural potential for alliance and alignment between official and less “establishment” initiatives. Suominen et al. (2015, pp. 90–91) observed that even before games started to receive academic and state-institutional attention, “hobbyist communities somewhat mimicked memory institutional discourses and practices, for example, when calling web sites as ‘museums’ or ‘archives’.”

Yet Swalwell (2007) notes that the “archive fever” (Derrida, 1996) for digital artefacts has not quite caught up to institutions that could provide much-needed structural support for such collection and preservation efforts, leaving individual and independent efforts alone to fill the gaps, “fall[ing] into cracks between institutions” (p. 267). There has been some headway made on this (Suominen et al. 2015, p. 90) towards a relationship still marked by negotiation and conflicting assumptions (Swalwell, 2017), but as these interviews show, progress has been localized and uneven.

Both Dresseno and Banavage seem concerned about the lack of long-term institutional support. This in some way contradicts the recent increasing success of exhibitions and permanent videogame collections. Nicoll (2017) observed that “videogame exhibitions are now a big business” (p. 181), pointing to remarkable examples such as the Museum of Modern Art, the “Game On” exhibition by the Australian Centre for the Moving Image (ACMI) (2008), and the Smithsonian’s “The Art of Video Games” exhibition (2012), all of which successfully appealed to a general public. Such examples of course testify to the increasing legitimization of the medium “as a cultural and artistic form” (ibid.). The diverging experiences in relation to institutional interest and investment in video games show that institutional support may depend on how successful and recognized the institution in question is. Whilst renowned and established entities such as ACMI or the MoMA benefit from financial support, and from a strong communications and public relations network based on their international reputation, Dresseno’s and Banavage’s collections are relatively small projects that emerged and are maintained through struggle and despite a lack of institutional interest or adequate support.

Taking an independent route, societies like VCCM often face obstacles, even when seeking to make such specialized understanding accessible to the public. Since VCCM is not a com-

mercial or profit-making venture, resources and funding are crucial, but not always available: Unfortunately nobody seems to support us financially, as it seems the mentality of getting stuff for free is still dominant. We created a Patreon page for support, but only a few helped us, and we decided to close it. [In terms of non-local funding, such as EU funds], I would want to use these for educational purposes, not for the club.  
(Banavage)

He noted that the VCCM founders often bear the costs directly, and this imposes constraints: “it is difficult to expand our ideas, and that’s why we need some sort of sponsors and help from the local authorities, as we have lots of ideas but we cannot develop them”. This “disparity in resources” available to the official and the vernacular places the latter “constantly under the threat of being marginalized” or supplanted by those with more direct access to such funds (Heineman, 2014, p. 4).

Whilst projects such as VCCM and AV can be viewed as small “memory institutions” and of course provide meaningful insights for further cultural, historical, and memory work on game heritage (Stuckey & Swalwell, 2013), our interviewees’ experience suggests that they still lack structured and progressive institutional support. Such institutional support and attention, on the other hand, as claimed also by Swalwell (2007, p. 269) is urgently needed,<sup>8</sup> as “institutions are necessary in order to select a corpus of texts to be remembered from the breadth of available [...] works, and to organize these texts and ensure their being handed down” (Erll, 2011, p. 75; see also Nylund et al., 2021). Newman (2012), along the same lines, observed that the committed efforts of hobbyists are not sufficient alone: “we should be mindful not to overstate the degree to which amateur, fan-led projects compensate for the comparative lack of academic and heritage sector preservation activity” (p. 26; see also Barwick et al., 2011, p. 377).

As highlighted by Dresseno, the lack of institutional support could also derive from limited resources and different priorities:

The AV is part of the Cineteca of Bologna, which is dedicated to cinema. Being side by side with other media such as cinema could help, but over time we missed the support we could have: resources are limited after all, and cinema still enjoys higher institutional support.

A benefit that these small organizations share with similar hobbyist initiatives (not all of which are so public-facing, while still catering to public interest through preservation) is the personalized touch they often provide – when making information and exhibits accessible, but also in their curatorship, springing from an enthusiast-connoisseur’s and volunteer’s love. Such personal touch lies at the very basis of preservation activities, especially when they are undertaken by single archivers or small groups of hobbyists. In fact, archivers such as Dresseno and Banavage “know that preservation requires curation”, i.e., that selecting which information is to be preserved, and in what formats, is one of their main concerns as archivers (Van House & Churchill, 2008, p. 301–2). The smaller these memory institutions are, the more the resulting “memory systems” they structure will be determined not only by

“seemingly objective but historically and culturally situated decisions” (ibid., p. 302; see also Bowker & Star, 1999) and also by subjective decisions, that partly derive from the personal backgrounds of such curators. The co-existence of different types of institutions, with their different criteria for selection (in each case subject to critique—for “officializing” the narrative, or for subjectively reproducing a presumed canon) could increase the range of what is actually preserved, and thus the possibility of alternative choices.

There is also room for developing the relationship between these different institutions and finding grounds for collaboration, particularly because the personal touch of the independent hobbyist going it alone could be a further cause for precarity, with the small “museum” sometimes failing to outlive its creator-curator. The Personal Computer Museum, in Brantford, Ontario, Canada, for example, had to close after the death of its founder Syd Bolton (whose personal collection provided the launch pad for the initiative—preservation as a response to the speed of change, even from the early nineties [Bolton, 2006]), despite having become reasonably well-established in the public eye.<sup>9</sup>

To contrast this with institutions which started small, but which have over the years established more secure foundations: the Computerspielemuseum in Berlin has had a bumpy history, but benefited greatly from public funds to build and establish its permanent exhibition. The Strong National Museum of Play in Rochester, US, started its life as a personal collection, and kept expanding to claim “National” status, going on to launch the National (now “International”) Center for the History of Electronic Games in 2009, with an extensive permanent collection, with its catalogue and much of its collection accessible to online viewers thanks to grants from a federal government agency. The Strong has recently been the recipient of another federal grant for an exhibit on the cultural history of videogames (McAloon, 2019), leading to a related permanent expansion (Spectrum News Staff, 2021). The Bibliothèque Nationale de France has taken the step of collecting videogames in a legal deposit scheme (Barwick et al., 2011, p. 385)—a wholesale approach that poses its own problems for cataloguing and maintenance (Bertrand et al., 2017). The UK National Videogame Arcade in Nottingham was “rescued” by support from the games industry when it was on the verge of insolvency (Stuart, 2016).

### Conclusion

Preservation of digital games (involving hardware and software) entails risks and challenges which both Dresseno and Banavage face every day. They also seem quite pessimistic about some of these, especially insofar as institutional support is concerned. On the other hand, both believe in the need to archive and preserve computer and gaming heritage, actively seeking out opportunities to do so. To conclude our interview, we asked them about their hopes and fears for the future of digital game archives. Dresseno said:

Of course, I fear that institutions won’t recognize and support gaming archives soon, at least in Italy. What I hope for, on the other hand, is the birth of large or small novel



archives all over the country. Thanks to the efforts of collectors or communities, I think that gaming archives can become a reality even for institutions, and get the support they need and deserve.

Banavage also expressed hope for the establishment of a local and national home:

I would like the local authorities to give us a decent place to accommodate the entire collection, so we can start the next phase of opening to the public. The main aim is for Malta to have a technology museum where ideas of our future generations could be inspired by the past.

The public interest and value of such efforts, and their role in providing a space for participatory heritage – both tangible and intangible – are clear. Unfortunately, the threat of disappearance is real, not just for the medium’s heritage, but also for projects engaged in its very preservation. Public support could translate to crowdfunding initiatives (see Suominen et al., 2018, on the Finnish Museum of Games campaign); however, this leaves a lot to chance and is likelier to succeed where a community is already established and where the project-leaders have access to resources like “professional campaign design and management” (Suominen et al., 2018, p. 185). What would be better yet, particularly where community-building is ongoing, would be a more stable structure to uphold its continuing maintenance. The institutionalized support (such as state funding) that would help to consolidate and sustain it at a local level is too often lacking, even though the diversification of the “curatorial voice” (Coleman, 2015) should be seen as contributing to public interest. While there is certainly value in a position that enjoys some autonomy and flexibility in opposition to, or on the periphery of official structures of memory-making and heritage, this position is also exposed to greater precarity (see Barwick et al., 2011, p. 376). The vulnerability of their situation is accentuated in pandemic times, when they face unprecedented challenges—such as moving some of their archives online—without a safety net. Banavage explained that in 2020-21 the VCCM was thrown back “entirely [onto] my own resources, as activities were practically down to 0”, and expressed his fear that “if things do not move we will lose all the momentum we gained [in previous] years”. Stronger support at a foundational level would help shield these smaller initiatives from instability and insecurity.

Figure 1: Snapshots of the VCCM Collection



Images copyright of Maurizio Banavage, VCCM, used with permission.

Figure 2: Snapshots of the AV's Collection



Images copyright of Andrea Dresseno, AV, used with permission.

### Endnotes

1. Games, moreover, arguably have an added and powerful charge in their ability to channel the past. Linking content to medium, Heineman (2014, p. 15) noted: “Because of the technologies associated with the medium, gamers can return to the same virtual spaces that they occupied at an earlier time, thus allowing their nostalgia to be addressed in ways that would be difficult to duplicate in non-virtual environments.”
2. “Musealisation” refers to the process of extracting a real thing from its original (being its natural or cultural) environment, and conferring on it a new character as “museum object” (musealia) (Mairesse 2004, p. 11).

3. They are critical of the hobbyist community's narrative of videogame heritage, and call upon institutionalized curatorship to provide the corrective (in what they admit to be an "ironical" twist on the expected [Nylund et al., 2021, p. 275]).
4. We may link this transience to the inherent "defining characteristic of the new digital media", i.e., remediation (cf. Bolter & Grusin 2000, p. 45). Remediation consists in "the representation of one medium in another medium" (ibid.) and of course lies at the basis of such products as emulators, which remediate previous software and allow players to run them using new pieces of hardware. Garda's concern about the physical durability of the software, in a sense, is exactly bound to the significance of remediation, which is also pivotal for contemporary memory studies and the idea of the "inherent mediality of cultural memory" (Erl 2011, p. 114).
5. Of course, here we should also acknowledge that the retro-trend has enabled indie game developers to pursue lower-budget game production (see Garda 2013b).
6. *Ridge Racer* (Namco, 1993) was originally released for Namco System 22. It was ported to PlayStation only two years later, in 1995.
7. Heineman (2014, p. 8) has observed more of a tension or conflict—sometimes even erupting in passionate outbursts (p. 13)—between retro gaming communities and the marketing of retro games, particularly with regard to their influence over the contested site of memory production.
8. On the relationship between private collections and institutionalized curation (possible sources of tension, as well as healthy symbiosis), see deWinter & Kocurek (2017, pp. 175–6).
9. We would like to thank one of the reviewers for bringing this example to our attention.

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