Videogames in the museum: participation, possibility and play in curating meaningful visitor experiences

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Abstract
In 2014 *Videogames in the Museum* [1] engaged with creative practitioners, games designers, curators and museums professionals to debate and explore the challenges of collecting and exhibiting videogames and games design. Discussions around authorship in games and games development, the transformative effect of the gallery on the cultural reception and significance of videogames led to the exploration of participatory modes and playful experiences that might more effectively expose the designer's intent and enhance the nature of our experience as visitors and players. In proposing a participatory mode for the exhibition of videogames this article suggests an approach to exhibition and event design that attempts to resolve tensions between traditions of passive consumption of curated collections and active participation in meaning making using theoretical models from games analysis and criticism and the conceit of game and museum spaces as analogous rules based environments.

Introduction
The recent growth in popularity of the collection and exhibition of videogames has seen some of the worlds' most prestigious museums and art galleries embrace the medium and recognize the significance videogames as culturally, and potentially, socially critical. Museums, by their very nature as custodians of culture and history, and as arbiters of taste, authenticate these properties simply by including videogames in their collections. Exhibitions such as *Game On* [2] and *Game Masters* [3] employ standard curatorial approaches using chronological progression, popular success and critical acclaim as organizational frameworks and discretionary criteria in representing the history and achievements of the videogames industry. Typically, they use a form of 'curated arcade' as the structural conceit of the exhibition. The recent Smithsonian exhibition, *The Art of Video Games* [4] notably adopts the traditional curatorial language of the museum by exhibiting the visual art and design elements of games directly on the walls of the gallery. Strategic approaches such as these consciously appropriate the language and conventions of the museum to directly invoke the legitimizing

effect of the institution whilst simultaneously courting controversy through the exhibition of unashamedly populist content. An example of this occurred when embarking on a collection of interaction design the Museum of Modern Art in New York invested in acquiring Nintendo's Pac-Man for its design collection. The exhibition of Pac-Man and 13 other games in the Museum's collection came under ferocious attack from The Guardian's art critic Jonathan Jones,

> *The player cannot claim to impose a personal vision of life on the game, while the creator of the game has ceded that responsibility. No one "owns" the game, so there is no artist, and therefore no work of art… Chess is a great game, but even the finest chess player in the world isn't an artist... Artistry may have gone into the design of the chess pieces. But the game of chess itself is not art nor does it generate art – it is just a game."* [5]

This polemical response was typical of the criticism of the exhibition and exemplifies the outrage that is provoked when the traditions of the institution are perceived to be undermined. Videogames, like all forms of play, are essentially accessible and consensual. They rub uncomfortably against the exclusive, hierarchical bureaucracy of institutions as they seek to engage and encourage exploration and discovery. Good games share a sense of wonder, excitement and delight with players. They are an invitation to connect between the designer and the player that recognises each participant has a role in creating a meaningful experience in the same way as good art and good curatorship should. *"Games create 'possibility spaces', spaces that provide compelling problems within an overarching narrative, afford creative opportunities for dealing with problems and then respond to player choices with meaningful consequences."* [6] The challenge to the museum is to relinquish some authorial control to 'possibility', in order to become an active participant in the creation of a shared construction of meaningful experiences.

Visitor Agency and Potential in Games

> *"Games have a wildness, a strangeness to them and sometimes I feel like what we're doing when we talk and think and write about games as an aesthetic form is to domesticate them, to tame this wildness, explain this strangeness and hang it on our walls, display it in our parlours and museums and preserve it in our history books."* [7]

Videogames do not easily fit into models typically defined as aesthetic. Their participatory nature, social qualities and spaces of possibility make it difficult to view them as 'complete' works. When discussing games as an aesthetic form, they are often put into more manageable categories, looking to the final artefact in much the same way as a painting or sculpture, in order to make the discussion and analysis of them more 'comfortable' [8]. Like most aesthetic objects, games are inherently participatory, however, unlike many others, videogames require direct interaction with the player shifting the role from 'passive viewer' to 'active participant' in order to reveal the true meaning of the game experience.

"The space of possibility within a game is all potential, a potential realized through play. Games, when approached with artistic sensibilities, explore an aesthetics located somewhere between the conceptual and the experiential." [9]

Play experience combined with player observation, participation and interaction are key to unfolding the depths of the game structure and in turn unlocking meaning either embedded by the game developer or interpreted by the player in collaboration with the game system's predetermined constraints. Authorship of procedural systems within a game structure is clearly attributed to the game designer.

"designers craft play, but only indirectly, through the systems of rules that game designers create. Play arises out of the rules as they are inhabited and enacted by players, creating emergent patterns of behavior, sensation, social exchange, and meaning." [10]

In order to craft play, the designer must first understand the concept. Play is fundamental to human life and helps us to make sense of the world around us, to form meaning and understand social, political and cultural issues. Marshal McLuhan believes that *"games as popular art forms offer to all an immediate means of participation in the full life of a society, such as no single role or job can offer to any man."* [11] There have been many attempts to define play [12, 13] however its pervasive nature makes it difficult to define [14]. In the context of this paper, when discussing play in relation to computer games and meaning making, it can be useful to consider Roger Caillois' definition of play as running along a continuum where 'Paida' (unstructured play) sits at one end and 'Ludus' (structured play) at the other. [15] At the extremes, unstructured play involves open ended interactions and is often associated with improvisation or free play whereas more structured play brings rules and conventions for interaction. [16]

Rules are central to Game Design processes, and all games have at their heart, rules, a goal, a feedback system and allow for 'voluntary participation'. [17] The designer may rely upon design frameworks to guide the creation of goals and rules for the player, such as the MDA (Mechanics, Dynamics and Aesthetic) Framework [18] or try to create a system which embodies 'a space of possibility' [19] for the player. But, as suggested by Eric Zimmerman, games have an essential unpredictability for the player and designer alike. Because the play experience is often unclear during the design phase; it is not until it is played that its behavior becomes clear. [20] Ultimately, the play behavior is defined by the choices embedded in the game system by the game designer. Ian Bogost believes that in the design of these systems, the game designer can influence and persuade the player towards certain beliefs or ideas. [21] In the light of inherent unpredictability, behavioral structures and persuasive systems the attribution of authorship of meaning in game systems becomes more problematic.

All of this activity occurs within a game-system designed to support meaningful kinds of choice-making. Every action taken results in a change affecting the overall system of the game. Another way of stating this point is that an action a player takes in a game results in the creation of new meanings within the system. The meaning of an action in a game resides in the relationship between action and outcome. [22]

Gonzalo Frasca [23] believes structured play can lead to closed products whose meaning is ultimately controlled by the game's author, therefore, it could be said that the flexibility of the 'possibility space' designed by the developed shapes the potential for the player to co-create meaning with the game's author.   Frasca's assertion suggests that the more structured play is within a game the more meaning is defined by the game's creator. [24] A tightly defined space of participation with little opportunity for the player to make meaningful choices which in turn influence gameplay, narrative or outcomes, offers minimal co-creation of meaning; the authorship of the designer is absolute. In turn, it could be suggested that less structured play provides more space for co-creation of meaning between the player and the game's author. A more open possibility space with less defined rule sets, goals and/or narrative could be seen as an invitation from the designer to the player to invent rules for themselves and in turn new ways of interacting. Such 'meta-gaming' can lead to new or unexpected avenues of play and meaning making for the player. Where game structures support and reward the player for their contributions, recognition (and perhaps reciprocation) of co-creation by the system can occur, manifesting as an intrinsic reward for the player. Participation in this way could be said to foster investment from a player, as they are able to make decisions which are meaningful to them and which create a shift or change within the game world. It is important to acknowledge that the developer of the system is likely to have motivation (aesthetic, commercial or otherwise) in terms of the work which will shape their approach to play structure.

"Artists using games as a medium of expression, then, manipulate elements common to games—representation systems and styles, rules of progress, codes of conduct, context of reception, winning and losing paradigms, ways of interacting in a game—for they are the material properties of games, much like marble and chisel or pen and ink bring with them their own intended possibilities, limitations, and conventions." [25]

The game designer in this case, will aim to utilize every aspect of the toolset of the game system to produce play and in turn infer meaning by directing, constraining and shaping play situations in order to influence player choices and maintain engagement.

Whether a tightly defined or more open possibility space is designed for a player, their own particular history, play experiences, attitudes, beliefs and values will shape their interaction with and interpretation of meaning in the system. The communication of meaning is therefore mediated by the designer, the system and the player and thus like many aesthetic objects, is

never direct. To complicate matters further, the play space itself can shape interpretation; these live spaces are inconsistent, constantly shifting in population, activity and form and thus can inadvertently lead to variance in play experience and discourses around the game from player to player.

Social play and Meaning-Making

Concepts of play and active participation can be harnessed to explore the contingencies of possibility spaces upon meaning making. Nina Simon believes that participatory projects can allow the institution to be responsive and/or relevant to the lives, needs and interests of its citizens. In an artistic context, Claire Bishop claims that participation and thus, collaborative creativity *"is therefore understood both to emerge from, and to produce, a more positive and non-hierarchical social model."* [26] Broadening active participation beyond interaction with exhibits in the museum could therefore enhance the relationship between institutions and their visitors. Furthermore, play can act as a motivator for co-creation of meaning which is an important process in establishing a community of practice, whether in an exhibition context or more likely, within a curated participatory space. [27] In order to address the situational impact of the 'institution', it may be the case that sociological frameworks for participation within curation and exhibition design are needed. Taking the lead from participatory art much of the impetus behind co-creation is to restore *"the social bond through a collective elaboration of meaning."* [28]

In this way games can also be seen to have significant impact acting as 'social objects', rather than as everyday objects displayed in arcade units. Social objects are objects that allow social networks to develop around them by providing a locus for discussion. [29] Social objects can be personal (we have a direct connection to the object), active (they physically draw your attention to them in space), provocative (a spectacle) or relational (invite simultaneous use). [30] Computer games can be understood to fulfil all four categories whether in their active or provocative situation in space (think of the arcade) or in their nostalgic factors or in the need to have multiple players to make the game work (relational). The social object allows the viewer to direct their attention to a 'thing' rather than an 'other' and in turn can ease social interaction with an 'other' around the 'thing'. [31] Mary Flanagan extends this notion, suggesting that games are in fact social technologies. [32] They can build relationships and interaction not only between the player and the game system but also between multiple players or between players and viewers. *"By playing together, people form close communities and develop a group identity and a sense of belonging."* [33] Such social technologies can be harnessed where active collaboration within a play space can form not only a close community but also through unstructured or semi-structured play, provides a possibility space from which shared meaning can emerge. In this way, play can operate as an organizing system for social meaning making.

Participation can help the individual and the community to make sense of their experiences: *"learning involves an open process of interaction with the environment. This experiential process develops and expands the self,*

allowing one to discover aspects of oneself that were previously unknown.”
[34] Hence it could be said that participation will not only allow players to create meaning for themselves in relation to an exhibit, but interaction within an environment; real or virtual, can help them to extend their knowledge of themselves.

Visitor Agency and Curating Participation

The impetus for museums to become increasingly participative challenges many of the established principles that have legitimized them as civic institutions and consolidate their purpose. Museums established in the 19th century were founded on a paternal model for social improvement to educate the population of growing urban populations with increasing leisure time and disposable incomes. Characteristically part of the Modernist project these institutions embodied the Modernist grand-narrative that sought to collect and categorize objects and artifacts creating taxonomies and epistemologies that ultimately decontextualized objects from their function and transposing new significance onto the object that is indistinguishable from the museum itself. The critique of the Modern museum by Douglas Crimp aligns the crisis of authority in the museum with the crisis of Modernism and the emergence of Postmodernism. [35] In the text of 'On the Museums Ruins', Eugenio Donato highlights the specific issue facing museums curating exhibitions of videogames.

> *Such a fiction is the result of an uncritical belief in the notion that ordering and classifying, that is to say, the spatial juxtaposition of fragments, can produce a representational understanding of the world.*
> [36]

The emerging conventions of videogames exhibition have relied on many of these established strategies resulting in the presentation of exhibits that employ categories and taxonomies based on chronologies, technologies and genre. This approach reinforces the dominant authorial voice of the institution and diminishes the authorial voice of both the game designer and the player. The Museum is a highly structured ritualized space designed to guide visitors through a narrative constructed around the objects selected for display. However, it is the responsibility of the curator to create a coherent narrative that offers visitors access to a digestible experience while preserving the space to construct a subjective response to individual artifacts and their relationship with the situated context. How this meaning making activity is managed is crucial in walking the line between authorial voices. This balance is described by Lois Silverman as a 'blended space' that balances the significance of the messages sent *“from a sender to a receiver to a process of negotiation between two parties in which information is created rather than transmitted.”* [37]

This call for activation of the visitor within a museum is not new. Traditionally in museums, participation has tended toward four models: contribution, collaboration, co-creation and hosted. [38] Each of these models relate directly to the curatorial nature of the exhibition and each presents an

increased challenge to the authorship of experience and meaning making held by the institution. Contribution invites participants to provide materials which will be considered for exhibition i.e. photographs, stories, objects of historical interest. The level of participation is low, the institution remains in control of the design of the exhibition but the opportunity to participate is offered to many. Collaboration invites a small group of community participants (experts, knowledgeable or with experience in relation to the themes of the given exhibition) to be involved in the curation of an event or exhibition to enhance exhibition authenticity in reference to the particular goals of the institution. Co-creation of events and exhibition tends to be driven by the community, where they bring a need to an institution and take the lead on the creation of the event and thus control over the authorship, with support from the institution. Simon also presents a fourth mode which is hosted, much like the community driven approach of co-creation of events who curate and organize exhibitions or event within the gallery space.

As Simon's definitions of participation suggests, engagement and investment from a community is central to success. Broad participation in curation tends to lead to limited/democratic co-creation whereas deeper co-creation takes place with smaller groups. Co-creation is seen as being overall more democratic and thus can enhance the credibility of the institution in the eyes of the stakeholder community. Museums have the option to collaborate with communities in order to maintain cultural relevance. However, in order to achieve this, much like the game designer, the curator is required to let go of some degree of authorship and create a space of possibility within which the community can play.

Curating Possibility
Museums have a range of frameworks and systems for the presentation of artefacts and for the design of participatory experiences. Yet, to better address the 'wildness' unpredictability and coded nature of computer games, game design theory can provide new models for participation and meaning making:

> *As players engage more directly in the design process, the line between gamers and designers begins to dissolve. To fully participate, players will need to learn more about the art of game design. Effective game design can yield spaces that encourage our exploration, provide resources for our struggles for dominance, evoke powerful emotions, and encourage playfulness and sociability.* [39]

Engaging visitors in the process of game creation would require the institution to embrace conceptual uncertainty as a generative source from which possibility can emerge. [40] There are examples of this approach outside of the institutional context, with a range of experimental festivals choosing to break games into component parts and to select a specific part as the sustained focus of participants for the duration of the event. Such a focus on the 'unit operations' of a game allows the participants time and space to actively engage and become familiar with a 'manageable' chunk of the complex process of game development, to demystify its approaches and form

their own understanding of its meaning. [41] Such events often take the form of Game Jams which are often 12, 24 or 48 hour events of intensive game development by a newly formed group of developers. Game Jams are recognized for their benefits to the development community [42], learning possibilities [43] and possibility to disrupt practice [44]. The 'Lyst Summit' [45] for example, focusses upon idea creation and experimentation around a particular theme whereas the Game City and National Video Arcade's 'Jump' Exhibition [46] focuses purely upon the mechanic of the jump and its relation to achieving goals within games.

Game development processes, however, are difficult to unlock for those without technical know-how or design training. For such participants, active participation within or even one way consumption of a digitally driven game jam may offer very limited meaning making opportunities as the language, processes and technical knowledge can be exclusive. Here, perhaps Live Action Role Play (LARP) and other forms of role-play can address such barriers to entry into the design process, by removing the need for computers and technical proficiency and instead focusing upon playable design. Role Play actively engages those who are brave enough to not only play but also perform the design process and game process concurrently. LARP provides scaffolds upon which players, regardless of their experience, can work together, with a facilitator, to co-create knowledge around game development processes. [47]   There have, in fact, been examples of LARP where the facilitator has been left behind by the group of players as they took ownership over the play experience, developing their own unique approach to game design beyond the limits of the given development space. [48]

Videogames exhibitions and Videogames conferences rarely present such participative opportunities for co-creation of knowledge and meaning, however, disruptors do exist in the form of games festivals which embrace participation in order to hand over responsibility for and perhaps deepen knowledge generation in participants. 'Feral Vector', "a festival about making games and game-like things' for example mixes workshops, talks, game jam events, Live Action Role Play and physical making in order to facilitate "*game design, learning and experimentation and* play." [49] The
website claims the event is *"primarily about design, in a way that's still accessible to non-industry people. If you feel like an impostor at games events, you're not only welcome here, we encourage you to attend."* [50] The philosophy of 'Feral Vector' clearly highlights issues in the presentation of, and discourse around, games as aesthetic and social objects; the unusual location (a church in a wood), short time frame and informal approach allow playful experiences to emerge for audiences designed through a carefully curated list of 'presenters' or 'facilitators.' 'Feral Vector' too, found situation to be a key factor in their success, moving from the urban center of London to rural setting Hebden Bridge has provided them with new play opportunities that could not be afforded within a city. [51] Such claims suggest that the creation of a playable space empowers the possibility space.

Similarly, disrupting concepts of situation, 'Now Play This', a three-day games festival hosted in Somerset House, makes use of parts of the building which

are not typically open to the public. [52] The setting provides an informal play space of unfinished walls and concrete floors upon which the festival coordinators carefully situate works to draw visitors through the space. This festival aims to *"showcases the wider possibilities of games: the peculiar, the beautiful and the deeply experimental. It's a place for games that encourage us to play in new and wonderful ways."* [53] Such festivals typically last for 3-4 days, but further approaches to disruption of situation and of presentation can be seen in festivals which locate games in the city space such as "Come Out and Play", [54] and one night only events including 'The Wild Rumpus' [55] and 'Games are for Everyone' [56] which mix the social event with play experiences.

These forms of active engagement with curated non-institutional or temporary spaces represent engagement with the three categories which typically motivate participatory art, as suggested by Bishop: Activation, Authorship, and Community. [57] In this model, activation invites the viewer to become active participant and in turn allows them to take control of their experience of the artwork and in turn meaning making (i.e. social events and playable cities); Authorship promotes collaborative creativity and democratic creation of work, embracing the perceive notion of risk and unpredictability in the process to create a *"positive and non-hierarchical social model"* (i.e. Game Jams, LARP) whereas community seeks to form social bonds through collective meaning making (an opportunity afforded by all of the models discussed above to some extent). [58] Bishop's model, when applied to the institution suggests that harnessing aspects of participatory design whether in curation itself, the design of exhibition spaces or within a program of events could tackle situational issues.

The playful structure of these events also maintains McGonigal's essential games elements of rules, a goal, a feedback system and allow for voluntary participation. Within game systems, an open possibility space can be seen as a discourse between the designer and the player where the game space is the situation within which play conventions are obeyed or co-created. In a museum context, it could be said that the possibility space would be the co-creation of discourse between the curator and player/visitor in response to museum objects, and that the situation, the museum, defines rules for the 'player' such as 'fitting response' and conventions of action, behavior and interaction for our 'player'. [59]

Conclusion

During the consultation workshops and discussions conducted in the *Videogames in the Museum* network the recurring return to participative modes of engagement continued to challenge curators and museums professionals to questions the assumptions about the conventions of their practice and the nature of their institutions. It was through engagement with the stakeholder community of games designers, and development professionals that modes of exhibition and visitor engagement drawn from the world of games and play began to coalesce.

The co-creation of solutions to the challenges facing institutions that sincerely wish to contribute to the understanding of videogames design and the principles of games development was ultimately playful, interactive and consensual. The discovery of new modes of exhibition and engagement were participative, active and collaborative. It came as no surprise to those involved that these processes led to a deeper and clearer understanding of the contingencies and complexities of videogames and the variety of motivations and experiences of players. The parallels between games and museums spaces as rules based environments where participants are invited to construct meaningful experiences through engagements with authored narratives and significant artefacts and events emerged as a conceptual possibility space for new approaches to curating videogames.

This approach not only offers a way to exhibit, display, enact and perform videogames, but by recognizing play and the experience of videogames as socially cohesive, participatory and meaningful it offers a new way for museums to fulfil their social contract with their communities.

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Acknowledgements

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