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Poiesis and Imagination in the Aesthetic Experience : The Moment of Grace in Computer Game Play

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What is the nature of a computer game player's experience? To have a computer game experience is to have a functional experience, one that is tailored to its function as a computer game. This function is defined by the sum of the properties that produce the meaning of a computer game experience, distinct from the other experiences of human existence: the player ascribes *this* particular meaning to his experience instead of another. The properties of this experience can be divided between its many dimensions, such as the technical (*techne*), ethical (*ethos*), aesthetic (*aisthêtikos*), etc., and account for the richness and complexity of human experience. These dimensions cannot be envisioned separately from their combined effects and function as an inseparable whole that define the meaning of life. However, for the needs of our demonstration, we will focus on a study of the aesthetic dimension of the computer game player's experience to show how it deploys itself, whether one is playing games as diverse as *Super Mario Bros.* (Nintendo, 1985), *Mount and Musket: Battalion* (Independent, 2010)¹ or *Trauma* (Krystian Majewski, 2011).

The aesthetic experience

Aesthetic considerations are most often associated with art, and when the question is raised regarding computer games, it is usual to debate whether this media can be seen as art or not. And yet, thinking about the aesthetic computer game experience can exclude such considerations. Basing ourselves on John Dewey (1934), we claim that the aesthetic experience cannot be reduced to the experience of art, and that it can be the experience of a computer game, however we situate ourselves on the question of games as art. According to Dewey, any experience can become an aesthetic experience, for that kind of

¹ *Battalion* is a "total conversion" mod of the commercial game *Mount & Blade: Warband* (TaleWorlds, 2010).

experience is not determined by a defined object (a work of art, for instance), but rather by the lived experience of that object. In other words, the aesthetic experience is not defined by an object's given set of attributes, but by a set of criteria that define the experience's dimension.

As an example, one could think that playing *Trauma*, an independent game by Krystian Majewski, would automatically yield an aesthetic experience, given the game's artistic aims. Taken in the same vein than *Myst* (Cyan, 1993), this game can lend itself to an aesthetic experience in and of itself given the originality of its gameplay and visual treatment. On the other hand, it can be a very boring game for certain players, who will not have an aesthetic experience if the game does not manage to stir their sensibilities, and they will rather turn away from it (an attitude that is contrary to the criteria that define the aesthetic experience, as we will later see).

In this sense, no object can predetermine an aesthetic experience, even if it presents certain characteristics that could favor it, because any experience can become an aesthetic experience. Dewey adds that the aesthetic experience itself is an experience of the ordinary, and not an external experience with other pretensions – associated to the work of art, for instance. Rather, it is a showcasing of characteristics that the player himself selects, a way of magnifying some qualities for enjoyment. The aesthetic experience is an experience of immediate pleasure that is always ongoing, an enjoyment of actual experience that is, in this sense, a form of relationship with the world.

This relationship is a total and unifying experience, a combination of forces that is the opposite of escape. In the case of computer games, it can be conceived as the unification of the player to the game in order to maximize some of its traits: the player magnifies some characteristics for his enjoyment, and has an aesthetic experience of his own computer game experience. As such, the aesthetic experience is nothing else than its self-enjoyment in an ever-unfolding present. As Dewey writes, the aesthetic experience is distinct from experience in general by the fact that it is not bound to a given object or phenomenon: it is lived for itself and constitutes an experience of the experience, becoming its own end by virtue of a constant reflection on its ever-shifting becoming.

World, rules and affordances

The relationship of a subject to the world and its given objects forms the basis of *The Ecological Approach to Visual Perception* (Gibson, 1979), a book turned into an approach that informs many schools of psychology today. The ecological approach posits that the subject cannot be thought of independently of its environment. An important concept put forward by Gibson, that of *affordances*, has already been taken up and applied to computer games by many researchers, such as Dan Pinchbeck (2007). An affordance is a possibility of action that is offered by the environment to a given subject (an animal, in Gibson's terms), depending on its skills and knowledge. Thus a door will be "open-able" to an animal that has the knowledge required to operate a door handle or knob, who is sufficiently tall to reach it, strong enough to push the door once the locking mechanism has been operated, and so on. The very same door may offer completely

different affordances to another animal: a beaver may find it “chew-able” if it is made of wood, and a tiny insect may find it “pass-able” if it presents a wide enough gap.

Affordances in computer games are the result of the meeting of two types of attributes: the in-game objects and rules, and the player’s skills and knowledge. For instance, a skilled player of *Super Mario Bros.* may master different aspects of jumping, such as mid-air steering or purposely limiting the height of his jumps, but the maximal height to which Mario can jump is fixed and inalterable (barring modification of the game’s code, of course). The player cannot exceed the action potential of his player-character, but he may be unable to fully exploit it. To exemplify this process, in *Super Mario Bros.*, a skilled player may run at full speed and duck. By conserving momentum, Super Mario can “slide” under blocks and through gaps which would normally only be “pass-able” by regular (small) Mario; this is referred to by players as the “duck-slide” technique. This is a player-character affordance that must be executed through a player-affordance which requires a certain degree of skill.

Hence, computer games are best thought of in ecological terms since a given game must always work with an implied player, model player, or audience, in mind.² In *Super Mario Bros.*, the duck-slide technique is never required for a player to complete a level. As shown in figure 1, the player can use it to slide under the bricks barring the path in World 1-2 if he is Super Mario, but without this advanced technique, he can simply break the bricks in front of the gap and pass over it. The game thus does not force the player to master this technique, but could have done so with ease. Had the rightmost image below actually been implemented in *Super Mario Bros.*, then its intended player would be different, as the game would require them to master this technique (as solid blocks cannot be broken by Super Mario).

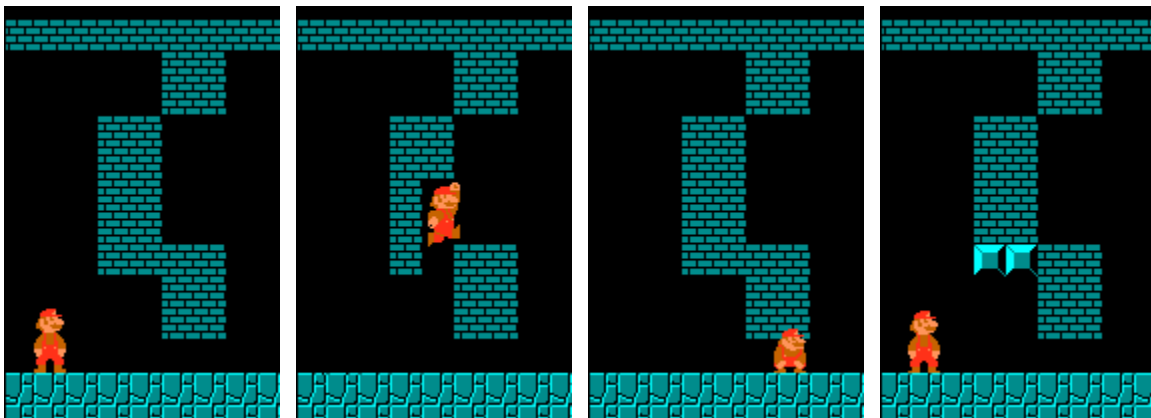


Fig. 1: Leftmost: Super Mario in front of the problem: a small gap.
 Center-left: The obvious and natural solution: breaking the blocks to pass over.
 Center-right: Super Mario executing the duck-slide technique to slide under.
 Rightmost: A made-up case where the duck-slide technique would be mandatory.

² Umberto Eco’s model reader (1979), to name just one theoretical proposition, has already been adapted and questioned in the context of game studies by many authors. We are skipping over the many important distinctions and nuances that could go here so that the paper can stay focused on our subject.

We may say that whatever the game specifically requires, and is not up to the player's freedom and free will in and of itself³, leans more strongly on the functional than on the aesthetic; the aesthetic computer game experience is an experience of free-play achieved through the actualization of affordances – neither “free-play” without any consideration of the game's affordances, and neither the simple performance of required actions without personal creativity (in which case we might say, in accordance with Seth Giddings and Helen Kennedy (2008), that the game has mastered the player). In the case of the duck-slide, there is an experience of the experience, since this actualization, this approach to a game problem, is a case of composition (which we discuss later), and is wholly “unnecessary”. Overcoming the problem is necessary, but the player is free to develop his own creative approach to do so. Therefore, an investigation into the notions of imagination and creativity seems to be in order.

Imagination

A player's imagination is what allows a reflexive return on the computer game experience so that new ways of doing things can be actualized. For Dewey, imagination is a way to bridge the past and the future so that meaning can be produced; we could say that imagination allows the production of meaning through a player's past knowledge and experiences, the future experience of the game, and those which he shapes in the ongoing present. In the wake of Wolfgang Iser and Hans R. Jauss's work in reception theory (Iser 1978, Jauss 1983), Dominic Arsenault and Bernard Perron (2009) have shown how the player's horizon of expectation is shaped by the liminal discursive elements around the game that Gérard Genette (1987) described as forming the *paratext*. The paratext aims to make these expectations match the range of possibilities that the game will offer, and allow the player to engage in the process of testing, discovering, and mentally mapping out these possibilities. The paratext really is, to take up Genette's term, a threshold, linking between the past experiences and knowledge to shape the expectations of the future. It serves an important function as a way of channelling imagination.

As computer games constantly present new situations, the act of playing is always focused on the present task, yet the task is part of a larger quest and network of relationships between objects, computational processes, and gameplay systems that keep unfolding. Gaining access to a new unit in *StarCraft* (Blizzard, 1998) that is stronger and more heavily armored has an immediate, present-moment meaning (something like a « power-up »), but also a second meaning: the anticipation of future enemies or situations that will challenge this newfound strength. The same thing occurs in games like *Resident Evil* (Capcom, 1996), where resources are scarce; when the player is given plenty of health herbs and ammunition, he knows that this « gift » is in truth part of a larger

³ “In and of itself” is important here; by using it, we want to preclude such situations where the player has to perform some mandatory actions that he does not want to do in order for him to “get to the good part”. It is true that he is, on a more global level, playing the game by his own free-will; but within the scope of that voluntary activity, there are some things that *have* to be done, whether the player wants to do them or not. These situations are not lived through by the player “in and of themselves”, but are instrumentalized as part of a longer-term goal: they lack self-enjoyment and the focus on the unfolding present that are key to the Deweyan aesthetic experience.

sequence: undoubtedly, a big fight is soon to come. When considered as part of an aesthetic experience of the game, the player is appropriating all of the game's elements to optimize its ever-renewed present and imagining the optimal ways of dealing with the upcoming obstacles. In this case, imagination is unifying the heterogeneous elements of the game in an idealized whole of which an aesthetic experience is made. Imagination thus allows the anticipation of other unactualized possibles thanks to creation.

Player creativity as a way of uniting with the game

We propose as a hypothesis that Dewey's imagination is in fact the *poiêsis*, presented by the Pre-Socratic philosophers and since taken up by, among others, Heidegger (1953). *Poiêsis* is then considered as "a mode of disclosure (*a-letheia*) of Being" (Ferrari Di Pippo, 2000: 3), an action of world-building, of making manifest that which was nonexistent before. *Poiêsis* is responsible for the openness of Being, and is the source of creation and difference in the world. This creation can be envisioned on two levels, which we evoked earlier in our discussion of affordances: the first concerns the player, his attitude, his knowledge and prior experiences, and his will (what the player manages to achieve), while the second concerns the "computer game" object and the possibilities of aesthetic experiences that are included in its structure: in other words, its potentialities and qualities (what the game allows). We are separating them in order to identify and discuss them, but in practice they work together: this is why the concept of affordances is so well-suited to computer game play. The *poiêsis* deployed by the effort of imagination is what links and holds together the experience of the object as a singular entity, yet always new and always in becoming.

In this sense, our definition of aesthetics is inherited from Wolfgang Iser's theory of aesthetic response (Iser, 1978), a natural choice given Iser's recent work on interpretation as the "productive mapping of ever new territories" (Iser, 2000: 158) stemming from play, and characterized by personal creativity and emergence. Hence the aesthetic experience of computer game play can be seen as the personal appropriation of game patterns and mechanics by the player, singular strategies and modes of play that showcase a subjectivity squarely outside the objectivity of the algorithm. In computer game play, there is creation of an experience by definition new and imaginative for the player, or else *play* proper does not exist: there must be an indeterminacy of results for the player, which is to say the actualization of a part of the virtual by way of his imagination.

The player thus actualizes what has not yet come to pass, thanks to the maximization of an idea included in the rules which the imagination explores. The aesthetic experience in the game is evaluated from the player's pragmatic process as the creator of his own play experience. The creative player has the possibility of turning his computer game experience into an aesthetic exploration, where he is affected by the game and affects it from criteria that fall within the realm of Beauty (rhythm, balance, grace, harmony, etc.). Studies on Beauty can be traced back to the first writings of Greek antiquity, and Huizinga (1938) even affirms that the same terms are used to describe art and play since, all things considered, both equally affect us by way of charm.

The notion of Beauty can be developed by considering it as a relationship between forces where there is rhythm, balance, grace and harmony that allow the thinking of the aesthetic experience. Drawing on Spinoza, we can say that this beauty is not only a relationship between forces, but also an increase in the agency thanks to a union of forces in “composition” (as opposed to “decomposition”). In the order of composition, there is a balance of forces toward unity; in decomposition, on the contrary, there is imbalance and an impossibility of having an aesthetic experience.⁴ For example, the presence of a dominant strategy, “one that surpasses all others by being the best one to choose under any circumstances” (Rollings and Adams 2003, p. 244), is an instance of decomposition: if some strategies are clearly and invariably better than any other, they render any other choice moot. Hence any player’s agency is potentially reduced – unless that player is not trying to play “to win”, to maximize his efficiency or chances to win. There is composition when the opponents fight in a balanced manner, in a union of rhythm, grace and harmony.

Just as the surfer unites with the wave instead of fighting against it (to take up Deleuze’s example), the player unites his forces to the game’s and the other players’ (in the case of multiplayer games) to increase his agency and to maximize the possibilities included in the game’s structure. In the aesthetic experience, there is composition of the player to the game and the other players. Like Dewey, we posit that the aesthetic experience is an experience of unity: it is being “as one” with the game and the other players, uniting forces to increase them and maximize the experience – which then becomes an experience of the experience. We could push the idea further and speak of a moment of grace to describe the very moment when the player maximizes his forces to those of the game and the other players, when what was until then virtual is actualized so that the player can experience it – becoming an aesthetic experience.

The moment of grace of the aesthetic experience

This may seem unproblematic, but some questions are soon to be raised: is the moment of grace the point in time when the player executes the actions, or the moment where he understands how the elements can connect together? In many action games, those two moments can occur in near-simultaneity. However, it is not unusual for players of strategy games to think of their next possible moves or of alternative strategies when they are not playing the game, and are in mundane settings. This attests to the role of imagination in Dewey’s definition of the aesthetic experience, as a function bridging the past and the future; and it also requires that we identify two particular points on the timeline of the aesthetic experience: the moment of grace, where the strategies and virtualities are actualized and coalesce together to form a blissful balance; and the pregnant moment, following Gotthold Lessing (1766). Originally coined in the context of painting and sculpture, the pregnant moment is the moment of maximum dramatic and

⁴ When examined in the context of multiplayer games, this notion ties into issues of fair-play and grieving: the griefer may be the player who rejects any form of conformism to the game rules or objectives and cares not about the balance of the game. Whereas most competitive players will stop playing a game that is unbalanced, griefers will keep playing them as long as they can harvest the imbalances in their favor. These issues, however, would certainly benefit from further in-depth studies.

representational impact. We are adapting Lessing's concept to a degree since it was used as a way to identify that moment as part of a narrative of which the particular object was a manifestation. Our usage of it, however, is not focused on the object itself, but on the experience of a given player. This is because the interactivity inherent in game play entails a measure of variation between the temporal unfolding of individual players' play-throughs of a given game. Even with this important difference, the pregnant moment is an important and useful concept. It is not, like a portrait or a still-life, an image to be taken in isolation, but rather it is a part taken out of a whole (a given scene or event); it relies on the viewer's imagination to reconstruct the rest of the scene (typically, the action that is about to take place). The pregnant moment, as a springboard for the imagination and as a part taken out of a whole, plays an integral role in the Deweyan aesthetic experience. Applied to the computer game context, the pregnant moment can be assimilated to the « Eurêka! » moment: that time at which things « click » together, when previously-seen or known possibilities are envisioned in a novel way, or when a new strategy is conceptualized. The moment of grace then follows when that new plan is put to the test and reveals a measure of previously unsuspected beauty.

Just like the aesthetic experience, the moment of grace cannot be defined in transcendental terms for all players: it is unique and immanent to the player. It is not defined by a sum of traits predetermined by the object, but by criteria that define the dimension of the player's experience. This moment can be, in the instance of a multiplayer game, when all the players unite their forces at the same time, in harmony, in rare unity. For example, players of *Mount and Musket: Battalion* (a mod of *Mount & Blade: Warband*) may have lived a moment of grace when they waged an epic 125-player battle, with each player united with the game and the others.⁵ Even though the French lost, the union of players, their synchronicity both with themselves and their adversaries, and their coordinated actions are elements that can be considered to be part of the aesthetic experience. In this sense, victory or defeat is not a determinate criterion of aesthetic experience since this type of experience does not answer to any goal other than itself. The technical experience is still happening, as the players need to properly manipulate their in-game objects and interface; but that experience is doubled by an aesthetic experience that takes predominance over the functional considerations of "playing the game" in the most basic sense (that is closer to "being played by the game"). This particular experience is lived in and of itself, by virtue of the game: the *Mount and Musket* players view their placement on the frontline and the harmonious execution of their actions as more important than winning, or even fighting. The battle must, first and foremost, be « beautiful ».

Though the object does not entirely determine the experience that can be had of it nor can the player do whatever he wants with any given game, there exists a correlation between, on one hand, expertise and mastery over a game, both for knowledge and skill (through the player's exploitation of the affordances), and, on the other hand, the actualization of a fully-developed aesthetic experience, that is to say, the actualization of the game's ideal (*idealis*) aesthetic (through the game's attributes that shape the affordances). Indeed, the

⁵ <http://www.youtube.com/watch?v=c5Iu1lT0MNQ> (December 22nd, 2011).

player's imagination depends on his acquired knowledge and skills, and the more it can access, the stronger it will be since the player will be afforded more possibilities of action. If the player does not know the game or is unable to execute some actions, his aesthetic experience will be limited to those affordances which he can actually make use of.

Conclusion

In other words, the shaping of the potential power of creation that lies in the relationship between the player and the game-object (the aesthetic experience) depends on the knowledge, skills and prior technical experiences for the full blossoming of the possibilities and potentialities of a computer game. According to the foucauldian paradigm of knowledge and power, the more a player knows a game, the more he can unite with it and maximize his forces to the game's to turn his experience into a unique aesthetic experience by virtue of the process of creative appropriation. It is in this sense that there is creation, *poiêsis*: a new organization of forces by virtue of the player's imagination, working into his relationship with the game, whether it matches what the game's designers or its other players might expect or not. We could thus propose a definition of the possible aesthetic experiences according to whether one pursues the game's stated objectives or not. In the first case, the player's aesthetic experience inscribes itself into the *ludus*, and in the second, it is rather tributary to the *paidea* (Caillois, 1958). This opening towards a categorization of aesthetic experiences would necessitate closer inquiry, but for now we can ascertain the uniqueness of the computer game aesthetic experience. Regardless of whether the player plays as he is expected or not, from his own perspective, he actualizes new possibles and invents for himself a new experience; that is the reason why we claimed earlier that the aesthetic experience is evaluated from the player's pragmatic process as the creator of his own play experience. As such, the aesthetic experience becomes a way of testing oneself and cannot be thought of outside the ethical experience: what kind of experience will the player be interested in having (both for himself but also for the others in the case of multiplayer games), and what will he make of his freedom and creativity? It is no surprise that, ever since the Greek Antiquity, many philosophers have approached play by associating it with aesthetic but also ethical considerations.

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The use of skill and imagination in the creation of aesthetic objects, environments, or experiences that can be shared with others. Encyclopedia Britannica Online. Art through the Eyes of the Beholder Art displays a special type of beauty Art mirrors some kind of essential reality or truth Art expresses what is paradoxical, complex and ineffable Art challenges perceptions and habitual ideas, making things fresh and new Art gives renewed appreciation and deeper understanding An Aesthetic Response. Basic Elements of Performance What is performed Composition, scenario, play, dance, act The personnel and resources involved Performers, production elements The audience Who? Where? Defining Performance Possible Definition Games also enable players to develop skills in building friendships and support networks. This is especially powerful for children who might have trouble doing the same in 'the real world'. TED. Sited in the hippocampus, the area in question was markedly more developed and larger. The hippocampus is also responsible for regulating emotions, and long-term memory. The final, and perhaps most worrying part of the study, relates to addictive tendencies. This is in part due to the influence of neural reward feedback when playing games. Scientific research incorporated in the review showed a clear demonstration of functional and structural changes to the brain responsible for this normal brain activity. Keywords: aesthetics, computer games, player experience, poiesis, moment of grace What is the nature of a computer game players experience? To have a computer game experience is to have a functional experience, one that is tailored to its function as a computer game. The aesthetic experience Aesthetic considerations are most often associated with art, and when the question is raised regarding computer games, it is usual to debate whether this media can be seen as art or not. And yet, thinking about the aesthetic computer game experience can exclude such considerations. players. which of the following are reasons that video games become more expensive to produce? - writers and programmers can demand more money once their games gain popularity. -new, more highly sophisticated tech for producing video games is more expensive. in the first 2 months on the market, _ sold 8 million units and became the fastest-selling electronic device in history. kinect. which of the following companies leads in video-game sales, with nearly 50% of all sales? EA. how much does development generally cost for today's average game? Conversation Games Video Games. The Aesthetic Experience of Games Part 1. written by Entropy April 11, 2014. Byron: Part of the problem is that mainstream games have gotten so bloated (in terms of budget and people) that they have to be played safe, from a financial risk point of view. They are too expensive to be anything but entertainment. That's why almost all of the more artistic game experiences come from small, indie game companies. In the spaceship the game rewards you with, is a desk with a computer screen and what looks like a large thermos can (of coffee?). That was such a fascinating touch, among all the laser guns and lightsabers, there was something as common as a coffee can, which made sense for a character who does a lot of reading of files and data.