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Against Procedurality

by Miguel Sicart

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Abstract

This article proposes a critical review of the literature on procedural rhetoric, from a game design perspective. The goal of the article is to show the limits of procedural rhetorics for the design and analysis of ethics and politics in games. The article suggests that theories of play can be used to solve these theoretical flaws.

Keywords: Procedural rhetorics, critical theory, ethics, politics, game design, game ontology

Introduction

It all starts in a sanitized environment. Steel, glass, concrete, the straight lines of the international style of architecture constitute a "modernist" space. We don't know yet the purpose of this building: hospital or school, where are we? Soon we learn: it's Orly airport, the starting point of Tati's masterpiece *Play Time* (Tati, 1967). The actors appear, following straight lines, turning with sharp 90 degrees angles, respecting what the architecture tells them to do. Slowly, though, things change, until the film ends with an exhibition of fluidity, live, and beautiful curves.

On the DVD commentary for the film, critic Philip Kemp paraphrases Tati: "If Playtime has a plot, it's how the curve comes to reassert itself over the straight line" (Tati, 1967; minute 7:20). In this article I will argue that this line should also be the plot for game studies.

This article questions the capacity of proceduralist rhetorics to address issues on the morality, politics, or cultural impact, particularly in multiplayer games. The purpose of this argument is to problematize the validity of the procedural rhetoric. To do so, this article takes a game design perspective akin to that taken in some procedural rhetorics (Bogost, 2007; Flanagan, 2009), but expanding it to include creative play (DeKoven, 2002) as the privileged way in which games act as rhetorical artifacts.

Besides an initial critical close reading of the classic proceduralist literature, this article will introduce a detailed discussion of the concept of instrumental play, expanding it from its use in game studies (Taylor, 2006) to a more philosophically oriented concept (Horkheimer & Adorno, 2010) that can be used to explain not only the values embedded in

particular design choices, but also the way in which games shape player ethics, or attempt to.

This article is divided in three sections. The first section presents a close reading of the texts that conform the core proceduralist tradition. In the second section, the concept of Instrumental Play will be introduced. It will be discussed in light of previous uses of the term in game studies. Section four will focus on the critique of proceduralist rhetoric and the suggestion of a set of concepts that will allow for the understanding of games as systems without sacrificing the presence of the player and play as fundamental elements of the political and ethical relevance of games.

This article may be read as a confrontational text, as a diatribe against a particular list of scholars, or against a particular school of thought in games research. This is not my intention. As the author of the arguments presented in this text, my intention is to provoke as much as to discuss. I believe that procedural rhetorics has helped deepen the understanding of some important notions on the ontology of games. However, as much as it has contributed to further our understanding of games, it has also fostered a way of researching and designing games that deprives them of the richness, pleasures and challenges that players bring to the game. My goal here is to engage in a productive conversation with proceduralism, bringing back players and advocating, finally, for a player-centric approach to the design of games, particularly the design of ethics and politics in(to) games.

The Proceduralists

This section intends to problematize the underlying game design principles behind proceduralism. To simplify matters, let us state that the proceduralist discourse started as a ludological focus on how games can convey political messages. This may not be the best historicist approach, as the origins of this idea can be tracked to arguments presented in New Media Theory in the late 1990s and early 00s, specially the works of Lev Manovich (2002) and Janet Murray (1998). However, this article does not want to trace a direct history of the proceduralist argumentation, but more of a historical sketch of some of the origins of this way of understanding videogame analysis and design.

Therefore, the starting point of the procedural rhetoric school is marked to the publication of Ian Bogost's first two books (2006, 2007). It is the success of Bogost's arguments not only across the academic body but also in the games industry what makes proceduralism a popular way of conducting computer games scholarship. Again, this article does not want to single out an academic, but given the popularity and influence of Bogost's work, both in academia and in the games industry, taking his work as a starting point centers the discussion on what this article understands as proceduralism.

If we look at the emergence of the proceduralist "school" from a historical perspective of game studies, we then may be tempted to consider this theory as a continuation of the formalist work laid out by the original "ludologists". Proceduralists[1] though did not claim any contentious approach to the narrative possibilities of computer games. What proceduralism (and ludology) argued was that computer

games present a technological and cultural exception that deserves to be analyzed through the ontological particularities that make computer games unique, in this case, the fact that they have a "procedural nature".

The proceduralists take their starting point in Murray's statement that digital games are unique, among other things, because of their procedural nature (Murray, 1998), that is, because they are processes that operate in way that is akin to how computers operate. The argument, of course, did not stop there: procedurality is understood not just as an ontological marker of computer games, but as the *specific* way in which computer games build discourses of ethical, political, social and aesthetic value.

While Murray's work initialized the use of this term, it was Ian Bogost who first provided a comprehensive philosophy and rhetoric of proceduralism in *Unit Operations* (2006). While the argument of the book is too detailed to summarize, may a quotation serve as the starting point for understanding where proceduralism started:

"(…) games create complex relations between the player, the work, and the world via unit operations that simultaneously embed material, functional, and discursive modes of representation" (Bogost, 2006, p.106).[2]

Proceduralism is interested in the ways arguments are embedded in the rules of a game, and how the rules are expressed, communicated to, and understood by *a* player. Via their simulation rules, games present embedded values, and it is the players' appropriation and understanding of that model that make a game have meaning: "A simulation is the gap between the rule-based representation of a source system and a user's subjectivity" (p. 107), and "(…) the unit operations of a simulation embody themselves in a player's understanding. This is the place where rules can be grasped, where instantiated code enters the material world via human players' faculty of reason" (p. 99).

Proceduralists claim that players, by reconstructing the meaning embedded in the rules, are *persuaded* by virtue of the games' procedural nature. While the argument that objects can embody values in their design is not new (Winner, 1986; Akricht and Latour, 1992; Latour, 1992), and has even fostered a school of design thinking and philosophy of technology (Verbeek, 2006), applying this line of thought to computer games innovated in at least two accounts: first, it provided an argument for those invested in considering computer games as a valid cultural means of communication; and second, it provided a new theoretical foundation, based on a multidisciplinary approach to computer games scholarship, to the serious games movement. Proceduralism both justified the cultural validity of computer games providing arguments for the exceptionality argument (computer games as unique, expressive cultural objects), and opened the possibility for a new take on serious games that combined design approaches with a strong humanist discourse.

Bogost's argument on procedurality is nuanced thanks to the inclusion of the concept of "simulation fever": "Working through simulation fever means learning how to express what simulations choose to embed and to exclude" (Bogost, 2006, p. 109).[3] Simulation fever inserts the player in the process

initiated by the game. This allows for different interpretive strategies that justify the players' complex understanding of the games' procedural message: "One method [for interpretive strategies] would encourage player critics to work though the simulation anxiety a simulation generates. Part of this process takes place within the gameplay, as the player goes through cycles of configuring the game by engaging its unit operations. Another process of configuration has to do with working through the player's subjective response to the game, the internalizations of its cybernetic feedback loops" (Bogost, 2006, p. 108-109).

"Simulation fever" attempts to formalize how the system contains meaning, and how the player experiences it. Games, procedurally understood, convey messages and create aesthetic and cultural experiences by making players think and reflect about the very nature of the rules, in the way the rules allow them to: "Both mental modeling and cognitive mapping show how the interpretation of a games relies as much or more on what the simulation excludes or leaves ambiguous that on what it includes" (Bogost, 2006, p. 105).

The logical next step in this argumentation is to take the theory on procedural rhetoric and apply it to those games that convey serious topics, understood, following Bogost, as "persuasive games". In the 2007 book of the same title, Bogost argues: "for my purposes, procedural expression must entail symbol manipulation, the construction and interpretation of a symbolic system that governs human thought or action" (Bogost, 2007, p. 5). The next move in the consolidation of the proceduralist paradigm was to extend the general theory of unit operations to the field of serious games.

The importance of this conceptual move is double: first, it could be understood as a validation of the theory by tapping on the seriousness of games, on the fact that the theory not only explains how games operate, but also how games *can* address serious topics. And second, it relates this theory with the larger field of the study of serious games, therefore providing both a tradition for proceduralism to relate to, and an innovative approach in a field that was slightly stagnated in its application of design of serious games and the evaluation of their results with actual users (Egenfeldt-Nielsen, 2007).

This historical argument suggests that proceduralism takes a formalistic approach to the study of games, inherited from a particular understanding of ludology, and turns it into both an analytical theory and a design paradigm by validating its existence through its application on serious games. More colloquially: if proceduralism explains why games can address serious topics, then procedural rhetoric is a valid theory for the understanding of games.

The conceptual move that Bogost plays in *Persuasive Games* deals with the application of the procedural uniqueness of computer games to the expression of serious topics. In other words, games can convey complex messages *precisely because of their procedural nature*: "Computation is representation, and procedurality in the computational sense is a means to produce that expression" (Bogost, 2007, p. 5)

Even though the elegance and complexity of the argument justifying the existence of a "procedural rhetoric" is sufficient to consider *Persuasive Games* a landmark in game studies, its success has also implied the widespread acceptance of procedural rhetorics as a way of understanding videogames as

capable of communicating complex ethical and political messages.

But what is the message that proceduralism communicates? Why is procedural rhetoric a *better way* of understanding the seriousness of games? In essence, procedural rhetoric argues that it is in the formal properties of the rules where the meaning of a game can be found. And what players do is actively complete the meaning suggested and guided by the rules. For proceduralists, which are after all a class of formalists,[4] the game *is* the rules, both in terms of its ontological definition (the *what* in what is a game), and in its function as an object that creates meaning in the contexts in which specific users *use* it.

This rhetoric makes their systemic nature, their rules, fundamental for understanding the expressive capacities of games: ""while we often think that rules always limit behavior, the imposition of constraints also creates expression" (Bogost, 2007, p. 7). Proceduralism often disregards the importance of play and players as activities that have creative, performative properties. In this sense, the meaning of a game, of any game, lies in its rules, as presented to players who experience them by means of simulation fever; that is, completing the meaning of the game communicated through rules using their player repertoire (Juul, 2005). In the proceduralist tradition, play is not central to understanding the meanings created by (playing) games, since it is the rules that create those meanings: "(...) play refers to the possibility space created by processes themselves" (Bogost, 2007, p. 42).

As previously hinted, *Persuasive Games* is not only a theoretical analysis of how games convey messages; it also provides a suggested, implicit approach to the design of these games. If proceduralism has gained a stronghold in games research is because of how it resonates with the practices and discourses of game designers - practices and discourses centered on how the designer or design team creates experiences by means of *designing systems*.

In this sense, it is perhaps Mary Flanagan's *Critical Play* the most interesting design-oriented proceduralist text (Flanagan, 2009). Even though Flanagan's work is very much focused on crafting the history of how games have used play to afford dissent and player expression, and in this sense her extremely valuable work can be understood as peripheral to the core of the proceduralist school, there are still hints of proceduralism in her understanding of games. The proceduralism of Flanagan's approach can be found in the argumentation on how and why games convey ethical, political and other complex, "critical" messages: "Games are frameworks that designers can use to model the complexity of the problems that face the world and make them easier for the players to comprehend. By creating a simulated environment, the player is able to step away and think critically about those problems" (Flanagan, 2009, p. 249).

Game designers are supposed to create play, that is, a particular behavior in players. Proceduralists believe that those behaviors can be predicted, even contained, by the rules, and therefore the meaning of the game, and of play, evolves from the way the game has *been created* and not how *it is played*; not to mention when and where it is played, and by whom.

Even successful game designers like Brenda Brathwaite, who is spearheading the use of games as tools for expressing serious messages, apply the procedural rhetorics discourse. In her practice as a designer, Brathwaite has explored how games, through play, can convey complex ethical experiences. Even though she has publicly explained how important the context of play for her games and the experiences of the players are for her design process and intention (Brathwaite, and Sharp, 2010), in her writing she still resorted to the tried argument of rules conveying the meaning of the game: "The rule set of this game, of any game, is the single most important thing a designer crafts. The rules of the game are the game. The pieces, the parts, the board? The table, computer or console? The graphics, the viewpoint, the angle of the camera? They are all there for one reason only - to allow us to play out the rules. They embody the game, they help to immerse us, but they are not the game. The rules are." (Brathwaite and Sharp, 2010, p. 317).

It is not coincidental that Brathwaite and Sharp's article is titled "The Mechanic is the Message". This obvious pun on McLuhan is too a classic proceduralist statement: the meaning of the game is not on the act of playing it, but in whatever meaning the designer embeds in the system itself. Interestingly enough, when practicing designers write in academic contexts such as those reviewed in this article, they resort to proceduralism in what can be interpreted as a search for validation, as well as a way of justifying their author-centric approach. As much as games are different from other media, some game designers still write and behave like "authors" to justify their processes, arguments, and decisions.

In fact, as a sign of the times, in the same anthology in which Brathwaite and Sharp published their work, Chris Swain signed a chapter with the same title, and roughly the same arguments: "That is, the interactive, goals-based structure of games greatly affects how messages that are embedded in games are understood by users. The title emphasizes "mechanics" because what the user does when interacting with a game is at the heart of how messages are understood, learned, and internalized. And they are at the heart of what makes games unique from other media." (Swain, 2010, p. 218).

Even though Swain, like Fullerton (2008) and Zimmerman and Salen (2004), is an advocate of play-centric design, his understanding of play-centrism is reasonably influenced by proceduralism: play centric only means that games are developed with players involved in the design process, but not claiming that the meaning of the game is conveyed in the act of play. Again, rules control the meaning of the game, and players, by following rules, create the meaning that is already predetermined by the designer(s).

For the proceduralists, a game means what the rules mean, and understanding what games are is to understand what their rules describe. Players are important, but only as *activators* of the process that sets the meanings contained in the game in motion. The rules constitute the procedural argumentation of the game, and play is *just* an actualization of that process. Furthermore, games create meaning thanks to their formal nature, and that meaning is completed when players engage in the processes of the rules of the game. Meaningful play is playing following the rules, and the

meaning of a game comes from the meaning of following the rules.

These statements supposed a very important landmark in game studies. It could be argued that without these ideas becoming so central in the research literature, game studies could still be thought as a subset of film and (new) media studies, not paying attention to some of the cultural and ontological specificities of games. However, the success of these ideas, and their reception by the game industry, also imply a certain narrowing of what is understood as the aesthetic or cultural potential of games.

These ideas have permeated the work of game developers, particularly of those independent developers who acknowledge publicly their commitment to the advancement of games as a form of expression. In the commentary to his game *The Marriage*, Rod Humble explicitly claims that he "wanted to use game rules to explain something invisible but real" (Humble, 2007). Humble created an interesting conceptual game that abstractly represents marriage by means of rules, disregarding any other means of conveying meaning. The game was created, as the author admits, as a follow-up on an article in which he argued for the uniqueness of games based on their rule-based ontology (Humble, 2006). However, the interesting (relative) failure of this game is that the designer had to include, as part of the website through which the game is distributed, an explanation of the rules and of what the game means. It seems that paired to the trust in the procedural discourse there is a mistrust on the capacity of simulation fever to complete the meaning of the game in the way the designer things is appropriate.

Designer Jason Rohrer took a similar perspective when presenting his game *Passage* (Rohrer, 2008). Even though Rohrer explicitly claims that the game has many interpretations for different players, he still published an author statement, which will obviously affect the way the game is interpreted. It seems that even though the idea of rules and procedurality as conveyors of meaning is present, those game designers that have embraced that approach still need to make the statements more clear, to make sure that their players "get" the games. If rules contain the meaning, what is the need for an author statement?

Perhaps the most interesting case of appropriation of the proceduralist discourse in terms of game design, both practice and theory, is that of Jonathan Blow. Author of the independent classic game *Braid*, Blow has also spoken publicly about the importance of games for helping players grow personally (Blow, 2010). However noble these ideas are, and regardless of how exceptional a game *Braid* is, Blow's position is still that of a proceduralist: "Seeing the rules unfold into compelling puzzles, I felt like I was tasting a little bit of Truth" (Blow, 2010; slide 21). Rules and meaning are created, and contained by, the puzzles - what players do is *complete* the meaning of the rules, derive meaning from a system, rather than focus on the creativity of play, since it is not the activity what is important, but the system, since "systems answer questions" (Blow, 2010; slide 22).

It would be possible to argue that perhaps these designers do not intend to be considered "designers", with all the cultural and methodological implications of the term, but "artists". This change would allow us to read their statements in a different way - as a *poetic* rather than as an explanation of design. The

implications of this change of perspective are troublesome, particularly if we account for the conceptual mess that "art" and "artists" are. But let this thought be the anchor for the final critique of these "author statements": perhaps their biggest problem is that they are ill-defined, at once pretending to be art statements, theory, and perhaps even scholarly work. This epistemological problem, while not directly tied to the proceduralist discourse, might as well weaken the important theoretical and practical successes of proceduralist thinking.

In the next section, I will analyze this proceduralist understanding of games from a critical theory perspective, introducing the concept of instrumental play as a critical review of the meaning implied by the systemic dominance of rules in the understanding of games that proceduralists argue for.

Understanding Instrumental Play

The assumption behind mainstream proceduralism is that the meaning of games is contained exclusively in the formal system of the game. What players do is to reconfigure the meanings embedded in the rules defined by the designers. Playing, then, becomes accepting *and learning from* the system-based message embedded in the game.

One of the main strengths of proceduralism, considered from a designer's perspective, is that it grants great power and influence to the designer. Of course, educated designers, reflective practitioners (Schön, 2007), are aware of players' creativity, and are cautious when arguing for the full extent of the proceduralist perspective. However, as it was suggested in the previous section, in their writings some designers still resort to proceduralism as the main argument for justifying both their artistic ambition and the possibility of games to create complex ethical and political messages.

Again, procedurality claims that it is the system of rules and mechanics that conveys the message of the game; players should follow those rules in order to configure the designer-encoded meanings by means of "simulation fever" and the ambiguity of the simulation,

This understanding of games, however, fosters the idea that to design ethical or political experiences through games is to codify arguments in the game system. When playing by those rules, players will be ethically or politically affected, or *persuaded*. The proceduralist claim for the effectiveness of games as a means for social and political content is centered on the formal nature of games, as much as the argument for games being art defended by the proceduralists is based on the fact that games have rules designed to create experiences. If it is in the rules, it is what the game *is* and *means*, therefore preserving the designers' authority and a relatively unidirectional communication model, hence the aforementioned importance of author statements in the work of some independent developers. However, this model takes away the importance of play and players in the configuration of the ludic experience. In this sense, proceduralism is a model that calls for instrumental play.

Instrumental play is a concept that, for the purposes of this article, adapts the theories of Adorno and Horkheimer to the

context of explaining the limits of understanding games as mere procedural systems of meaning. The term "instrumental play" has been used before in game studies (Taylor, 2006). This chapter introduces another interpretation of the term, expanding on previous work but focusing on a more precise definition oriented to explaining the ethical and political underpinnings of proceduralism.

Instrumental play is a take on the concept of instrumental rationality first written by the Frankfort School of critical theory in the 1950s. Essentially, instrumental rationality is an argument used in the critique of modernity and its faith on a model of reason that, despite its focus on prove and evidence, is still deeply rooted in myth. The fundamental tension between myth and reason, and the excessive focus of enlightenment on reason as ends for the means of the modern revolution. In other words: reason becomes an end, a justification for all actions, and what Enlightenment does is to rationalize all processes in order to justify them, even if those processes are deeply rooted in myth, in the irrational, in those aspects outside of the frames of rationality.

Horkheimer and Adorno's critique of enlightenment is one of the fundamental texts in critical theory. However, this is not the place to write an exegesis of it. The purpose of this section is to introduce some of the key aspects of critical theory as relevant for defining the type of instrumentality that explains how proceduralists understand play.

For proceduralists, games have meanings that are prior to the act of playing the game, and somewhat determine the meaning of the game; there is an essence to any game, and that essence is to be found in the rules. In words of *The Dialectic of Enlightenment*: "For enlightenment is as totalitarian as any system [...] for enlightenment the process is always decided from the start" (Adorno and Horkheimer, 2010, p. 24). Much like Enlightenment, then, proceduralism is a determinist, perhaps even totalitarian approach to play; an approach that defines the action prior to its existence, and denies the importance of anything that was not determined before the act of play, in the system design of the game.

The problem with this understanding of reason is that, in critical theory terms, it is used to substitute myth and ritual in our culture, becoming the center of cultural and economic modernity: "the technical process, into which the subject has objectified itself after being removed from the consciousness, is free of the ambiguity of mythic thought as of all meaning altogether, because reason itself has become the mere instrument of the all-inclusive economic apparatus."(ibid, p. 30). But play belongs to the myth domain (Huizinga, 1992; Gadamer, 2004), to the area of rituals as much as to the domain of reason. If modernity despises ritualism, then games and play should shy away from what cannot be reasoned. Games, then, become an instrument for reason, and not for play.

This leads to an understanding of play, and leisure, as mechanical outcomes of processes; outcomes that follow the same production and consumption models than labor: "Amusement under late capitalism is the prolongation of work (...) mechanization has such power over a man's leisure and happiness, and so profoundly determines the manufacture of amusement goods, that his experiences are inevitably afterimages of the work process itself." (Adorno and Horheimer, p. 137). Proceduralism, with its call for systems at

the core of the essence of games and its disregard for expressive or ineffective play, turns the act of playing a game into a labor-like action, into work towards an externally decided, predetermined, and rational outcome designed by others than the players. Play becomes *external* to the player and the play context.

In this sense, simulation fever, which is supposed to be the argument proceduralists use to justify the ambiguities brought by players, is nothing but the guided process of meaning-making in which a player, reconstructing the system as designed by an author, engages with when playing a game for other means than play. Again, this is a situation that echoes those Horkheimer and Adorno critiqued: "No independent thinking must be expected from the audience: the product prescribes every reaction: not by its natural structure (which collapses under reflection), but by signals. Any logical connection calling for mental effort is painstaikingly avoided. As far as possible, developments must follow from the immediately preceding situation and never from the idea of the whole" (*ibid*, p. 137).

But perhaps the most important element that defines instrumental play is how designers adopt the idea of a systems-centered game ontology in order to rationalize not only the design of the game, but also its outcome. It is almost as if proceduralists were designing against play, something that resonates with Horkheimer and Adorno's critique: "[...] the prevalent ethos is suspicious of anything which is miscellaneous, or heterogeneous, of anything which has not clearly and unambiguously been assigned to its place" (p. 190). Play is the unknown and the uncontrollable, and by building an ontology based on designer-centric reason, the proceduralists eliminate the myth and the ritual from play, and encourage an instrumental approach to games that is exclusively guided by the rules, norms and processes embedded in the game system.

In terms of understanding games, instrumental rationality points at the fundamental tension between play and gameplay. Play is at the core of what games are. Play is the experience of a game by a player, and play is a creative, appropriative process of understanding and engaging in a dialectic relationship with the game system and with other players (DeKoven, 2002). Play is appropriation, creation, expression, and to a certain extent submission to the rules of a game. Play is everything about a player engaged in a game, and less about the rules of such game.

The idea of the importance of rules for understanding play and games is not new in play research. Philosopher Bernard Suits wrote: "Rules are the crux of games because it is the rules of any particular game that generate the skills appropriate to that game" (1988, p. 19). This idea echoes some of those foregrounded by Caillois: "(...) the game has no other but an intrinsic meaning" (2001, p. 7). But play theory is a much wider and deeper field than that concerned with games, and it is in the philosophy and anthropology of play where arguments against procedurality can be found.

Games create, frame and encourage play - but what is play? Caillois defines it as "a free and voluntary activity, a source of joy and amusement (...) play is a separate occupation, carefully isolated from the rest of life, and generally is engaged in with precise limits of time and place" (*ibid*, p. 6)". Again, this definition of play is very much engaged with the

nature of games. But there is more to play than just this. Eugen Fink gives play a different meaning, a metaphysical one: “"From the beginning, play is a symbolic act of representation, in which human life interprets itself" (1988, p. 107). Play is more than just engaging with the rules of a game, it is a creative, productive experience: "Human play is a creation through the medium of pleasure of a world of imaginary activity" (ibid, p. 106).

This implies that the meaning of a game cannot be reduced to its rules, nor to the behaviors derived from the rules, since play will be a process of appropriation of those rules, a dialogue between the system and the player, or, as DeKoven puts it: "On the one hand we have the playing mind - innovative, magical, boundless. On the other is the gaming mind - concentrated, determined, intelligent. And on the hand that holds them both together we have the notion of playing well" (2002, p. 49).

This means that the meaning of a game has to be problematized, and not located exclusive on the rules. In fact, there are several instances in which we find the meaning of play: "(...) we must distinguish between the intrinsic meaning of play - the meaningful bond between things, actions, and played relations - and the external meaning, the meaning of play for those who initiate it and take part in it, as well as the meaning it is supposed to have for the spectators" (Fink, 1988, p. 104). This way of thinking liberates us from considering that players are determined and conditioned by the game rules; in fact, it considers that the player can be reflective precisely by abandoning the rule-determinism: "The player of games, if reflective about what he is doing, realizes that even beyond the success of winning the game, there is the interest he takes in the very act of playing itself (...) to the player, the game, if properly constructed, presents not so much a challenge-in the usual sense of the word-as an opportunity to experience possibility" (Esposito, 1988, p. 115)

Games structure play, facilitate it by means of rules. This is not to say that rules determine play: they focus it, they frame it, but they are still subject to the very act of play. Play, again, is an act of appropriation of the game by players.

This understanding of play contradicts the designer-dominant perspective of the proceduralists, all too focused on rules and systems and their meaning. Play, for being productive, should be a free, flexible, and negotiated activity, framed by rules but not determined by them. The meaning of a game, its essence, is not determined by the rules, but by the way players engage with those rules, by the way players *play*. The *meaning* of games, them, is played, not proceduraly generated.

But proceduralism has succeeded in convincing a large body of academics and designers that the meaning of a game is in its rules. If we examine this claim closely, we will perceive how the argument for proceduralism enforces a type of instrumental play that eliminates the need for a player as an active configurator of the meaning of the game.

If the meaning of a game is to be found in its rules, or in its systemic nature, then players who do not understand the meaning of the game are playing the game the wrong way. Because play, in the proceduralist creed, is ultimately subordinated to the rules and systems it must reconfigure. What players bring to the game is their repertoire, and their will to, by means of simulation fever, complete the meaning of

the game and experience what the designer had created for them.

Arguably, these designers are aware of games, and are in fact very concerned about player experience (Blow, 2007; Blow, 2010). However, all these designers feel compelled to write statements about the meaning of their games. The proceduralist model still implies that there is meaning in the rules *as rules*, and not in the activity of play. It is not casual that most of the games referred by these practicing proceduralists are single player, puzzle games, from *Braid* to *The Marriage*. Those are perfectly closed systems of tame problems that are easy to analyze in terms of behaviors and practices. Play is more predictable (only slightly more, though) in a single player puzzle games than in games where multiple players bring multiple intents to a play community (DeKoven, 2002).

The type of conditioned play derived from strict proceduralist arguments can be defined as instrumental play, as the process of playing for other means, as play subordinated to the goals and rules and systems of the game. In this sense, play is subordinate to reason, to the logic of achievement and progression externally determined by the player.

The game has been designed with a purpose in mind, that rules are there for a reason, and that the designer, via game itself, justifies following those rules in order to achieve the critical experience and knowledge that the player is supposed to achieve. The designer is the guarantee for the meaning of the game, justifying this type of instrumental play.

This justification of the meaning of the game as embedded in the rules makes proceduralism a type of philosophical school. There is no empirical data, but a strong line of rational argumentation. In this sense, it also falls prey to the myth of the scientific that Adorno and Horkheimer used to critique the enlightenment project. And, unsuprinsigly, it is not the first time that such a rhetorical process is used to validate a means of expression: "It is hard to establish whether the spectators of Greek tragedy really experienced the catharsis Aristotle described - in fact this theory, evolved after the age of tragedy was over, seems to have been a rationalization itself, an attempt to state the purpose of tragedy in pragmatic, quasi-scientific terms" (Adorno, 2001, p. 170)

The discourse of the procedural is that of scientificism. If we can formally define the properties of a game and in them embed meaning, then designers will be able to provide players with guided experiences in which the very act of play is controlled and oriented. Play is instrumentally guided towards the completion of goals that ensure, by means of the objectively and scientifically solid procedural elements of the game. This will lead the player experience a deep message that will hopefully persuade her.

However, play is not that simple to guide, not even through rules. Empirical data shows how players constantly negotiate rules, adopt new ones and discard those afforded by the designers (Taylor 2006, 2009). Play is not a scientific process, but it is within the realm of the myth and the rite as much as within the realm of rationality.

Many players enjoy progressing in games towards goals and enjoy achievements and other instrumental play systems. These sophisticated tools for player engagement foster the

player's need for orientation in play, for the very existence of the game as a framework for the experience. However, play is much more messy than just playing for goals and achievements. External rewards only operate on the domain of instrumental play, but leave aside play as negotiation, play as appropriation, and play as expression. In the proceduralist realm, players do not express themselves by play: they express the designers by means of their actions guided by the rules.

This perspective has strong ethical, political and cultural implications. By depriving players of their capacity to express themselves through play, and by turning play into an instrumental action, the proceduralists are ignoring the acts of appropriation and configuration that constitute the players' expression. In fact, proceduralists, not always the best providers of empirical data to support their otherwise normative arguments, tend to ignore that play is often engaged with as a means to explore and create a common space of enjoyment with other players, and that rules are, more often than not, excuses for social interaction with political and ethical meanings.

What proceduralists deny is the capacity for players to affect the game with their virtues, to explore their relation with what the game proposes by means of their values and political ideas. Players are creative, engaged, value-driven agents who engage in play with their own values as part of what helps them configure their experience. In philosophical terms, they are creative stewards of their play (Floridi and Sanders, 2005). In fact, play is a way of expressing their virtues as much as it is a virtue in itself, understood as the capacity to relate with others and with a system by both recognizing and following some rules and procedures, and contributing to a shared experience by that very same process of interpretation (Sicart, 2009).

The proceduralist discourse can be said to deny the player as an individual, rather considering it as another formal element in the meaning-production system of the game. The player is instrumentally rational, engaging with play with the idea of, by being exposed to procedural rhetoric, become educated or persuaded. But play is not that simple, as play is not exclusively a child of reason. Play is activity between rite and reason, between rationality and emotion - and as such, it cannot, and ought not to be instrumentalized.

The allure of proceduralism, then, comes from its quasi-scientific discourse, from its efficient, postmodern argument that ties technology, systems and reason together, justifying the existence of games as a serious medium for expression. However, this is achieved by means of ignoring players and play as a source of rituals and aesthetics, as a form of expression and exploration, as a way of experiencing values as much as adopting values. Instrumental play exists, and on occasions is useful to understand particular behaviors of players. But justifying the aesthetic, political and ethical capacities of games by means instrumentality leaves aside the complexities and nuances of play as appropriation, and of players as co-creators of the ludic experience.

Modern design theories often focus on efficiency (Norman, 2002; Lawson 2007; see also Norman, 2004, chapters 1 and 2), as much as the technological discourse of progress is pervasive in popular media. Proceduralists are also immersed on a scientificist discourse on the value of efficiency as

programmed in the game. What we should be arguing about, however, is for play as an expression of appropriation, and for games as slow technologies (Hallnäs and Redström, 2001). Games, like many other, or all objects, need time for reflection, need emotional responses (Norman, 2004) so we make sense of them, they need myth in their reason: "Man is not 'at home' amid pure functionality - he requires something like that lustre of the wood of the True Cross which could make a church truly holy, some kind of talisman - a shard of absolute reality ensconced, enshrined at the heart of ordinary reality in order to justify it" (Baudrillard, 2005 p. 84)

Against the argument of efficiency and rationality, we should invoke the aesthetics of play, the ethics of expression, the myth in the machine. To surpass instrumental play and address that whatever games contribute with to our culture, plat cannot be codified; it cannot be limited and bound to the processes delimited by arbitrarily created rules dictated by distant designers. Play belongs to players, and the games' meaning resides in the actions of players.

Against Procedurality

Writing against a theory, much more against a popular and rather solid academic theory, is a risky task. Any theory has omissions, any theory can be somewhat criticized from other theoretical standpoints and come up with a need for reviewing the theory. That is not the goal of this article.

This article wants to point out what I understand as fundamental flaws in proceduralist rhetoric; flaws that are not only not addressed by the 'canon' of proceduralism, but also relatively ignored by the adopters of the theory. This article wanted to unveil the missing parts that make the discourse more than flawed, questionable regarding its own goals and claims, and problematize the influence and application of proceduralism in the field of game studies and game design.

Much could be said about the procedural rhetorics' lack of empirical data to support its claims, or their lack of critical reflection when presenting their own design works; critical reflection understood here in the academic domain, beyond talks at business oriented venues such as the Game Developers Conference. However, those are not the main points of this article's critique. The main argument of the critique against procedurality has to do with its lack of interest in the player and play. Many of the games produced and analyzed under the proceduralist domain are visually playful, thematic parodies of the mundane and absurd, from airport security to oil economics. But these games are seldom playful in a mechanical, procedural sense: these are single player, puzzle or resource management games, with only few "operations" available to players, and a very limited space of possibility in which players can express themselves. In fact, these games often force players to reconfigure a particular set of actions in the way a designer has thought them, explicitly abolishing many possible instances of player creation and appropriation. The designer, in this case, *plays* the player.

Paradoxically though, proceduralism should be all about communicating ideas to players. But the missing part in the mechanism of procedural discourse is the player. Not the player as a configurator of the system, which is the implicit position taken by many proceduralist theorists and developers,

but the player as a living, breathing, culturally embodied, ethically and politically engaged being that plays not only for an ulterior purpose, but for *play*'s sake. The missing part in proceduralism is that player who plays for the myth, and not for reason; for the other players, and not for the game; for the game, but not for the message.

Procedurality argues for instrumental play as the center of the rhetorics of serious games. Instrumental play, play for other purposes predetermined before the act of play, is what makes games capable of conveying ethical and political messages. But play, as this article has argued, is a balance between reason and ritual, between what players bring to the game and what players provide to the game. Ignoring the player means ignoring the single most important ethical and political, and creative element of the game: the values and opinions and cultural presence of the player who engages in play. And the biggest risk is that theory leads to particular games being developed.

In order to follow the proceduralist ideas, single player games seem to be the qualified, unique mode of engaging players as political, rational, ethical or creative agents. Which, understood from a critical theory point of view, is an absolute contradiction in terms. The success of proceduralism is not the success of political games, or the triumph of an argument in favor of the expressive power of videogames: it is the success of a particular way of understanding how a particular type of games are created - not even interpreted or received by players. And it is the success of a very non-playful understanding of what games do.

What is left, if we downplay the importance of procedurality for creating and analyzing the meaning of games? Do we fall into relativism, so any meaning can be found in any game? As I've mentioned, the importance of procedurality in games studies cannot be denied. It is still a perspective that is fruitful, and that helps us anchor experiences and actions in technologies and objects. My intention, my position against proceduralityis that of a demand: for each procedural analysis there must be an orthogonal analysis of play that completes the arguments of meaning by means of accounting the play experience. Or, in other words, we need a theory of play that accounts for, and complements, the proceduralist discourse.

Play is not only a performance. Play does not only include the logics of the game - it also includes the values of the player. Her politics. Her body. Her social being. Play is a part of her expression, guided through rules, but still free, productive, creative. Without the openness of play, the player cannot express or explore their ethics, their politics. The player may be guided by reason, by the instrument of play, but that does not guarantee, as the fall of modernity and the critique of Enlightenment have shown, that rationality is enough to express politics or ethics.

Without the player there are no ethics or politics, no values and no messages. Objects can have embedded values, technology can be political, but only inasmuch as there is a human who *makes* the politics. This is of course not in accord with the basic philosophy behind proceduralism. However, even at the deepest level of abstraction, politics, ethics, and culture intimately and ultimately *personal*.

To write against procedurality is to sing the body, the presence, the player. Against procedurality an army of players

stand and *play*, breaking the rules, misunderstanding the processes, appropriating the spaces of play and taking them somewhere else, where not even the designer can reach. Against proceduralism is a player who wants to *play*.

The risk of proceduralist rhetoric is to identify *play* with reason, to control play and guide it to a predetermined purpose. And another risk is to foster the dominant idea of the designer as the provider of meaning for the game. If there is an exceptionalist argument to make about games, an argument that justifies that games as aesthetic form are different than others, is that games belong to players - at most, games belong to the designer if she wants to establish a dialogue with the player through the game - but *play*, the performative, expressive act of engaging with a game, contradicts the very meaning of authorship in games. Players don't need the designer - they need a game, an excuse and a frame for play. All of this is missing from the rationalist project of proceduralism, and all of this can be argued against procedurality.

I started this article referring to Tati's *Playtime*, a parable about the linear, rational architecture of modernism, designed to make our life *rationally* better, which only constrains our behaviors to following lines and making sharp turns. *Playtime* also illustrates how the curve succeeds, and how the messiness of humans, the ways in which we appropriate what we are told to do configure our experiences of space, place, and meaning. As a program for game studies, we can take that insight: we need to understand the design of the game, but only if we acknowledge that a living, breathing player will engage with it in ways that make gameplay a *personal* affair. As game researchers, we should focus, like Tati, on how curves reassert themselves over straight lines, and how that reassertion is a process and a matter of beauty.

Procedurality explains the whys and hows of how game technology operates, and how games can aspire, as designed objects, to funnel behaviors for reflection. Play, however, is personal, individual, and communitarian, played with others, for others, in an intensely, deeply *personal* way. And politics and ethics are personal, too. Therefore, when a player engages with a game, we enter the realm of play, where the rules are a dialogue and the message, a conversation.

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Endnotes:

[1] I am aware that many researchers might consider themselves as proceduralists, from Michael Mateas to Noah-Wardrip-Fruin. There are many schools within procedural thinking, and this article should be read as a critique of what

arguably is the most popular understanding of the term, both within academia and in the games industry.

[2] "Unit operations are modes of meaning-making that privilege discrete, disconnected actions over deterministic, progressive systems […] in literary theory, unit operations interpret networks of discrete readings […] in software technology, object technology exploits unit operations […] in human biology, DNA nucleotide bonding displays unit operations […]" (ibid, p3)

[3] For a genealogy of the term, and its relation to the work of Derrida and Turkle, see Bogost, 2006, pp. 106-109.

[4] By formalism I refer to the study of the formal properties of an object as its defining properties. A recent work on games formalism, that can also be used to trace the history of this approach in game studies, is Myers (2010).

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