Zero Lecture in Game Design

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Abstract

We believe creativity has not been a prevalent element in the video-game medium. While many issues might be at fault, in this paper we propose that one of the underlying causes resides in the game design discipline itself, more specifically in the way scholars, journalists and audiences promulgate normative thinking. This notion is developed with arguments that explore how normative thinking has shaped three dimensions of the medium – form, value and expression. It takes into consideration major trends in journalism and production, as well as an analysis of books and scientific articles that concern the subject. We then propose alternatives on how to frame the currently available knowledge in the discipline in a way that can help foster creativity instead of constraining it.

Keywords:: Game Design, Aesthetics, Creativity

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"–You take a big risk by encouraging them to be artists, John. When they realize they're not Rembrandts, Shakespeares or Mozarts, they'll hate you for it."

"–We're not talking artists, George, we're talking free-thinkers."

in "Dead Poets Society", a film written by Tom Schulman

1 Introduction

Game Design has become a field of human knowledge of intense and diverse production, with articles and books being steadily released in the last decade or two. And whilst the richness of perspectives and the distinct backgrounds of the many authors cannot be denied or simplified, it is our perception that there is a dominant current of thought underlying almost all analytical discourse on video-games. This notion is reinforced, we believe, by all surrounding the video-game medium, as we have come to see the same ideas, the same philosophies, the same design approaches, in a single word, the same *ideology*, replicated by practitioners from inside the industry, members of specialized journalism, consumers in general, and yes, even academic contexts. Paradoxically, there seems to be an honest recognition of this state of affairs from inside the very same areas that continue to promulgate it.

Lecturing a game design course, the question of how to frame the available knowledge on game design and its conspicuous tendency to lead designers to create bland artifacts came into the fore. This was fueled by the subjective perception that, in our experience, when given freedom on a game design assignment project over half of our student proposals were basically designs emulating already existing video-games, with designs subscribing strictly to genre conventions. In one year, a conscious choice was made to constraint the game design process by offering a clear theme – global warming – but even in that bizarre context, something like 90% of students still approached the problem with archetypal solutions. An example of this was a First Person Shooter where players were asked to 'sabotage' oil refineries. The design replaced aesthetic elements but maintained the feel of the experience as well as core mechanics and dynamics. These reflections are not to be understood as objective, nor as positivist argumentation; merely our personal, dreadful confrontation with something viciously at hand in the medium.

What follows in this paper is an attempt to better understand this perception, and also to find how it could be counter-acted in the context of a game design course, so as to promote creativity in the game design process. These considerations are directed, above and beyond to those who teach game design and are looking for a different approach, but also to students and practitioners who seek to create video-games out of personal passion or for a more comprehensive knowledge of the field. Several generalizations and rhetorical figures are used – these are inherent limitations of attempting to address an issue that is, for the most part, out of reach for a strict scientific analysis and more prone to a philosophical reflection. We will address normative thought through 3 lenses that we believe are crucial in game design: form, value and expression. The purpose of this analysis, is not, in any way, to criticize the whole world of video-games as an homogeneous system of thought that always commits all these sins. Simply, these are the sort of traps which, at some point, we tend to forget we are falling into, and as such, deserve a greater notability than they usually get.

1.1 Summary

We will start to analyze the problem of video-game creation by elaborating on how we view the process of creative thought, followed by how it is impairing the production of highly innovative and valuable artifacts. Then we dissect the three components of normative thinking which we view the problem stemming from: Normative Form, Normative Value and Normative Expression. In each of the following sections, we analyze these components not only in terms of problematic discussion, but also by proposing paths of liberation. Finally, we conclude with some thoughts on why this analysis is useful.

2 Creative Questions

Why are so many video-games simply not creative and genuine and innovative? Why is it that when starting fresh in a game design procedure, the end-result so often ends up as bland and unfulfilling?

3 questions are implicitly answered in every act of video-game creation:

- *How would you define video-games?*
- *What do you value in video-games?*
- *What (ideas and emotions) would you express through video-games?*

Each of these questions translates personal viewpoints anyone of us possesses regarding the medium on three levels – formal properties, value and expressive purpose. The relevance of these 3 questions cannot be overstated. As we embark in the video-game design process the answers to these questions are made transparent, our value system regarding video-games is thus physically embodied in the artifact. Many possible answers have been given, more or less explicitly by scholars, game designers and critics, and whilst these are surely of value, they are guided by their own subjective sense of aesthetic, their prejudices and their accumulated knowledge, acquired in the specific context that originated it. But, whichever current we choose to subscribe, it is, nonetheless a current – a specific view that focuses on a fragment of the whole medium. It is, therefore, limited in scope and only valuable if we chose to subscribe to a similar set of ideals. Further, even the most encompassing and general of views, as long as based on empirical knowledge – be it scientific or otherwise – will be constrained by time. It can only explain normative properties of existing artifacts, therefore being adept at explaining a dominant portion of the past, but unlikely to remain

valid in the future as long as we assume that future artifacts are creative, and therefore transgressive of features that were present in the past. It is for these reasons that we argue that, if the creative process takes into account these questions – and it surely does – then the answers and the end-product of the process will tend to be in normative terms, describing video-games on the basis of how they are expected to be and not how they could be. We think this is a mistake the game design discipline has been committing, by strictly adhering to norms of the past and being too cautious in its observance of the rare, innovative and defying examples, therefore promulgating a conservative point of view of the medium. As such, the past is wedged into the future, bringing its bulky weight into the design process and shaping it almost in its totality. Thus you end up not creating, but recreating. This is what we are labeling as normative thinking.

3 Normative Thinking

What happens when a sufficiently large and influential part of a community shares the same normative beliefs? The physical implementation of such beliefs gains fraction and reinforces itself as the norm, therefore shaping reality itself. We contest this is the actuality of video-game medium. For example, in 2011, at least 9, high-end, triple AAA budget, military-style first-person shooters [Wong 2011] will be released. What separates these games is surely less than what unifies them in the smallest of sub-genres. The normative ideals they subscribe to can be analyzed. They are all formally games – activities of competitive engagement between players and artifact or between players and players (ludus and agôn games, in Caillois categorization [Caillois 2001]). They value a certain emotional and cognitive mindset construed with players – one of meaningless entertainment, of antagonization embodied in a fictional ground of bellic warfare and adorned with the aesthetic cover of pyrotechnic spectacle. They express victorious conquest over foes and a feeling of satisfaction on the mastery of an ability ('fiero', according to Ekman's emotional spectrum [Ekman 1999]). Their core essence is, we would argue, awkwardly similar, and yet we are granted with 9 examples of their brand in a single year. Are these multi-million dollar projects allowing the medium to move forward? Is the entertainment value they produce significant for their audience? Do each of these games offer a substantially new and interesting offer compared to their peers? And what about other genres? Tolkienesque role-playing games, military strategy games, sci-fi shooters, sports simulations, beat'em ups? When was the last time there were truly innovative ideas in these? If readers might cynically respond to this provocation with the reply that the same happens in other mediums, we would argue that that may be true, but surely never as predominant an effect as in the video-game medium (for reasons that do not fit this limited space) and above all, just because a similar problem exists elsewhere does not make it any less of a problem.

But others do agree. Salen and Zimmerman were quick to point the dubious, infantile, unoriginal nature of games that litter store shelves [Salen and Zimmerman 2004]. Ian Bogost admits that society still views video-games as a children's medium [Bogost 2007], despite his and others defense of it, otherwise, as cultural and commercially relevant [Bogost 2007; Poole 2000; Frasca 2001]. Is the perception not reality? We must question how far we are willing to look beyond the obvious, in our anticipation that video-games are more than they actually are. Chris Crawford – author of several books on game design and founder of the first game design periodical [Crawford 2003a] – seemed to believe video-games should aspire to be art, stating that *"computer games constitute an as-yet untapped art form"* ... back in 1982 [Crawford 1982]. Have things changed? Back then he already criticized the repetitive re-hash of games in genres such as sports simulations, but defended the rightful statute of art to video-games based on the premise:

> *"The industry is too young and the situation is too dynamic for us to dismiss computer games so easily. We must consider the potential, not the actuality. We must address the fundamental aspects of computer games to achieve a conclusion that will withstand the ravages of time and change."*[Crawford 1982]

There was and is hope that, just as other art forms that were shunned in their infancy, so too video-games would achieve maturity that would grant them critical acceptance [Freeman 2003; Poole 2000; Koster 2005]. And yet, though there has been an astonishing technological evolution of computer related technologies, video-games and game design have not improved in equal measure [Crawford 2003a]. Video-games *"are still struggling to emerge from their arrested adolescence"* [Poole 2000], remain *"focused on fantasy genres, monsters and trolls"* [Frasca 2001] and are *"emotionally shallow"* [Freeman 2003]. Still today, it is difficult to find a single author that does not present some amount of criticism or ambiguity when qualifying the creative properties of video-games. While other causes are surely at work, we argue this is also a consequence of normative thought binding the future to the past. We have come a long way from 1982, but we have not come a long way since 1982.

Normative thinking is a constraining box that obscures creative approaches. It induces a vicious cycle of reproduction. You conjure things based on an abstraction of what they are, a prominent parcel of reality which you are able to perceive, analyze, catalogue. Then you reinforce that belief by implementing an artifact sustained on your perception of the past. Others do the same, apparently moved by a similar set of ideals (at least in the video-game medium). The process then repeats until some change in the social, cultural, technological, scientific or economic context forces you to shift your normative thinking into a new set of structured beliefs that contradicts your own practice. But to make that shift we need a new set of non-normative ideals or counter-ideals that can break the mold. And so we must now critically analyze the existing ideals so as to propose a change in paradigm.

4 Normative Form

How would you define video-games?

The question prompts many an answer. Books concerning video-game topics and game design usually start with one or more strict definitions of what a video-game is/can be. Let us cover the main theories about form.

The most prominent perspective is ludological. Most video-games are created as 'ludus' play [Perron 2003; Frasca 2003a] – a goal oriented type of play (usually called 'game'), which focuses the experience on skill mastery, goal conquering, conflict between player and the very rules of the game, and has some form of explicit moral valuation (win – good, lose – bad) [Frasca 2001; Caillois 2001]. Thus, ludological definitions view video-games as digital forms of ('ludus') games, their analyses and definitions of what a game is, typically including mentions (amongst other elements) to:

- artificial/closed nature [Salen and Zimmerman 2004; Schell 2008; Juul 2005],
- rules [Juul 2005; Brathwaite and Schreiber 2009; Schell 2008; Salen and Zimmerman 2004],
- mechanics [Brathwaite and Schreiber 2009],
- formal system [Juul 2005; Schell 2008; Salen and Zimmerman 2004; Fullerton et al. 2008],
- structured conflict [Salen and Zimmerman 2004; Fullerton et al. 2008],
- goals [Brathwaite and Schreiber 2009],
- challenges [Brathwaite and Schreiber 2009; Schell 2008],
- effort [Juul 2005],
- rewards and penalties or variable, quantifiable outcome [Juul 2005; Schell 2008; Salen and Zimmerman 2004; Fullerton et al. 2008].

While there are minor deviations on the basic assessment, we think this is more a question of choice of linguistic terms than there being an actual disparity in terms of the definition – the essence agreement is clear, video-games are digital games and games tend to have the aforementioned features.

Frasca has advocated the idea that 'ludus' (video)games, on account of their structural features, would be poorly expressive, imposing a non-ambiguous binary interpretation of games, with win scenarios being interpreted as good and positive and vice-versa [Frasca 2003a]. Ergo, these games would fit perfectly with morally unambiguous types of games, such as military warfare types and its *"friend or foe, dead or alive, with us or against us"* logic [Frasca 2003a]. This theoretical argument was further expanded by us in the past, in terms of ludus games' minimizing emotional elicitation, by affording a basic binary emotional pay-off ('fiero') upon win, frustration upon loss [Craveirinha and Roque 2010; Craveirinha 2010]. Based on his criticisms, Frasca went on to advocate a different type of ludological perspective on 'video-games', becoming a major proponent of a video-game form more akin to the concept of simulation, Caillois' 'paidia' [Frasca 2001 2003a], and to the notion of 'persuasive games' defended by Ian Bogost [Bogost 2007]. 'Paidia' is a less structured form of play, more explorative than competitive, like child play [Frasca 2001; Caillois 2001] Bogost uses a ludological proposal which basically defends an imbuing of meaningful discourse in games' procedural rules [Bogost 2007]. Meaning that is understood by players through active interaction with the game's processes and behaviors, but which is not given some form of explicit moral valuation, as in 'ludus' games (according to Frasca himself, that is the major distinction between the two types of play [Frasca 2003a]).

In the early 2000's, a great (yet somewhat artificial) debate in the research community opposed the ludological perspective on video-games with a narratological view which proposed games to be understood as story-like media such as films or books [Frasca 2003b]. The major avenue of study regarding video-games, up to the beginning of the century, was keen on analyzing video-games in the perspective of drama or narrative [Frasca 2003a]. Many narratological authors advocated that the future of video games would lie in a novel form of narrative media [Laurel 1993; Murray 1997; Crawford 2003b], the *"holy grail of game design"*, Interactive Narrative [Mateas and Stern 2003]. Essentially, this view holds video-games as a digital artifact which narrates a story which the player traverses through, by impersonating one or more characters and in the process affecting to some degree the sequence of events. Murray used Star Trek's holodeck as a metaphor for this perspective [Murray 1997], thus making it immediately clear what sort of experience was being advocated. The foundation of this perspective is most likely a consequence of video-games having historically employed non-interactive, narrative segments that resemble literary and/or cinematic sequences [Poole 2000], with many ways of structuring these with game-play or game-like interactivity [Majewski 2003]. Even completely interactive portions of contemporary video-games have been described as *"kinetic narrative experiences"* [Poole 2000] or *"first-person storytelling media simulations"* [Grodal 2003].

An attempt to unify some of the elements from both narratological and ludological perspectives can be seen in the interactive fiction theory of games, defended by Tavinor [Tavinor 2009]. According to it, video-games are fictional artifacts, meaning they possess fictional qualities though not necessarily strictly narrative ones (for a detailed understanding of the distinction, see [Tavinor 2009]). Narrative presupposes a set of events (which can be fictional or real) within a timeline, given an order and an emphasis, which are then narrated in a medium [Majewski 2003]. Fiction on the other hand, refers to a non-existing (in the physical world sense) conjured reality, elaborated through props – objects, characters, countries, societies, cultures, etc. [Tavinor 2009]. It is fiction because it is not real. And it may or may not have a story – a GI Joe action figure is fictional, but there is no narrative on it; a Star Wars film is fiction but is also a story. A pragmatist definition is then given by Tavinor – *"X is a videogame if it is an artifact in a digital visual medium, is intended primarily as an object of entertainment, and is intended to provide such entertainment through the employment of one or both of the following modes of engagement: rule-bound gameplay or interactive fiction"*[Tavinor 2009].

A vehement criticism to the predominance of 'ludus' video-games came from a Belgian studio named 'Tale of Tales' (Michael Samyn and Auriea Harvey), who develops digital entertainment pieces targeted at the video-game audience. They create their works according to a Realtime Art Manifesto [Harvey and Samyn 2006]. One of its main ideas is that *"the rule-based structure and competitive elements in traditional game design stand in the way of expressiveness"* [Harvey and Samyn 2006], i.e. 'ludus' limits expressiveness. They also advocate punk approach to game production, auteur ideals, and a strong influence from traditional art forms [Harvey and Samyn 2006]. From their proposition, they have moved on to foster a movement called notgames [Not], apparently inspired by Juul's categorization of video-games which relinquished 'ludus' to a 'not-game' category [Juul 2005]. Notgames can therefore be understood as digital artifacts that subvert or simply avoid any formal semblances with 'ludus' games. According to their manifesto: *"Can we create a form of digital entertainment that explicitly rejects the structure of games? What is an interactive work of art that does not rely on competition, goals, rewards, winning or losing?"*[Not] Samyn's ideals are strongly influenced by pre-modernist notions of Art [Samyn 2011], adopting strong aesthetic experience ideals as their main counter-value system to 'ludus'. Besides the 'Tale of Tales' titles several other games have been recognized as notgames [Not].

Other debates with striking similarities could be analyzed, but what matters to our analysis here is not the preponderance of each perspective, nor its validity or usefulness, not even the substance proper. What we contest is the normativity in the presentation of these reasonings and formal considerations. Common to all these views is that they either embody a strict view to video-game production or analysis, or react to another (mostly the dominant norm of the 'ludus' perspective) by elaborating a new strict perspective on what video-games can/should/must be. Indeed, each group of scholars and practitioners has created their own limited set of conceptual understanding of the video-game medium. Video-games are narratives. Video-games are games. Video-games are simulations. Video-games are notgames. We question if video-games are not all of these things at the same time, and none altogether. There is clearly room for all these ideals, yet none by itself can be made sufficiently whole a perspective to understand the richness, complexity and ambiguity of the medium. As scholars, teachers and practitioners, we should offer all these views as valid, meaningful alternatives, fomenting critical debate and analysis on part of students and new upcoming creators. We would hope them to built their own, very unique, very personal, individualistic and self-centered formal characterization of what video-games can be. The more it moves away from previous definitions, the greater their contribution can be.

Now, it may seem as we are removing these definitions from the context in which they were presented. In all honesty, most authors frame their perspective cautiously, warning that it is only a perspective, and that others may exist. For example, Juul admits his definition is born from tradition [Juul 2005]; he further admits that fiction can be a part of games, though he mostly downplays its relevance, avoiding formalizing it in the definition [Tavinor 2009], and actually pointing out the major contradictions between games and fiction [Juul 1999]. Tracy Fullerton notes in her design book that once we have arrived at a definition, the first thing to do is move beyond it [Fullerton et al. 2008], which is actually a good advice. It is just too bad that so many authors do not follow their advice to its ultimate consequences, and simply avoid addressing the issue with only one strict definition. Because authors must know there are meaningful alternatives, they just seem to fail to encompass them by providing multi-faceted formal descriptions.

All these definitions are quite normative. They establish a strong vocabulary (e.g. goals, rules, outcome) of features that they say are common to most if not all video-games. But even vocabularies can be limiting, as Fullerton herself notes [Fullerton et al. 2008]. Of course, after presenting the definitions, authors say things do not necessarily have to be that way, but by then, we would argue, it is already too late. As at that point, in the mind of readers, the concept of video-game is established, closed, its boundaries firmed by constraining adjectives and powerful metaphors. The lid on the box is sealed, the way forward locked. The very names we use to address the fields themselves – game design and video-game – are surely poor linguistic objects to begin with, as they firmly suggest

that video-games (a thing of the future) *must be* games (a thing of the past). But video-games only exist for 40 years now, and games have existed for millennia. Are computers, as a medium for entertainment, limited to a family of artifacts that existed long before them? Should we not embrace their power without pre-conceived dogmas of what entertainment is?

As a parallel, let us look at film. What defines it? It is a medium, therefore it is the physical limitations of the medium that define it for what it is, was and can be. A film is any artifact that is composed of a series of still or moving pictures that may be accompanied by sound. That is it. You do not need references about specific formal constructions – archplot, miniplot, antiplot – to define film. Victor Perkins, notable film critic, explained it best when referring to valuation criteria:

> *"I do not believe that film (or any other medium) has an essence which we can usefully invoke to justify our criteria. (. . .) Standards of judgement cannot be appropriated to a medium as such, but only to particular ways of exploiting its opportunities. (. . .) Our major concern will be with the different opportunities which can be realized within the various forms of cinema. A theory of film which claims universal validity must provide either an exhaustive catalog of film forms or a description of the medium in such general terms as to offer minimal guidance to the appreciation of any movie."*[Perkins 2004]

Because what we believe video-game authors are mistaking for properties of the medium, are a number of (widely employed) techniques and formal structures which can be used in light of certain intended expressions. Games, simulations, narratives, not-games are very different structures which lead to very different experiences, each serving different ideals of their authors. But they are part of the same medium. There is nothing stopping creators from mixing and mashing elements of these in order to fulfill their aesthetic vision. So, by providing definitions based only on their own distinct views, authors are biasing production to assimilate them, instead of educating the public to understand contexts in which these different forms can be assembled as tools to create the artifact itself. It is not a question of these authors actively trying to constrain the conceptualization of video-games as games, merely their working definitions are so narrow they become highly constraining from an intellectual point of view.

What we need, in order to foster creativity, is not to let any of our answers dominate speech at any given time. As Fullerton proposed on innovation, creators should be *"asking difficult questions about what games are, what they can be, and what their impact is on us, individually and culturally"*[Fullerton et al. 2008]. Well, such is only possible if we present the full catalog of alternatives, as Perkins suggests regarding criticism, framing it in terms of what expressive desires each can help convey, and methodically study how they can co-exist in the space of an entire medium. All answers are welcome and enriching, but only when properly contextualized. We need to help young game designers contest established paradigms. Because, whether we subscribe or not to these currents, what we are in fact discussing is the limitation of the video-game medium to imperfect medium conceptualizations of the past – narratives, games, art. Epistemologically, this is a serious mistake we are committing. Video-games are new forms. Future video-games may take unexpected forms we know nothing about, and that have little to no relationship with traditional ways of thought about form. But this is only possible if we stop actively thinking of their properties as a defining element in our work, be it analytical or creative. Only then can we expect a fundamental change in video-game creation culture and consumption, where innovative concepts and archetypes appear in a steady stream.

Thus, as counter-ideal to these different ideals we would propose the absence of ideals; a no-ideal approach. Let the specific creative work you are engaged in guide you, let your expressive desire tell you, in context, which are the best techniques for your aspirations – both in technological, aesthetic and formal terms. Accept the need to blend different pieces created according to different philosophies of video-game. Do not let currents dominate your thought without strong critical reflection. Video-games, to us, can only be defined in the most wide of senses, completely open to interpretation and future revision. To us, the closest to a good answer to the proposed question is that video-games are all creative artifacts that exist in a digital medium (computers, consoles, cellular phones) that have non-functional traits (i.e. not solely geared towards realizing everyday tasks, such as word-processing, communication and image-editing tools). Everything else, be they structurally descendent from games, stories, art, simulations, or some other unforeseen concept, is a 'video-game'.

5 Normative Value

What do you value in video-games?

The second of our questions addresses the issue of how value is recognized in video-game artifacts. Here we perceive a dominant view that treats video-games as techno-scientific products, very much in line with what is expected from television sets, mp3 players and other such devices, something we believe clashes deeply with our understanding of video-games as an expressive medium.

Take the attempt at characterizing video-games based on technical descriptions of the artifact. Look behind the cover of a video-game and you will find a number of cleverly designed marketing checkboxes, elaborating on technical facets of the artifact. Expressions referring to high-definition photo-realism in graphics, temporal duration of single-player campaigns, sound quality, breadth of races, units, items, weapons, gameplay modes and options, control types, co-op and multiplayer modes, AI proficiency and customization options are major selling points in video-game covers (see Figure 1 for a recent example). These features are discretized, separated from the whole and analyzed as if independent qualities of the artifact. We call this a techno-scientific valuation for two reasons. Firstly, it is technological because it focuses greatly on technological aspects, such as the quality of the graphical engine or the Artificial Intelligence. Secondly, it is scientific, because there is an underlying idea that video-games can be analyzed by objective, even quantifiable criteria, being systematically torn apart, piece by piece, to be scrutinized in terms of 'quality'. This is just like a pathologist would dissect a corpse in an autopsy, separating each part of the body from the whole, measuring it, weighing it and then putting it under a microscope.

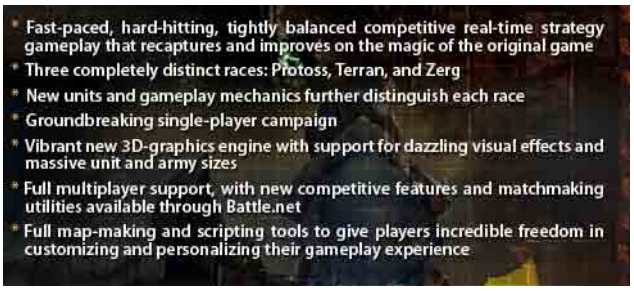

Figure 1: *Excerpt from the "StarCraft 2" (2010) PC Back Cover.*

This tendency spreads to other avenues. Specialized gaming magazines and websites also tend to review using a remarkably similar approach. IGN [IGN] and Gamespot [Gamespot], for instance, not only describe games on this techno-scientific logic in the review text, as will also create lists where they sum up the qualities of the game based on a discretionary base. Compartmentalized analysis of Presentation, Graphics, Sound, Gameplay and Lasting Appeal are given particular relevance in IGN, each with their own tick box with a quantitative figure attributing value to each. Gametrailers [Gametrailers] prefers story, design, gameplay and presentation, but is similar in approach. Gamespot has a freer approach, merely stating two feature lists (good versus bad) with small textual references to the same type of marketing elements aforementioned. Usability criteria (also a techno-scientific criteria, mostly studied by design and HCI disciplines) are also commonly evoked in terms of how accessible and polished games' control and design are. As far as we can tell, other magazines and sites follow similar approaches. Note the

focus on technical aspects, but also common expressions such as bang-for-buck, value-for-money, total number of hours spent playing, and so forth, that reflect a conscious awareness of market tendencies and product commercialization. This is the third part in the video-game valuation trinity: product valuation, i.e., the valuation of video-games as products.

If you look in a media outlet, you will find a remarkably similar approach when it comes to other technological-base artifacts. Televisions in stores come with feature lists that approach the quality of the reception, color depth and contrast, brightness, number of pixels, surround sound frequency and power, number of entry ports for hdmi cables, amongst a myriad of other technical aspects that are at the fore of any marketing description of these products. Specialized technology magazines do the same in their reviews, fact-checking the supposed technical quality of the elements and finally addressing issues of commercial value (price) face their inherent functionality. Except video-games have nothing to do with television sets. The latter serves a functional and technological purpose in our lives – decoding of images and sounds from media –, but itself has no content to transmit and therefore for us to value. Video-games are a medium, not the tool we might use to decode one. If such a logic would be acceptable in a console, it becomes incoherent in the actual video-game.

Aesthetic experiences have to be understood as holistic, each part inseparable from the sum that feeds the greater whole [McCarthy and Wright 2004]. It is because of this that it becomes denegrating to analyze a video-game by looking into technical details taken in separate, instead of trying to judge its aesthetic form in unison with its emotional substance and in harmony with its thematic. Technology can be given merit only in function of how it helps these expressive aesthetic elements take shape, but never can it be valued without framing it in the greater context it serves. Here, the whole is everything: in its consistency, complexity, elegance and ability to evoke feelings and provoke ideas within us. How often do you read about video-games from that prism? Describing a video-game as is often done, whether for marketing purposes or to judge its merits is, we would plainly say, meaningless. Engaging in a speculative parallel, imagine a painting described thus:

> *a wonderful new photo-realistic piece with over 8 billion polygons, with nine thousand different chromatic blends, dozens of geometrically perfect shapes (down to the millimeter!), framed in gorgeous 9 by 10 cm pinewood and the complexity to hold you and your friends' gaze for ten whole hours. All for the low low price of 60 US dollars.*

This is shocking because it is referring to an established art form, but in the context of video-games, like-minded descriptions are the bread and butter of video-game journalism and even some critique (the same happens elsewhere, but here we are concerned with video-games). The curious thing is that no one seems able to overcome the dissonance in analysis, especially when there are so many who seem to uphold video-games as an art form. Perhaps this idea too is a marketing angle; for if 'video-games are art' then that affirmation instantly raises our perception of value towards them as artifacts, therefore justifying our investment in terms of price and dedication.

Of all, it is in a scholarly context that it hurts the most to see this techno-scientific product paradigm at work. Design Documents used in academia, such as Fullerton's [Fullerton et al. 2008], make these values explicit, therefore promulgating them. You are encouraged to write audience profiling, marketing and sales expectations, legal considerations, and also to compare your proposal with previous games in the same market/genre – all these speak of video-games as a product and severely constrain creativity. There is simply no distinction in the document between the creative view of the medium and the industry side. For example, a film script describes the film before being shot, but it is agnostic to whether that film is to be produced in an entrepreneurial or artistic context, with any additional needs being delivered by production documents.

Functionality or usability, inherently technological traits (for what is the function of a play, or the degree of usability in a song?) are also frequently given relevance in design books as a major factor in video-game creation [Fullerton et al. 2008; Brathwaite and Schreiber 2009] Somewhat surprisingly, even market considerations are occasionally included; books on game design and production also tend to address issues with this clear underlying notion of value. Naturally, books trying to understand the problem from an industry perspective [Mulligan and Patrovsky 2003; Irish 2005], have chapters just for executive considerations, focusing on logistic, professional, marketing and development questions which are only understandable under economic value systems. However, others, concerned with the problem from a design view, tackle the same issues in chapters [Fullerton et al. 2008; Brathwaite and Schreiber 2009; Schell 2008]; Jesse Schell [Schell 2008] goes to the point of writing that design having to address clients is a necessary evil. In commercial avenues, it could be argued that such mechanisms are necessary, coming as baggage to a discipline fathomed to be related to commercial success, but in academic contexts where the objective is (should be?) to critically educate students and future practitioners into grasping the basic video-game vocabulary, it is saddening. Perhaps, today, even this view of education is becoming increasingly naive.

It is in part the understanding of games as profoundly technological artifacts that feeds the industry's constant release of sequels which add little more than a new technological apparatus. Like the aforementioned television sets constant improvement over their ability to improve certain quantitative elements, video-games are improved in terms of the number of polygons, game-play hours, multi-player capacity, complexity of shading techniques, anti-aliasing, AI routines, etc. Sports simulation games make this aspect abundantly clear, as they even lack a traditional story campaign to justify a buy based on a new narrative. Further evidence of this value system lies in how video-games are, like technology, timely artifacts, with old games being constantly forgotten and relinquished to obscurity in download sites, especially if they did not achieve significant commercial success in the first weeks [Costikyan 2005].

Of course, what can one do when students and aspiring practitioners come filled with these preconceived notions of value in a video-game? Such problematic is indeed tough to solve. Different ways of incentivizing the flourishing of a new set of values can be imagined – by playing games that do not uphold these normative values (e.g. 'Tale of Tales' video-games), by reading different value proposals from other authors (such as Bogost regarding video-games [Bogost 2007] or others in terms of art and film criticism), or by incurring in the risk of proposing different, wider, less strict notions of what value constitutes – for example, bringing back aesthetic ideals from traditional art forms. Creating bridges with how value is viewed in poetry, sculpture or visual design surely seems like a good starting point to enrich our current value systems, just as long as these alternatives are additive and not reductive. For as bad as the current paradigm is, we must not risk the change of one ideology for another. No matter how questionable and flawed, the current technological and mercantilist value system has its merits and is perfect for specific idealizations of what video-games can be; what are needed are different value systems to become accepted and rooted in culture, counterweighing the current dominance, and providing new ethic grounds, far more adjusted to unconformist conceptualizations of what stands as a 'good' video-game.

6 Normative Expression

What (ideas and emotions) would you express through video-games?

Video-games can be expressive in a myriad of ways. Far from us to cover all the ways in which normative thinking has shaped video-game expression, here we will cover a major trend in terms of cognitive and emotional expression in the medium. We will treat video-game expression as if it were synonym of symbolic and emotional communication (this is not necessarily true, but the metaphor is useful). So, how does the world see video-games? What are they a medium *for*?

The word most commonly used to refer to video-games expressive purpose is 'fun'. It is, quite literally, everywhere you look. Whether

books address it with strong emphasis, dedicating whole sections and chapters to its understanding and pursuit [Fullerton et al. 2008; Koster 2005; Bartle 2004; Schell 2008], or with minor references [Juul 2005; Brathwaite and Schreiber 2009] it is always justified as being the sought out end-product of a good video-game experience. Quite recently, scientific research has started pursuing video-game technology that can dynamically measure and maximize players' fun [Pedersen et al. 2009 2010; Yannakakis and Hallam 2006; Togelius et al. 2006]. As Randy Smith, lead game designer exposed in his EDGE column:

> *"Because games are supposed to be fun (. . .) We've brilliantly succeeded in eliminating the interstitials, stripping away everything but fun. And what's with fun? Schindler's List is a valuable film, but it's not especially fun. (. . .) How did we become the artform that absolutely has to be all about fun? Remember when graphic novels were all about superheroes and cartoon animals? Was that so great?"*[Smith 2008]

Anyone in the field would be hard pressed not finding a reference to the three-letter word in practically every article that concerns video-games in any way. As anecdotal evidence of its preponderance in academic discourse, a search on google scholar was made with the two keywords – 'fun' AND 'games' – bringing about 368.000 hits [Scholar 2011]. The curious thing is that, whilst there is an attempt to understand what the word means (see, as an example, [Vorderer et al. 2003] or [Lazzaro 2004]), there is an acknowledgment of its highly ambiguous, undefined nature:

- *"sometimes fun defies analysis"*[Schell 2008];
- *"it's a somewhat circular definition: Players play so as to have fun, fun being what they aim to feel while playing"*[Bartle 2004];
- *Unfortunately, fun is one of the most elusive concepts you will ever try to pin down*[Fullerton et al. 2008];

Fun is really a catch-all expression, reducing player emotion and satisfaction to a single word, in reality saying practically nothing other than video-games are to be entertaining experiences. Fun is construed as being inherently associated with pleasure [Salen and Zimmerman 2004; Brathwaite and Schreiber 2009; Schell 2008], or as in [Chen 2007], with Csikszentmihaliy's concept of flow [Csikszentmihaliy 1990] (in itself, flow is a general psychological model for the arousal of pleasure). Many attempts have been made to further structure what 'fun' is and how it can be elicited. Bartle defined 'fun' in terms of player behavior, separating it into four player types, achiever, explorers, socializers and killers, each deriving 'fun' from different aspects of online game-worlds [Bartle 2004]. Lazzaro et al. [Lazzaro 2004], studied how video-games' gameplay could be emotionally expressive and concluded there were 4 different emotional keys associated with 4 different types of video-game experience, two of which were 'hard fun' and 'easy fun', the first deriving from meaningful challenges (also backed by Vorderer's study [Vorderer et al. 2003]), the second from exploration and immersion in the game world and narrative. In [Fullerton et al. 2008], Fulllerton and Lazzaro both expand the rationale to other types of fun. And in [Salen and Zimmerman 2004], several other typologies of 'fun' and pleasure are covered, using categorizations based on structural features of the video-game artifact.

What is clear from all these authors is that 'fun' is everything but a clear concept. Authors avoid defining it precisely, yet are keen on appropriating it to define video-games expressive purpose. As an emotional state of being, it is not even mentioned by a psychologist such as Ekman [Ekman 1999], who lists a total set of 15 discrete emotions – amusement, anger, contempt, contentment, disgust, embarrassment, excitement, fear, guilt, pride in achievement, relief, sadness/distress, satisfaction, sensory pleasure and shame. It is true that some of these are clearly associable to a semantics of 'fun', as long as you go to the roots of the word, as a derivative of 'funny'.

So, when it comes to design authors and scholars and journalists to define what really matters, what a video-game can express, the answer is extremely elusive, but nonetheless, clearly associated with the idea of pleasure. Pleasure, which it seems can be achieved in diversity of ways, as the many variations on how fun can be elicited seem to lead us to believe. Besides providing emotional gratification with positive emotions, films can sadden, anger and disgust us [Gross 1999], and such an emotional vocabulary is accepted as fundamental to the medium. Video-games, on the other hand, have been known to have severe flaws in terms of emotional expression, for example being seemingly incapable to elicit sadness in interactive segments, as the Zagalo et al. study showed [Zagalo et al. 2005]. Because they have such flaws, it seems we continue propelling them unto the future, assuming 'fun' is all there is to their emotional expression. And so here we find a normative thought process which we believe is also constraining of creativity and maturation for the video-game medium. Fullerton even rationalizes its preponderance:

> *"Games are voluntary activities; they require (. . .) a high level of participation. Unlike movies or television, the show does not go on if players cease to play. So if your game has no emotional appeal, players are apt to stop playing or never pick it upon the first place. So fun appeals to the emotions."* [Fullerton et al. 2008]

Note that you can walk out of a movie theatre, or use the remote to shut down your TV, so the basic argument seems fickle. But what is more interesting is all the talk about emotions, yet the word 'fun' is used, implicitly associating it with pleasure. This is paradigmatic of the medium's discourse; what the sentence seems to suggest is that if a game is not pleasurable from the get go and does not continue to give positive emotional feedback, then it is not a game which can captivate the audience. Simply put, a bad video-game. Good video-games are fun. Bad video-games are frustrating. Or so it is implied.

But we must wonder if such an emotional flaw is an inherent consequence of the medium's properties (as Zagalo suggests when referring to sadness [Zagalo 2009]) or if the problem is that video-games were always idealized as, first and foremost, entertaining machines, guided by a vague but instantly familiar notion of pleasure which we have been calling 'fun'. The usage of the word 'fun' – in academia and journalism – does not seem naive to us. It resonates with a mercantilist approach to video-games, and with a perception of video-games as undemanding, effortless game activities, where the ratio of effort to pleasure tends to the latter. This is, we believe, the linguistic translation of a hedonic view of video-game playing, which sees immediate pleasure, enjoyment and comfort ('fun') as the single, ultimate purpose to the activity. 'Fun' is Orwellian Newspeak for video-games, it traps authors in a logic of pleasure pursuit, with a nagging insinuation that fun is varied and emotionally diverse when in fact it is described using a single word.

Further compounding on this issue, is the lack of strong emphasis on meaning systems and conveying of ideas and messages (except [Bogost 2007], where it is a key point of the book). If design is, as Krippendorff so boldly stated, *"making sense (of things)"* [Krippendorff 1989], then why do we spend so little time addressing the issue? Game design books tend to go deep into analysis of definition, structural properties, narrative and development, but fail to contextualize these in terms of a medium's expression. When they address meaning issues, they either: a) give it minimal importance, shunning it to a small chapter and framing it as an oddity [Brathwaite and Schreiber 2009; Fullerton et al. 2008]; or b) treat the subject in abstract, as [Salen and Zimmerman 2004], avoiding discussing in concrete the myriad of ways video-games can convey ideas on political, philosophical and social issues. This despite most authors referring, in some way, the lack of deep, meaningful discourse in a major part of video-game production [Salen and Zimmerman 2004; Crawford 2003a; Frasca 2003a]. But meaning (or the perception of it) is a big part of how we derive pleasure from experiences and objects, as Paul Bloom argues in his essentialist view of Man [Bloom 2010].

While we think hedonism is a valid point of view in how to frame video-games, it must not be the only one. We should start looking upon video-games from an Eudaimonic point of view, according to which *"true happiness is found in the expression of virtue – that is, in doing what is worth doing"*, despite its potential to satiate

our desires and needs of pleasure [Ryan and Deci 2001]. Psychology research actually shows that hedonic and eudaimonic pursuits in tandem help lead to a happier, more fulfilling life than just catering to one motivation – hedonic relating more to positive affect and carefreeness, eudaimonia to higher meaning and elevating experiences [Huta and Ryan 2010]. The dialectic between these two ways of approaching life and its many pleasures (or games) has ever been as eleganty put as by James P. Carse:

> *"There are at least two kinds of games. One could be called finite, the other infinite. A finite game is played for the purpose of winning, an infinite game for the purpose of continuing the play. The rules of the finite game may not change; the rules of an infinite game must change. Finite players play within boundaries; infinite players play with boundaries. Finite players are serious; infinite games are playful. A finite player plays to be powerful; an infinite player plays with strength. A finite player consumes time; an infinite player generates time. The finite player aims for eternal life; the infinite player aims for eternal birth."* [Carse 1986]

Video-games can be a means to enrich us as human beings, by pushing us to expand our understanding of humanity, to better understand the universe, to probe the unknown and the sacred, to achieve the unachievable. We must stop this condescending view on video-game players – this idea that if a video-game is not fun, no one will play it. Life goes beyond immediate pleasure. Pleasure is not the ultimate goal in life, but our evolution as human beings is; interacting with media is but a way to get there. Pleasure can be one of the means to get there, but it is not the only means, and it is most surely not the only possible end. Video-games can teach us about life, through procedural models as Bogost argues [Bogost 2007], through aesthetic expression, as Tale of Tales does [Harvey and Samyn 2006], through stories as Murray imagined [Murray 1997], or through mind-games as Koster contests [Koster 2005]. Video-games can express many things, through many ways. Now, we know designers want to go beyond fun [Brathwaite and Schreiber 2009], but they can only do so if they remove the careless and obsessive treatment of the word from their vocabulary and start addressing emotional expression on a new basis, guided by theories of emotion that embrace diversity and breadth, but also meaning and value systems. Game designers, like other members of the design field, are *"reducing experience to the mere "pleasure due to the feel of the action"* [Hassenzahl 2011], i.e., thinking of user satisfaction as opposed to user experience. Experiences can be a way to fulfill greater psychological needs [Hassenzahl 2011], and do not come to us ready-made, the effort we undertake is a requirement for the quality and meaningfulness which the experience comes to possess [McCarthy and Wright 2004].

There is a strong need to re-frame video-games expression, embracing both hedonic and eudaimonic principles, accepting that transformative experiences and even pleasure require effort, that meaning should be a core preoccupation in a designer's mind, and that negative feelings – be they frustration, anger, sadness or other – can be welcome emotional ingredients in a valuable experience. Other media have had the blessing not to live by these constrictions and are all the more rich because of it.

7 Conclusion

Creative pursuit requires intelligence to rationally explore the vast knowledge of the area in which we seek to make our contribution, but it also requires naiveté and openness to novelty; a capacity to diverge beyond the confines of the area, to break through conventions and reinterpret the very definitions that serve as the area's foundations [Csíkszentmihályi 1997]. We believe the video-game field, as a whole, has become complacent and claustrophobic in its vision, too self-enamored with its axiomatic principles, and reluctant to accept new ideas, new visions and new understandings of what it means to create video-games. Normative thinking has become the alpha and omega of video-game production. Because the desire to change and improve the situation is real, we believe this meta-analysis of ours can help teachers, students and practitioners of game design to rethink what they (think they) know. To reassess how we frame video-games, to look for new ways in how we can make them move forward, and to be more lenient to new approaches on how to address the issue.

Some will just not agree with the starting point of this rationale. They will either accept the current state of affairs as beneficial, or ignore its negativity out of well-intentioned hope that things will eventually change. Others may even look to the problem from other perspectives. Either way, whoever is right, whether this problem can or cannot be solved is, in the end, not important. We can only gain from viewing the medium from a lens which avoids some of the logical syllogisms which permeated the past. Creators, scholars and audiences can start looking at video-games differently, accepting them more for what they are and can be, and let their visions become challenged by new practices and new idealizations. We have viewed form, value and expression in very strict ways up until now, it is time to start opening up these ideals to new interpretations. The past is written, the future is not – to forget this simple truth and insist on catering to glimpses of the past as a way to go forward is castrating to the medium's potential.

We must look with new eyes at the dated compasses and maps of the past and embark on a journey that leads us into uncharted territory, to lands where we might be greeted with a sense of awe and marvel and newness that we have seemingly forgotten. For if we never embark on that journey towards the unknown, video-games will forever be still and lifeless, trapped in a small parcel of barren land surrounded by thick impenetrable walls and high watchtowers, all willingly built and raised by ourselves in fear of that which we had yet laid our eyes upon.

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