Heuristics from Curating and Exhibiting Game Art in the 21st Century

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ABSTRACT

This paper outlines experiences and lessons learned in organizing a variety of digital art exhibits for small and large scale events. The perspective is provided as a cross-disciplinary set of heuristics, drawing on the decade long experience of the curator-artist and paying particular attention to playable electronic media (e.g. games and toys) as installation works in an art context. Lessons learned from exhibits organized or coorganized by the author in the United States, Europe and Asia are shared. These events were offered with support from the Smithsonian American Art Museum, Leuphana University, the University of Utah, Abertay University and others. Additional observations are provided as an artist who has exhibited at more than 40 events in the last decade.

Formally the paper offers an ontology for defining distinguishing between exhibits, festivals and showcases. It is not the intention of the author to create a compendium of exhibition and curation practice. Instead the aim is to provide context and a starting point for the evolving intellectual examination of curatorial practices around digital games. It is hoped that these assertions support the growth of such work by providing a starting point for other practitioners.

CCS CONCEPTS

• Applied Computing → Arts and Humanities; Media Arts;

KEYWORDS

Game Art , Game curating, exhibiting digital games ,video game showcases, new media art, exhibits and festivals

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1 INTRODUCTION

Curating games comes with its own challenges and opportunities. While much has been written about the practice of curating traditional media [25], the fundamental challenge to curating and exhibiting electronic art is its common tendency to challenge the common look but don't touch ethos of most gallery exhibitions [6]. For many of the most respected venues, visitors are discouraged from touching or otherwise physically interacting with the world. This is a particularly common challenge in exhibiting interactive media work, of which much has been explored and written on theory and practice [14]. To focus this paper, there is no explicit mention of Fluxus play art or historical new media installation work that involves games and play such as Duchamp's and Eve Babitz's nude chess [17] or Yoko Ono's Play it By trust. Instead the focus is on digital game exhibitions, festivals and showcases.

The challenges faced by curators of interactive art and new media work are also common to the creative practice subset of games. In addition to the challenges shared with other interactive forms, the history of games as commercial products further complicates both the curation and exhibition of such games. As with many commercial products, the prevailing criteria for value are often linked to profit or popularity. The notion of games as art works is a relatively recent assertion in the thousands of years of game making history.

Assertions of games as art have also been met with much criticism [7]. For the purpose of this paper it is not necessary to validate games as an art form or as an expressive medium, but those critical of the medium may want to review Wolf [35] or Squire [32] for more succinct scholarship on the cultural value of games. The practical reality is that many such games and toys are being exhibited in a variety of venues worldwide and increasingly regarded as art [11]. These include hallmark cultural institutions like the Smithsonian Institutes [24], The Strong Museum of Play [33] and the government of Finland [8]. The list also includes a variety of curated public outreach initiatives of which the Games for Change Festival, Indiearcade

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[30] and others are of note. The community of game makers has as well established a culture of curated content for annual exhibitions of which long-running events like Indiecade [21] and the Independent Games Festival [19] are particularly resonant.

As games are relatively new to the curated environment, it is no surprise that much of the early effort in exhibiting these works distinctly relied on adapting prior models of exhibition and curation. It is clear that some venues adopt a filmic tradition, while others adopt a fine art model, and yet others apply commercial arts competition as their foundation. IndieCade, for example, has been described as the Sundance of Games (referring to the iconic film festival), but that same moniker has been attributed to a variety of smaller events including the Australian Centre for moving Image's 2007 Games Festival [4] and smaller events like GDEX [10].

Such framing relative to established creative practices only further emphasizes the aspirational character of the games as art community exhibition and curation process. Film, for example, need not describe its premier awards as the Pulitzer Prize of film or frame its work relative to novels or theater. It is evident that as the work of exhibiting games continues, efforts in providing an analysis of best practices and offering a set of heuristics distinct to game exhibition and curation is valuable. This is particularly apparent as the size and complexity of this work increases. In 2016, for example, the Smithsonian American Art Museums' IndieArcade (known as the SAAM Arcade in 2017) attracted more than 11,780 visitors in a single day [30]. SXSW's Gaming expo and the Independent Games Festival at GDC attract a similar number of visitors for their multiday events.

2 EXHIBITION, FESTIVAL, OR SHOWCASE

It is important to provide at least a loosely framed definition of the three prevailing approaches to showing creative game work in contemporary practice. These definitions acknowledge the fact that many games, even those designed as artistic expression, rest between the commercial and the fine arts. It is also important to note that the distinction between the commercial and fine arts is a cultural one, not a universal one. It has been claimed, for example, that while western traditions make sharp distinctions between commercial art and noncommercial or fine arts, eastern traditions (particular Japanese) blend these distinctions more fluidly [15]. Regardless of the commercial intention of the creative work, it is useful to frame the types of approaches used to most commonly present creative work in games. To support loose categorization, these will be are exhibition, festival or showcase.

In short, a typical exhibition borrows from the tradition of fine art, aiming to pull together a collection of works unified by theme, medium or intention. Exhibitions are curated, meaning a person of group of people who know the game maker's work, intention and the corpus (when applicable).

A festival borrows from the tradition of film and theater, offering a collection of recent, themed selections often informed by a combination of judging and popular consensus, designed to

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be sampled by a wide general audience in celebration of the medium itself.

A showcase is informed by commercial exposition, which aims to present the newest, most novel inventions to its audience, acknowledging that such work may aim to sell its value as part of its presentation. Although not required, many showcases are blind-reviewed, aiming to focus selection on the quality of the work over the quality or notability of the producer's corpus or work history.

It is important to note that individual events and venues may elect to describe themselves using terms that do not necessarily match the curatorial and exhibition practices outlined in this loose categorization. The Boston Festival of Independent Games [3], for example is much more of a showcase than a festival by the framing offered, and although the Smithsonian American Art Museum's Arcades [18, 30] are held within a curated space, the event aligns much more closely with a festival than a traditional exhibit.

2.1 Exhibitions:

Exhibitions of games aim to follow much of the same standards of selection and presentation as traditional art mediums (e.g. painting or sculpture). In process, a call for artwork submissions may be issued, or curators may elect to select unsolicited work from the larger canon of games. The curator(s) then select the work in relation, identifying adherence to pre-determined themes or considering what is communicated by exhibiting the selections together. As is the case in other media, curators consider the relationship between the works, even in the final installation of works in the physical or virtual space of the exhibit.

In rare, situations, game makers may even have their work added to an institution's permanent collection, in much the way other art forms are collected. That Game Company's Flower [31], for example, was acquired into the Smithsonian American art Museum's' permanent collection as an art acquisition in 2013. The meaning of adding a specific digital work to a collection among non-digital works is in itself worthy of considerable philosophical debate. For the purpose of this paper it is merely worthwhile to note that part of some exhibition practice includes the acquisition of such work and to note that such acquisition can be used to rotate content in and out of exhibition, as venues like the Strong Museum of Play [34] choose to do. It is also important to note that acquisition may involve payment directly to game makers (beyond the cost of acquiring a single copy of the game). Such payments may also serve simply to support the exhibition of such works and the royalties to exhibit, as the ACM Multimedia Art show has paid exhibitors for showing their work

Exhibitions are often the most formal presentation of game work. Likely because much of the tradition of exhibiting is aimed at developing a sense of import to the selections and the act of being exhibited is a focal element of many traditional art practices. Exhibitions are also often cited as evidence that games have made it into the canon of culturally relevant creative Heuristics from Curating and Exhibiting Game Art

works. The Art of the Video Game exhibition [24], for example, garnered international news in 2012 for these reasons.

In the implied hierarchy of social-cultural relevance, the notion that digital games were displayed in the same building, as the established mediums of painting, sculpture and even photography means that games have matured and garner more respect than they had in the past. It is this value by location that actually permeates the practice of exhibitions as they relate to games. Philosophically, in curatorial practices, proximity has meaning. Being in the same building, the same wing or on the same wall means something distinct. This is one of the defining characteristics of exhibition and of making selections as a curator. At least, in the physical world of curation.

Examples of game exhibits that fit most squarely into this categorization include Blank Arcade [13], Punk Arcade [5], and the Game Worlds of Jason Rohrer exhibit at the Davis Museum [28]. Now Play This [26], in London, is an example of an exhibit event that more loosely falls within this framing.

2.2 Virtual Exhibitions.

A subset of the traditional physical exhibitions is the virtual exhibition. These aim to do much of what a physical exhibition does, but extend such benefits via the core opportunities presented by virtual space. These of course offer practical benefits like global anytime/anywhere access and a theoretically unlimited, even mutable space.

Previous work has been published around the potential of virtual exhibition spaces [22], of online galleries and even virtual world galleries [23] that support the exhibition potentials of virtual reality and early generation, 3D rendered virtual communities like Second Life. What is consistent in much of this work is a fundamental assumption that the exhibition of such work should mimic or carry forward specific elements of the contemporary, traditional gallery. In short, the bias is towards reasserting either black box or white box [27] experiences that are explicitly aimed at selecting the best work, hanging it on real or virtual walls and encouraging people to convene in a single space. For the purpose of this paper these will be called emulative exhibitions, in that their philosophical approach is fundamentally to emulate the accepted practices of exhibitions without questioning the politics (socio-technical or sociological) of the contemporary exhibitions space. A virtual gallery of note is the ACM Siggraph Digital Art Community's Aesthetics of Gameplay exhibit [1].

2.3 Festival

If exhibitions posit the power of selection with a few subject matter experts, festivals often aim to invert that power. Where traditional exhibitions emphasize value by proximity (e.g. in the building or not), festivals aim to disperse works and rarely put much emphasis on proximity. Festivals are often aligned along democratic process that aims to celebrate the work. Festivals are fundamentally informal. Unlike an exhibition, there is little historicizing, contextualizing or formal communication of artist or curator intention. Like a party, there is little expectation of formality or the types of contextualization that may be present at an exhibition. Unlike exhibits, festival attendees do not expect quiet rooms, with framed plaques describing artist name and intent.

For this reason, festivals are often less about the critical examination and more about the hedonistic pleasure of large collections of work. Hence a festival is as much about the juxtaposition of radically different work to orchestrate energy than it is about the meaning of juxtaposing work to make a curatorial statement (i.e. one way an exhibit curator may chose to make selections). This also means that festivals are not subject to the intimidating character that some may perceive in exhibitions. There is far less authorial presence at a festival. A festival, like a party, is as much about the hosts as the guests. In this way, festivals have an element of democratic participation, providing an experience that is equally accessible to plebian and non-plebian approach.

By this framing, festivals of note include the aforementioned IndieCade [21] or the Games for Change Festival gameplay portion. Perhaps most important to note about festivals is that they are in practice and experience, nearest to the video game arcade.

2.4 Showcase

The showcase takes an entirely different philosophical approach to the practice of curating and exhibiting works. Showcases typically include the collection of work, contests and judged events that have a clearer history to the commercial world. Many mimic the showroom or exposition floor of a tech conference, offering a semi-curated collection of work that may include the accoutrement of sales. Such work is commonly shown in a booth or at table, by the team or person who created the work and is offered with promotion materials (e.g. stickers, pens, business cards, etc). Within this spectrum of curated content, are *best of show* showcases and the peer-reviewed content of international conferences focused on the intersection of creative practice and technology.

One of the most defining distinctions for a showcase is the presence of the game maker or game team. Showcases exhibits are staffed not by docents or gallery staff, but by the people who are part of the creative project itself. As such, they are also understood as an opportunity not merely to show the work and have it speak for itself, the work is often spoken for by those who contributed to it.

Likewise, showcases are places to sell. They afford creatives the opportunity to embellish the work. These embellishments might take the form of conversation with visitors, but they also include stickers, postcards, business cards, banners, candy and all manner of exposition floor giveaway. Showcase visitors know that they are present not only to experience the work, but to experience the work as framed and sold by those who made it.

As a result of this high energy perpetual pitch, these events are often more temporal than exhibitions, lasting at most a few days. They are also more common in the spaces in which the commercial arts intersect with technology. Conferences often



Figure 1: Sample photographs of a typical white box game exhibit (A), a festival (B) and a conference showcase (C). These are the Blank Arcade in Scotland in 2016, the Smithsonian Indie Arcade in 2016 and the Advances in Computer Entertainment Creative Showcase in 2010, respectively.

contain such showcases, of which the Game Developer's Conference (GDC), CHI, CHI-Play and the Advances of Computer Entertainment (ACE) are widely regarded. Conference showcases are often subject to distinct review criteria, which includes the novelty of experience offered to conference attendees.

Figure 1 seeks to demonstrate some of the characteristics of exhibits, festivals and showcases. The images hint at the experiential difference between these environments. The white box of the Blank Arcade in Scotland is contrasted to the black box experience of the ACE Creative Showcase in Greece. Both are distinct from the festival experience of the Smithsonian Indie Arcade, which takes place in an open air courtyard. It is also important to note that showcases, unlike exhibits and festivals are not always open to the public. Showcases in academic and commercial conferences in particular, often require conference registration to visit.

3 THE CHALLENGES OF EXHIBITING GAMES AS ART

These dichotomies and categorizations in themselves provide evidence of one of the fundamental challenges of exhibiting and curating games as art. To establish the medium as a legitimate art practice, it must engage in some form of emulative exhibition, festival or showcase. This is a notable power dynamic. Games must translate themselves into these spaces or in the cultural or experiential elite. In short, Games must find a way to work within the environment and culture of museums and art galleries; rarely do the institutions work to accommodate the medium's need. This is, as mentioned in the introduction, particularly obvious in places which have discouraged physical interaction with work for years. Yet while these environments offer their value through the physical space they manage (which comes with an additional socio-cultural value), the norms of these environments discourage much of what defines games (i.e. playful, aesthetic and acoustic, approachable and potentially time consuming). These are environments in which play, if it happens, happens in the static images of a painting or sculpture or in the moving image of a film audiences are encouraged to sit quietly and contemplate.

Into this paradigm festivals present themselves as the celebratory, participatory and accessible exhibition space. It is an environment as informal as games, yet it is also bound to the long history of festivals as validating, if not temporal, entities. Getting into a festival is a marker of success, only if the festival is well regarded festival. Festivals are also not necessarily a place to sell work, but instead for the work to sell itself. In comparison, showcases are a place to sell work, and it is almost awkward to expect the work to attract others without some level of salespersonship. Yet, decorating a game trailer with several laurel wreaths denoting festival and showcase history is an obvious strategy to market a game's value.

It is also important to note that the markers of good exhibitions, festivals or showcases are distinct. Exhibitions and showcases, if associated with well-regarded institutions of high cultural status, are the least subject to value related to attendance. Festivals, on the other hand, are subject to attendance markers and selection metrics. If a festival is highly inclusive, perhaps accepting 80% of the work submitted, the value of such an event is often questioned by both game makers and players.

These same markers of selectivity effect showcases as well, but depending on the venue, there is a selection of quality implied with some showcases. CHI's showcase for example, is largely attended by other human-computer interaction researchers, so the implied logic is that even if only a few hundred people attend, those attendees are of high quality (e.g. other HCI researchers). The same could be said for commercial showcases, like the Independent Games Festival and the ALT-Ctrl, both at GDC. These events rely in part on *status proximity*. While physical proximity may matter most in exhibition, status proximity, or the value of being in league with other well regarded work, persists across all three exhibition types. In short, the expectation is that work is good because it is among other good work. When a game finds its way into the Guggenheim, its status proximity is increased.

It is important to mention that these choices in exhibition all frame digital game work as either a new effort at an old problem (the production of aesthetic beauty or the identification of important work), a temporal convening of available experience, or an effort in sales. This immediately limits the ways in which this work is perceived.

4 CORE CHALLENGES

To provide more context for the critical evaluation of these concepts, the following sections briefly highlight specific observations about the meaning of such curatorial and exhibition practices.

4.1 The Value of Cultural Artifacts and Commercialization

One of the many values inherent in exhibiting work is the preservation and maintenance of the creative work [2]. Museums do more than merely show work, they act as archive, preserving work, maintaining it, and protecting it.

This is one of the fundamental weaknesses of virtual art exhibition. Such exhibits rarely consider the archival nature of the work that is produced. To create a piece of work in Second Life, for example assumes that both the Institution that operates Second Life, Reston Labs, perpetuates and that this commercial entity will continue to archive the work.

Beyond the many practical challenges to archiving electronic art (e.g. code rot, technological deprecation, physical wear), work that is created for some platforms is forever wed to that platform. Artists who work in glitch aesthetics, for example, are bound to the commercial entities that produce their work. This means that their archival value is directly tied to the organizations, whether commercial or not, that produce the medium in which they work. This creates a philosophically distinct and historically novel coupling. By example, where once a photographer was bound to the qualities of Illford 400 B&W film, the tech artist is now not only bound to the product, but to the continued existence of the product. The user of an Illford 400 film was able to produce prints from that roll and could reliably become their own archivist. However, with software and hardware dependencies the relationship becomes much more difficult. If an artist in Second Life wishes to export their work, they can. They can make screenshots, machinnima videos, etc. What they can't do, is bring their exhibition with them. Instead, they must archive it as they have in the past -a video or images.

The challenge of archiving is likely only to increase as the commercial entities that implement the platforms on which such work is developed continue to offer continually dynamic platforms. Work produced for an Apple mobile device in 2009, for example, cannot be installed to a modern device. Likewise, a virtual exhibit produced using Adobe's Flash is unviewable on an Apple mobile device, and over time may be unviewable on any computing device. Physical structures, when bound to large institutions, are often more durable than virtual ones.

Disambiguating Curating and Judging

A common misunderstanding in the space of contemporary game exhibitions is the conflation of judging and curating. This is an exceptionally important distinction. In short, curating is the result of considering all of the work in concert, where judging is an individualized assessment. A curator not only judges work, an effective curator is thinking about the relationship of each piece to the other (i.e. the value of proximity as mentioned previous). While this distinction is commonly understood in other art circles, it is a common misunderstanding in the communities of practice for exhibiting games. This misunderstanding comes from a variety of likely sources, including the fact that game work's commercial history meant judging via competitions was a common means of evaluation. In addition there's the fact that much of the early creative practice history was related to game development (as opposed to game design), which focused on ranked competition. There's also the obvious fact that competition is common in many games and a mode of thinking that permeates the culture.

Likewise, games, perhaps because of their original relationship to commercial entities and to arcades, are often considered distinctly from each other. Like an arcade, an exhibitor may consider it reasonable to have two discordant games next to each other. Yet, from a curatorial perspective there's always a challenge. If the exhibition is supposed to be about a specific theme in the space of games, what does the placement of one game next to another mean? Was it intentioned, accidental or serendipitous? Judges do not typically worry about answering such questions, curators are continually asking them, and in a showcase such a question is more often dismissed than asked.

As a way to help frame the common practices of curating or judging, it's useful to consider the most common contexts under which curating and judging occur. Exhibitions are most likely to be curated entirely. Festivals are typically judged and curated. For festivals, initial selections may be judged for inclusion and a subset of curators select from the judged set. Showcases are most often judged exclusively. Some showcases involve very practical curatorial decisions like avoiding auditory bleed between projects or placing experiences that need low light or black box experiences away from light-tolerant or white box experiences.

4.2 Games as series

One of the key concepts for artist producing such work is the notion that they can develop games in a series. This is the practice evident in Critical Gameplay [12]. Other Artist, such as Jason Rohrer or Paolo Pedercini have an apparent feel to their work that makes it evident who made the game, but the games themselves are not always clearly designed in relation to each other. Each instead is a distinct exploration. While it is rare to find game makers who create games in a series a few independent developers have explicitly described their work as such.

This notion of making games in a series creates an interesting moment for the curators, as the work is already themed across the artists' practice.

4.3 Community building through collaborative curation and Judging

One of the explicit benefits of judging is the opportunity to create new community through process. The community of IGF

reviewers forms around their effort to select the best work. As many judges have themselves been finalists in this highly lauded community of independent game makers, it's important to note that it is a community of creative support. This community has even created its own subset of venture funders, the Indie Fund, who act as benefactors for emerging game makers in much the way the creative communities of past art movements supported each other. In its own words Indie Fund "Indie Fund aims to support the growth of games as a medium by helping indie developers get financially independent and stay financially independent" [20].

It's important to note that the result of these efforts also includes the development of schools of thinking not unlike the schools of creative thinking we have seen in other creative media. In games, for example, there are communities of pixel artists and low-fi game makers, of people who excel at specific genres like masocore, and those who have made one or two emblematic games to which others aspire, without a notable contribution thereafter.

What is most interesting here is the notion that these communities of game makers are developing specific trajectories within the creative practice. Forward thinking researchers and critics are likely asking the fundamental question - how are these schools, movements, or creative practice communities being recorded? There are websites that offer descriptions and videos of the games, but the experience, which is arguably the most distinct part of the medium, is rarely articulated through non-interactive media. For games in a series, will only portions of that series remain?

4.4 Regional Exhibition

It is also important to note that many such exhibitions, festivals and showcases also reflect regional selections. These regional selections offer an opportunity to demonstrate the localized cultural, aesthetic, and thematic foci of creative game work. The scale of such events emphasizes the diversity of the game making community and offers the potential to bring the game making experience toward the personal. Examples of regional events that aimed to incorporate regional themes include the Indies in the Middle [18], GDEX showcase [10], and Gamescom [9], et al.

5 Unconventional exhibition – Stepping Beyond Convention

There are a few distinct efforts in unconventional exhibition that warrant noting. In particular efforts in alternate reality games combine the performance aspects of some arts with the experiential and interactive elements of electronic art. These include a variety of efforts to extend the physical museum space through mixed and alternate reality [29] These experiences might be technically mediated (e.g. telephone booths as save points, RFID as play token, etc). Perhaps the most interesting aspect of this work is that it rarely considered curated and is rarely considered an exhibition in itself. Yet, these games are played very publically and purposefully to embrace actions that

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require a public as audience, visitor and participant. Games such as Jane McGonigal's Cruel 2 B Kind, a benevolent assassins game, are explicitly about retaking public space through a performance of gameplay.

Rarely has such work been considered curated, yet, there are venues such as New York's Come Out and Play that seek to exhibit such work. Likewise, the genre of Big Games has venues as eclectic as SXSW and Indiecade. Such play serves to exhibit itself publically in ways that are playful and theatrical.

6 The Problems with Payment

A common challenge in the game exhibition space is the harsh reality that while many of the events that host creative game work do turn a profit from these exhibitions; they rarely result in payments to the exhibitors. Like some other commercial arts, curators, festival organizers, and showcase hosts often emphasize the benefit of exposure as sufficient payment for the work. This is particularly common when the selection criteria includes some form of judging, as the price for being selected is often the ability to show the game at a showcase or festival.

A critical eye would also appropriately ask about the costs of producing such work. Artists who have custom physical game interfaces for example, are not only paying for the cost of producing their work, they are also paying to ship such work to venues for display. As an example, The Big Huggin' game [12], which is controlled by a 32 inch Teddy Bear (shown in figure 2), must be shipped to any venue for play. When the exhibition is complete, it must be shipped back and repaired. Even though the game has been exhibited at more than 10 venues across the world, no exhibit, showcase, or festival has ever paid the artist for the rights or ability to show the work. A few have reimbursed shipping costs.

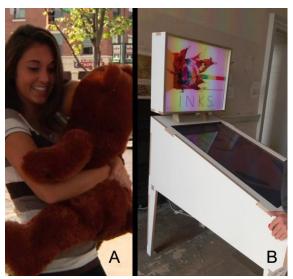


Figure 2. Games with custom controllers and installation demonstrate the challenge of exhibiting such work. The Big Huggin' controller (A) and Inks games (B) at the Now Play This event.

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In contrast, the cost of operating and maintaining digital work can be higher than traditional art mediums. Beyond costs for electricity and computing equipment, the technical specialties needed in the setup and teardown of such work, as well as any needed security tends to drive the cost higher than wall hung works (although insurance costs greatly vary for art works and shipping sculptural work can be very costly).

In recent years more established artists have requested honorarium or travel allowances for exhibiting their work. Organizers of such events should be aware that such requests are likely to rise, especially as the lure of increased sales from exposure dwindles and the interest in creating physical computing games, games using virtual or augmented reality or custom hardware (shown in figure 2) increase.

7 CONCLUSION

The goal of this writing is to provide a range of exhibition venues, curatorial challenges, strategies and heuristic analysis. These observations are based on paid and volunteer curating, judging, organizing and review work at more than 10 such venues and exhibiting work at more than 40 venues between 2009 and 2015. Participation in the curation and exhibition organization includes curating and judging for the Games for Change Festival, co-curating the 3 events for the Smithsonian American Art Museum's Independent Games Showcase (aka SAAM Arcade and the Smithsonian American Art Musuem's Indie Arcade), 3 events for the Digital Games Research Association conferences (aka Blank Arcade), as well as serving as co-chair for the 2015 ACM Conference on Advances in Computer Entertainment creative showcase, paid judging for the SXSW Independent Propeller awards (2011), among others. As such the research presented here is provided via firsthand experience on both the production and consumption of the experiences.

It is true that the creative and artistic future of games is not only about discussing work, but about enabling and supporting a diverse set of game-makers with the ability to exhibit games. The perspective is provided as cross-disciplinary views, drawing on the decade long experience of the curator-artists and paying particular attention to playable electronic media (e.g. games and toys) as installation works in an art context.

While this work is not intended to be a comprehensive guide to the state of curating and exhibiting it is hoped that it provides much needed topographical overview of the state of practice.

REFERENCES

- Aesthetics of Gameplay. 2014. Digital Arts Community, http://gameartshow.siggraph.org/gas/ (accessed March 25, 2017)
- [2] Barwick, Joanna, James Dearnley, and Adrienne Muir. "Playing games with cultural heritage: A comparative case study analysis of the current status of digital game preservation." Games and Culture 6.4 (2011): 373-390.

Artech '17, September 2017, Macau, China

- Boston Festival of Independent Games, Boston, Massachusetts, USA. https://www.bostonfig.com/ (last accessed April 2, 2017)
- [4] Brent, William. "ACMI: The Sundance of Games". May 24, 2007. https://gamefront.online/acmi-the-sundanceof-games/ (Accessed April 1, 2017)
- [5] Brin, Sarah and Tusman. Lee. Punk Arcade Exhibit (October 15-October 27, 2012). Philadelphia, Pennsylvania, USA. http://www.littleberlin.org/calendar/2012/10/5/punkarcade (accessed March 12, 2017)
- [6] Candlin, Fiona. "Don't touch! Hands off! Art, blindness and the conservation of expertise." Body & Society 10.1 (2004): 71-90.
- [7] Ebert, Roger. "Video Games Can Never Be Art", April 16, 201. http://www.rogerebert.com/rogersjournal/video-games-can-never-be-art (Accessed April 7, 2017)
- [8] Finnish Museum of Games, Tampere, Finland http://vapriikki.fi/en/pelimuseo/
- [9] Gamescom, Cologne, Germany, http://www.gamescom-cologne.com/gamescom/index-9.php
- [10] GDEX, Columbus, https://www.thegdex.com/, Ohio, USA (Accessed April 7, 2017)
- [11] Gee, J. P. (2006). Why game studies now? Video games: A new art form. Games and culture, 1(1), 58-61.
- [12] Grace, L. (2013, April). Big huggin: a bear for affection gaming. In CHI'13 Extended Abstracts on Human Factors in Computing Systems (pp. 2919-2922). ACM.
- [13] Grace, L. and Reed, E. Blank Arcade 2016. Digital Games Research Association (DiGRA), Abertay, Scotland. http://blankarcade.criticalgameplay.com/ (Accessed April 7, 2017)
- [14] Grau, O., Arnheim, R., Weibel, P., Broeckmann, A., Burnett, R., Couchot, E., ... & Kahn, D. (2007). Media art histories - . Mit Press.
- [15] Hjorth, Larissa, and Olivia Khoo, eds. Routledge Handbook of New Media in Asia. Routledge, 2015.
- [16] Huhtamo, Erkki. "On the origins of the virtual museum." Museums in a Digital Age (2010): 121-135.
- [17] Humble, Paul N. "Marcel Duchamp: Chess aesthete and anartist unreconciled." Journal of aesthetic education 32.2 (1998): 41-55.
- [18] Indies from the Middle, Smithsonian American Art Museum, Washington, DC, USA. http://lgrace.com/middle/ (Acccessed April 6, 2017)
- [19] Independent Games Festival. http://www.igf.com/ (accessed March 30, 2017)
- [20] Indie Fund, https://indie-fund.com/ (accessed March 28, 2017).
- [21] IndieCade. www.indiecade.com/ (accessed March 30, 2017)

- [22] Lepouras, George, and Costas Vassilakis. "Virtual museums for all: employing game technology for edutainment." Virtual reality 8.2 (2004): 96-106.
- [23] Mateevitsi, V., Sfakianos, M., Lepouras, G., & Vassilakis, C. (2008, September). A game-engine based virtual museum authoring and presentation system. In Proceedings of the 3rd international conference on Digital Interactive Media in Entertainment and Arts (pp. 451-457). ACM.
- [24] Melissinos, Chris, and Patrick O'Rourke. The art of video games: From Pac-Man to mass effect. New York, NY: Welcome Books, 2012.
- [25] Möntmann, Nina, et al. Art and its institutions: current conflicts, critique and collaborations. Black Dog Publishing, 2006.
- [26] Now Play This (2017). Somerset House, London. http://nowplaythis.net/
- [27] Paul, Christiane. "New media in the white cube and beyond: Curatorial models for digital art." Leonardo Reviews Quarterly 1.01| 2010 (2008): 33.
- [28] Reese, Nathan. An Exhibition That Proves Video Games Can Be Art. New York Times, February 10, 2016. https://www.nytimes.com/2016/02/10/t-

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magazine/art/jason-rohrer-video-games-exhibit-davismuseum.html?_r=0 (accessed April 1, 2017)

- [29] Schmalstieg, Dieter, and Daniel Wagner. "Experiences with handheld augmented reality." Mixed and Augmented Reality, 2007. ISMAR 2007. 6th IEEE and ACM International Symposium on. IEEE, 2007.
- [30] Smithsonian American Art Museum's Indie Arcade, Washington, DC, USA. http://www.IndiePopup.com (accessed April 2, 2017)
- [31] Smithsonian Institutes. Permanent Collections. http://americanart.si.edu/collections/mediaarts/ uri: http://edan.si.edu/saam/id/object/2013.70
- [32] Squire, K. (2002). Cultural framing of computer/video games. Game studies, 2(1), 1-13.
- [33] Strauven, Wanda. "Media Archaeology: Where Film History, Media Art and New Media (Can) Meet." PRESERVING AND EXHIBITING MEDIA ART (2013).
- [34] Strong National Museum of Play, Rochester, New York, USA, http://www.museumofplay.org/
- [35] Wolf, Mark JP. The medium of the video game. University of Texas Press, 2001.