

CHAPTER 4: PLAYING WITH PUZZLING PHILOSOPHICAL PROBLEMS

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1. PREFACE

The academic context from which the following essay understands mediation (and from which it presents its claims) is commonly referred to as the 'digital humanities'. By definition, the work of a digital humanist is interdisciplinary, interpretive, experiential, and generative (Gold, 2012). Offering perspectives and ideas that contribute to the shaping of a 'digital humanism', the present work necessarily involves a degree of *praxis* and implicates "the creation of new technologies, methodologies, and information systems, as well as in their *détournment*, reinvention, repurposing [...]"¹.

In this text I will articulate a perspective on virtual worlds as mediators of philosophical thought. From the recognition of digital simulations and videogames as viable instruments to be employed in the crafting and communication of philosophical notions, ideas and frameworks, I will propose an understanding of digital mediation as the context when a new, projective² humanism has already begun to arise.

¹ The quote corresponding to this footnote is an extract from the online 'Digital Humanities Manifesto 2.0', available online at

http://www.humanitiesblast.com/manifesto/Manifesto_V2.pdf, page 6.

In particular, the 'pracademic' efforts discussed in *PLAYING WITH PUZZLING PHILOSOPHICAL PROBLEMS* can be understood as a "direct engagement in design and development processes that give rise to richer, multidirectional models, genres, iterations of scholarly communication and practice." (ibid.)

² In Martin Heidegger's 1927 *Being and Time*, the term 'projectivity' (*Entworfenheit* in the original German edition) indicates the way in which a person approaches the world in terms of his or her possibilities of being. Inspired by Heidegger's writings in the field of philosophy of technology as well as by Helmuth Plessner's philosophical anthropology, the present study understands the concept of 'projectivity' as the innate openness of human beings to construct themselves and their world with the intercession of technical artefacts. Borrowing the words of Robert Musil, 'projectivity' is "a conscious utopianism that does not shrink from reality but sees it as a project, something yet to be invented." (Musil, 1996, 11) This position derives from a fundamental standpoint which understands technology as the materialization of the innate tendency of human beings for overcoming their physical, perceptual and communicative limitations.

As a philosopher who designs videogames and as a game designer who is passionate about philosophy, I develop videogames that overtly pursue the objectives of

- making certain philosophical notions playable,
- materializing thought-experiments, and
- experientially and interactively disclosing worlds³ that are alternative to the ones human beings can experience in their everyday engagement with the world commonly labelled as ‘actual’.

Practical examples of videogames designed with philosophical scopes and themes will be illustrated and dissected in their design and playful interactions in the fourth and fifth section of this essay.

2. PROBLEMATIZING PLAY

In this section, I will articulate a perspective on why the virtual worlds that are disclosed by digital simulations and videogames (see note 3) can be considered to be practicable ways of communicating philosophical notions.

When discussing the various effects of digital mediation on culture and its growing involvement in social as well as artistic practices, it is not uncommon to observe that contemporary academic discourses gravitate around the unique affordances of computers. In other words, when we discuss the digital medium, we tend to talk about how its specific ways of granting access to information “classify the world for us, sequence it, frame it, enlarge it, reduce it, colour it, argue a case for what the world is like.” (Postman, 2005, 10) Both the potential for artistic expression and the cultural relevance of digital mediation are understood as derivations of the specific ways in which computers disclose interactive experiences. According to this perspective, the cultural meaning of interactive digital media content cannot be understood as simply emerging from *decoding* of such content – as was the case for traditional forms of mediation such as textuality – but also from acting within mediated content: from ‘doing’.

Approaches to the design and academic understanding of virtual worlds that primarily focus on their affording some forms of ‘doing’ are common. From the artistic perspective on game design commonly referred to as ‘proceduralism’, for example, the ways in which games allow for the emergence of meaningful interactive experiences have their foundation in the logical structuring of their interactivity: the game

³ The understanding of what a ‘world’ is proposed by this essay was inspired by Heidegger’s existential phenomenology. I understand a ‘world’ as an interrelated set of beings and relationships among beings that are stably perceivable and persistently intelligible within a certain spatial-temporal context. This interpretation permits to establish a clear distinction between the experiences of virtual worlds and the less stable and accessible ones of dreams and hallucinations. In line with this definition of what a ‘world’ is, I propose to understand simulations as mediators that grant an interactive access to worlds.

mechanics. For the ‘proceduralists’ games disclose to their players what are effectively artificial worlds. Such virtual worlds are mechanically devised by game designers and are considered capable of establishing unequivocal, interactive relationships with their ‘players’. In other words, for the ‘proceduralists’, digital simulations and videogames can engender predictable effects on the cognition and the behaviour of the players. This is the ideological foundation upon which games (and videogames, and more generally any kinds of interactive simulations) can be understood as viable media for delivering information, funnelling behaviour, and effectively function as persuasive technologies. From a similar perspective, Miguel Sicart observed – in his 2011 article ‘Against Procedurality’ – that the allure of ‘proceduralism’ “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.” (Sicart, 2011)

The outlined ‘proceduralist’ understanding of ‘play’ can be criticized (and indeed was criticized) on the basis of its depicting an incomplete and impoverishing picture of what must instead be recognized as a very fundamental and irreducible activity (Sicart, 2011). According to the detractors of ‘proceduralism’, in fact, a valid and thorough understanding of ‘play’ ought to be embraced in all its complexity, ambiguity and expressivity. The ‘proceduralist’ approach to ‘play’ restrictively focuses on comprehending and predicting quantifiable and performance-oriented dimensions of ‘play’⁴ while ignoring the freely creative, ritual, social and transformative ones that Bernie DeKoven identified as its ‘myth domain’ (DeKoven, 2002). In other words, ‘proceduralism’ is criticized on the basis of its disregard towards ways of engaging with games and their worlds (regardless of their digital, analogue or hybrid substrate) that are informal and not strictly deterministic.

When embracing perspectives on ‘play’ that are broader and looser than the one outlined above, the job of the game developer cannot be recognized as that of ‘designing play’, but rather as one that is contributory to ‘play’ in setting up the stage for it to emerge (Salen & Zimmerman, 2003, 168). Abandoning a formal and deterministic understanding of ‘play’, the figure of the game designer can no longer be associated with that of a divinity capable of creating worlds and controlling the fates of their inhabitants, but is rather identifiable with an earthly scenographer who sets up constraints and affordances that will be freely appropriated by the actors (the players) during ‘play’. As revelatory examples of this approach, Mary Flanagan utilizes the term ‘game’ as a synonym for ‘play scenario’ (2009), and according to Ivan Mosca, game developers supply props to play with “like engineers supply technologies for flying and therapists supply tools for understanding ourselves.” (2013, 19)

⁴ For a more in-depth reflection on the relationship between computer games and instrumental rationality, I recommend reading Paolo Pedercini’s blog post titled ‘Videogames and the Spirit of Capitalism’, available online at: <http://www.molleindustria.org/blog/videogames-and-the-spirit-of-capitalism>

In line with the previous observations, philosopher of technology Don Ihde noted that no forms of technical mediation establish a fixed and stable relationship with their users. According to Ihde the effects of any technologies can never be said to be solely determined by the (sometimes clumsily pursued) intentions of the designers, but they are ‘multistable’: they are also constantly appropriated, interpreted and repurposed contextually by their users (Ihde, 1990). In addition to the general ‘multistability’ of technology, we also need to keep in mind that unexpected behaviors and effects might arise from unforeseen malfunctions of the technologies that mediate human actions and decisions⁵ (Verbeek, 2011, 97 – 99).

The ‘multistable’ qualities of technology appear to be radicalized in our interactions with virtual worlds, as unexpected behaviours, technical glitches and events that were not anticipated by the designers are commonly experienced occurrences in several playful as well as non-playful computer applications. I believe this to be the case in the worlds of videogames and simulations for two main reasons.

1) The first reason consists in the observation that digital simulations in general (and videogames in particular) are characterized by several forms and levels of interaction that are often intricately overlapping, which tends to afford a certain flexibility and expressiveness in their use. As I argued elsewhere, the autonomy granted to the players often leads to behaviours and interactive possibilities that can potentially subvert and trivialize both the experiential goals and the semiotic meanings originally intended by the designers (Gualeni, 2014).

2) The second reason why I claim that virtual worlds are particularly ‘multistable’ technologies stems from the recognition that both the inner functioning of the worlds and the complex interactions outlined above are dependent on interconnected technological systems. As such, they are susceptible to a vaster spectrum of possible malfunctions and unexpected interactive behaviours than technologies that are applied to the actual world or have more binding mechanical and physical dependencies from it. The amount of erratic and exhilarating videogame glitches that are published daily on video-sharing websites are a testament to the imperfect control that we, as developers, have over the technological instruments that we employ.

An example of the awareness of the particularly penetrating ‘multistability’ of virtual worlds was voiced in a recent interview for the *New Statesman* by Jason Rohrer – independent author of celebrated experimental videogame titles such as *Passage* (2007) and *The Castle Doctrine* (2013) – and Merritt Kopas – designer and creator of *Lim* (2012), a free, web-based videogame about the tension of trying to meet society’s expectations:

⁵ From this perspective, Marshall McLuhan’s gnomic observation according to which ‘the medium is the message’ (the interpretation according to which the message of any medium or technology is “the change of scale or pace or pattern that it introduces in human affairs”) appears to be particularly accurate (McLuhan, 1994, 8).

“I think that systems have a tendency to get away from us,” says Kopas. “We intend to portray or produce one thing, but the systems we’re creating seem to resist or reshape our intents.” Even Rohrer, with years of programming experience (this game is his seventeenth), has to take responsibility when things go wrong. “As a designer, I’m trying to build the tightest system that I can build. I don’t want there to be those system leaks which allow bizarre readings, and involve the procedural rhetoric effectively falling off the rails and going who knows where.” (the complete interview is available online at: <http://www.newstatesman.com/voices/2013/02/political-video-game>)

Problematizing the possibility for designing ‘play’ (that is to say our possibility of deterministically predicting its cognitive effects and controlling the ways in which it will engage the players and change their in-game behaviour), also raises questions concerning the effective persuasive and communicative potential of interactive media. If the possibilities for autonomous agency and self-fashioning in virtual worlds threaten to distort and trivialize the affordances and messages originally set-up by the game designers, how could such worlds ever be treated as media of communication? How could a defined meaning ever emerge from contents that are not only infinitely interpretable (as was already the case for text and other traditional media forms), but also infinitely manipulable?

It is my belief that neither the recognition of limitations in the possibility to control messages and experiences in videogame worlds nor the discontents with ‘proceduralist’ approaches to ‘play’ should encourage game scholars and game developers to bluntly discard their insights and methods of deterministic approaches. The uncompromising rejection of scientific ways of understanding ‘play’ (understood both as an activity and as its experiential outcome) is in fact no less impoverishing than the excision of its ‘ritual’ ones operated by ‘procedurality’. What I propose here is, instead, to embrace deterministic approaches for framing ‘play’ as instruments that are useful and revealing in specific contexts. Perspectives like ludology, ‘procedurality’ and Game User Research (GUR) can be usefully employed to uncover some aspects of the functional behaviors of simulation and can be recognized as capable of helping designers and researchers alike to anticipate and control some of the effects that design choices will have on the players. As already observed by Sicart, the deterministic framework offered by the ‘proceduralist’ approach can be fruitfully applied to analyze single-player videogames that offer limited operative options to their players. Those games are, in fact, already structurally efficient in constraining players’ behavior, allowing them to execute a few specific actions in the restraining ways envisaged by the developers (Sicart, 2011). Among the videogame genres that more starkly funnel players’ behavior we can plausibly enumerate the ones defined by a few player-related mechanics such

as puzzle games, simple resource management games, point-and-click adventures, 2-D platform games, hidden object games, *et cetera*.

What I am advocating in this section of my essay is that the proverbial baby can be saved from being thrown away together with the dirty bath-water by means of a cautious and instrumental use of quantitative methods of approaching ‘play’ both as designers and as game researchers. In other words, formal and objective approaches to the analysis of ‘play’ can be fruitful methods to describe player experience when employed on the background of the awareness that play is a complex and irreducible activity which is deeply rooted in what makes us humans, and that its experience can never be completely anticipated and controlled by the game designers or fully captured in questionnaires, interviews or the statistical analysis of data.

3. (THE QUESTION CONCERNING) PHILOSOPHICAL PLAY

In what was discussed until this point, the most deterministically controllable dimensions of the activity of ‘play’ were recognized as viable contexts to develop and communicate philosophical ideas. To be sure, the possibility for critical design and philosophical ‘doing’ must also be recognized as latent in each of the ways in which human beings extend and objectify their physical functions, their ideas and their desires via technical artefacts. As already purported by several academics in the fields of philosophy of technology and game studies, all technologies cannot avoid to materialize ideologies as well as fundamental aspects of who we are as human beings (Haraway, 1991; Coolen, 1992; Flanagan, 2009; Dunne, A. & Raby, F., 2013; Gualeni, 2013; Yee, 2014).

As novel and flexible opportunities for philosophical as well as critical performance, digital simulations and videogames are recognized here as particularly interesting mediators. In the virtual worlds disclosed by those media forms, the ‘players’ have the opportunity for actively negotiating notions and hypotheses that are materially presented to them. When acting within digital simulations, the user (or player) is actively co-authoring the virtually-materialized philosophical arguments in which the extent of the authorship depends on the game genre, on the quantity of agents involved and, clearly, on the degree of interactive autonomy granted to the ‘players’ by the developers of the simulation.

The two philosophical videogames that I will discuss in the fourth and fifth section of this essay were single-player videogames that were explicitly designed to direct the player’s behaviour towards simple and non-negotiable objectives, and to offer the player very limited operative options. As playful systems aimed at restricting and funnelling the behaviour of the player, those videogames can be considered capable of explaining philosophical notions and articulating arguments in ways that are largely unambiguous.

It must be noted, however, that – at least in line of principle – it is always possible to develop interactive simulations and videogames with philosophical scopes and themes that are less constraining and more expressive than the ones purposefully designed to control ‘play’ and to materialize a specific set of notions. By definition, acting in worlds that allow for freer and more ambiguous types of agency cannot lead to the emergence of univocal and clear meaning, but can still interactively disclose worlds that are alternative to the ones human beings can experience in their everyday engagement with the world commonly labelled as ‘actual’. More succinctly stated, all videogames allow their players to experience alternative phenomenologies, but not all videogames can function as communication instruments.

To sum up the core argument of this section, I believe that virtual worlds that are characterized by a few operative options for the users (or player-oriented mechanics) and enforce simple, non-negotiable limitations to their experience are recognized as viable communication tools and can, therefore, be utilized for educational, philosophical and other various rhetorical purposes (propaganda, training, advertisement, *et cetera*). Digital simulations that, instead, embrace a freer and more expressive approach to acting within virtual worlds can provide the contexts for various kinds of experimentation including human-animal interaction, the critical subversion of values, research in behavioural psychology, performativity, *et cetera*.

The rest of this essay will only focus on the former, which is to say on articulating an understanding of virtual worlds as mediators and, more specifically, as philosophical instruments. Towards that objective, I will introduce and analyse two videogames with deliberate philosophical scopes and themes that I designed and developed in the past few years.

When proposing computer simulations as viable instruments for the pursuit of philosophical – or more widely intellectual – objectives, a frequently-encountered opposing line of reasoning contends that books are (and always will be) necessary and desirable on the basis that words afford the subtlety needed to symbolize and organize complicated arguments. According to the detractors of the philosophical use of simulations and games, subtlety and clarity are not something that virtual worlds can aspire to achieve. At this point in the development of my argument, I believe it is important to clarify that this essay does not advocate for the abandonment of text in favour of videogames, nor does it advance the claim that computers are (or are ever going to be) the ultimate philosophical media. In my opinion there are, however, no logical reasons why it would be ill-advised to embrace a vaster and more compromising media horizon to develop, test and divulge ideas.

With the objective of explaining why I consider it viable to tackle and disclose philosophical notions, hypotheses and thought experiments through the activity of ‘play’, I will start by focusing on what I consider to be a fundamental quality that playing and philosophizing have in common. In accordance with continental

philosophers such as Michel Foucault or Martin Heidegger, I understand philosophy as a transformative practice. As a transformative practice, philosophy is not defined, in its activity, by the specific ways in which its contents can be mediated (oral, textual, visual, simulational, *et cetera*), but rather by its capability to elicit a certain shift in behavior or in perspective in a person engaging in it (Rayner, 2007). In this sense, ‘play’ and philosophy can be associated in terms of their transformative effects and purposes. Both ‘play’ and philosophy are, moreover, traditionally considered as having a fundamental importance in the education of individuals, the establishment of social values as well as the development of culture in a broader sense.

By definition, the capability of engendering a transformative effect is not a quality that can be objectively attributed to an artifact or a piece of work, but it is always associated to the idea of being practically engaged in something, hence the term ‘transformative practice’. The activities of painting, writing, designing, playing, sculpting, dancing, philosophizing, exploring, building, *et cetera* can have a transformative effect on the recipient of the experience or the performance in question but can also be a self-fashioning, transformative moment for the philosopher, the artist or the designer engaged in the very crafting of a certain experience, artifact, work or performance (Gualeni, 2014). The idea of philosophy as an *autopoietic* practice (that is to say functioning as a self-fashioning practice: an activity that has transformative effects through an on-going critical process) is quite well established in the continental tradition and was recently recuperated by Davis Baird in his 2004 book *Things Knowledge: A Philosophy of Scientific Instruments*. According to Baird, the concept of ‘building’ (understood as the academic *praxis* of ‘doing’, of ‘constructing things’ as a heuristic practice) offers an opportunity

“to correct the discursive and linguistic bias of the humanities. According to this view, we should be open to communicating scholarship through artifacts, whether digital or not. It implies that print is, indeed, ill equipped [sic] to deal with entire classes of knowledge that are presumably germane to humanistic inquiry.” (Ramsay and Rockwell in Gold, 2012, 78)

Baird’s notion of ‘building’ as an academic practice has also evident affinities with the understanding of ‘carpentry’ explained by Bogost in his 2012 book *Alien Phenomenology*. Bringing together the perspectives of Graham Harman and Alphonso Lingis, Bogost defined ‘carpentry’ as the “practice of constructing artifacts as a philosophical practice” (Bogost, 2012, 93). In two aspects, I believe, Baird’s academic understand of ‘building’ and Bogost’s notion of ‘carpentry’ are analogous to the approach to the mediation of thought that I am proposing in this essay:

- i. in their openness towards non-textual options for the structuring and dissemination of philosophical notions and experiments, and

- ii. in their vision according to which the very crafting and framing of ideas and world-views in any media form is in itself a deeply transformative activity.

Far from being a neutral way of exchanging information, writing has cognitive effects that are evident and inevitable, and have been the focus of philosophical debate since its first introduction in ancient Greek culture. Analogue to the way videogames might not be suitable for presenting abstract concepts in their full intricacy and subtlety, traditional books can neither give the reader agency, nor the possibility to negotiate with the objectified thoughts that they mediate. Apart from the choice of whether to continue reading or not, linear books must in fact be recognized as only allowing – like any other traditional form of mediation – for hermeneutical forms of freedom. In addition to that, I believe it is relevant to observe that books cannot embed dynamic and objective representations of spatial contexts, while digital simulations can materialize spaces accurately and interactively, and can also offer the opportunity to explore alternative approaches, courses of action and outcomes.

The embedding of videogames and computer simulations in social practices (philosophy being one of them) might, thus, best be pursued on the basis of the understanding that, as any other form of mediation, they disclose reality in specific ways and that such ways are always inherently both revealing and concealing. New ways of establishing relationships with reality through media necessarily entail a balance between the increase in acuity of certain cognitive functions and the desensitization of others (McLuhan, 1994).

4. GUA-LE-NI; OR, THE HORRENDOUS PARADE

The fourth and the fifth sections of this text will focus on the *praxis* of designing virtual worlds and virtual experiences with philosophical scopes and themes. In the pages that follow, I will illustrate and dissect the design of two philosophical videogames:

- *Gua-Le-Ni; or the Horrendous Parade* (*Gua-Le-Ni* from now on) – a commercially released, action-puzzle videogame that I designed and developed in collaboration with the Italian developers *Double Jungle S.a.s.* for the *Apple iPad* and *iPhone* platforms between 2011 and 2012, and
- *Necessary Evil* – a free, self-reflexive videogame that was developed as a contribution to the panel ‘G|A|M|E on Games: the Meta-panel’ at the 2013 DiGRA conference in Atlanta, Georgia (U.S.A.).

In terms of narrative, the world of *Gua-Le-Ni* takes place somewhere in Great Britain during a fictional reinterpretation of the ‘age of discovery’. In *Gua-Le-Ni*, the player is given the role of an aspiring scholar who is instructed by an old, befuddled British zoologist on the finer points of combinatorial taxonomy. On top of a dark, wooden desk lays a fantastic book: a bestiary populated by bizarre, finely drawn paper creatures that allegedly inhabit the ‘new world’ (see figure 1). Similar to the combinatorial monsters of head-body-tail books that we might have playfully explored in our childhood and to the creatures described in legends and mythical recounts, the paper beasts of *Gua-Le-Ni* are chimeras: impossible assemblages of real animal parts. For example, the specimen shown in the next page is a CA-BIT-DOR-STER: a four-module creature with the head of a camel, one body part of a rabbit followed by the mid-section a condor and concluded by a lobster’s tail.

The combinatorial paper creatures of *Gua-Le-Ni* hectically walk across the illustrations of the bestiary from the right to the left margin of its pages. From the point of view of the player, the main goal of the game is that of recognizing the components of the fantastic creatures and their relative order before the creature manages to completely traverse an illustration and flee from the book (which constitutes the ‘game over’ condition). Encouraged by the unwieldy mentor, the player pursues this purpose by quickly rotating, moving and spinning toy-cubes with pictures of animal parts printed on each face of the cubes. A paper beast is correctly recognized – and thus prevented from escaping the old book it belongs to – when the player manages to match the illustrations on the top faces of the taxonomic cubes with the paper beast currently in play.

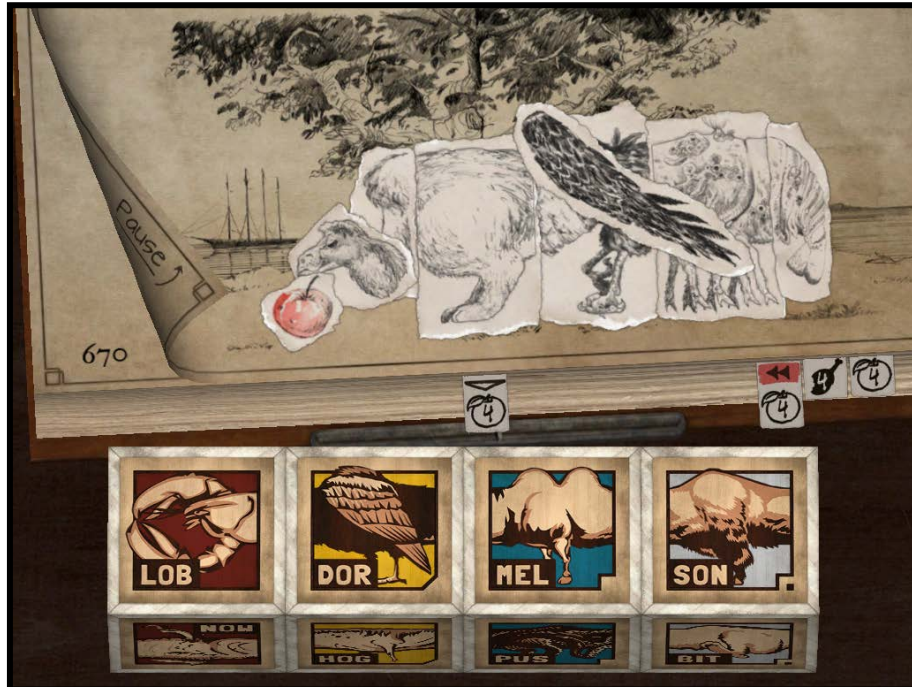


Figure 1: Feeding the beasts in *Gua-Le-Ni* does not only temporarily stop their relentless stampeding, but can also modify the beasts' composition, quell their acceleration or increase their value in terms of points awarded upon their correct cataloguing.

Gua-Le-Ni is a single-player videogame consisting of only one fundamental player-oriented game mechanic (a matching mechanic that is accessed by the players via the manipulation of the toy-cubes interface) and a simple, univocal goal: correctly categorizing the animals under a growing time-pressure. As such, *Gua-Le-Ni* can be considered to be simple enough in its structure and constraining enough in its interactive affordances to be suitable for the unambiguous expression of philosophical notions and perspectives.

In the specific terms of its philosophical contents, *Gua-Le-Ni* was inspired by David Hume's philosophical understanding of what a 'complex idea' is as presented in his 1738 book *A Treatise of Human Nature* (book I, part IV, section VI: *On Personal Identity*). In extreme synthesis, according to Hume, most people can be said to possess the mental concept of a Pegasus (Hume, 1738). For the Scottish philosopher, this is patently due to the fact that it is common for human beings to be exposed to Greek mythology in some form. This is also ostensibly the case in the present century, where

the Pegasus can still be encountered in books as well as in modern remediations of its folklore. In general, it is presented as a divine horse that could fly using its legendary eagle wings. In Hume's work, the Pegasus is introduced as an example of an idea that is not caused by direct, worldly experience, but is nevertheless one with which we all have familiarity with. Nobody can, I believe, truthfully claim to have encountered a Pegasus in his or her every-day life, to have ridden, smelled or touched it, and yet the Pegasus is an idea that humans can fantasize of, discuss, write legends about, *et cetera*. As such, according to Hume, the idea of a Pegasus does not fall under the category of simple ideas, which is to say ideas that can be simply caused by immediate sensory 'impressions' of the objects. It must, therefore, be recognized as a complex idea: a mental combination of elements and properties of which the human mind has had previous experience of and eventually creatively reassembles into a new idea.



Figure 2: A more recent update of the game features a new game mode and additional monstrous parts including those of a human being.

By means of fantastic beasts of the same combinatorial nature as Hume's Pegasus, *Gua-Le-Ni* asks the players to reverse the creative capabilities described in *A Treatise of Human Nature* and use them as logical tools: impossible paper beasts will parade

across the screen (the page of the taxonomist's fantastic bestiary) only to be recognized as combinations of parts of existing animals. In other words, *Gua-Le-Ni* is a playful and interactive materialization of the Humean notion of 'complex ideas'. This philosophical objective was openly discussed in several reviews, conferences and interviews about *Gua-Le-Ni*. The Italian independent game developers' community website www.indievault.it, for instance, quoted a passage of a discussion with them about this point. In that occasion I explained that

“[i]f one learns how to play the game, one implicitly understood Hume's text, regardless of whether one aspired to do so or not. The player does not need to use her imagination or her interpretative capabilities in accessing those concepts of Hume's precisely because the game offers that portion of his thought in the form of an objectively present, interactive allegory.”
(the complete interview is available online at: <http://www.indievault.it/2011/11/23/gua-le-ni-una-perla-made-in-italy-per-ipad/> – translated from Italian)

As author of *Gua-Le-Ni*, I was responsible for the game-design, the game-balancing and the direction of the aesthetic and creative content of the game. In this last role, my tasks included the design of the game's narrative, the supervision of the production of music and sound effects and the way in which visual design related to gameplay. The creative goals and the research objectives that I had in mind for this video-ludic project were constitutive for *Gua-Le-Ni* since its inception. The game's design aspirations were pursued by embracing virtual worlds not only as inherent factors of cultural change, but also (as elaborated upon earlier in this text) as media that can disclose experiences and information in ways which are alternative to, and in some contexts more desirable than, the abstraction and inflexibility of text. When designing the game, I thought it would have been an amusing to question the dominant and largely unquestioned textual framing of the philosophical discourse by presenting my criticism in the form of a (digital) book.

5. NECESSARY EVIL

The second philosophical videogame that I will analyse here is titled *Necessary Evil* and – as mentioned before – is a free, self-reflexive videogame that I originally designed as a contribution to ‘G|A|M|E on Games: the Meta-panel’ at the 2013 DiGRA conference.

The philosophical observation that inspired *Necessary Evil*, is the following: the interactive worlds of videogames objectify what is effectively an idealistic perspective on reality. According to a radical version of idealism, in fact, the qualities that we can experientially encounter in objects (regardless of their actual or digitally mediated nature) are not objective properties: it is our experience of these objects – for example in George Berkeley’s subjective idealism – that is responsible for bringing them and their properties into existence as mental contents.

Videogames and their worlds are customarily conceptualized and developed with the design goal of disclosing certain player-experiences and to elicit certain emotions through a combination of aesthetical stimuli, interaction and narration. Similarly, from the specific perspective of software architecture, videogame worlds are technically structured around the player’s possibility to perceive them or interact with them. I believe it is revelatory, as an example, to think about the fact that objects in the game-world that are too far from the player, whose sight is occluded by other objects, or that are momentarily irrelevant for gameplay effectively do not exist as far as the game states are concerned. This approach to the representation of virtual worlds has the functional scope of limiting the amount of calculations that are needed to suitably materialize the game world by a computer. Technically speaking it is a desirable, if not necessary, evil.

Necessary Evil tries to problematize and demystify the unquestioned idealistic structuring of videogames in a playful and interactive fashion. By doing so, it also inevitably ridicules the player-centrism of videogame worlds⁶. Game-design-wise, this

⁶ I believe it is interesting to observe that, like most games and videogames that take a critical stance, *Necessary Evil* relies on controls, conventions and aesthetics that are already established in the tradition of a particular game genre, in this case the action-role-playing-videogame one. The deliberate design decision of not pursuing innovation and of relying on convention has the double advantage of:

- 1) not having to teach the players how to understand the world and operate in it, allowing them to access the critical message of the game in a more immediate and efficient way, and
- 2) making the subversive, critical aspects of the game more evident by contrast, that is to say by making them stand out in their being unexpected and unfamiliar over the background of what can largely be considered as already known by the players.

For a more thorough discussion focused on the ironic and self-critical dimensions of *Necessary Evil*, I recommend reading my gamasutra.com featured blog post titled ‘SELF-REFLEXIVE VIDEOGAMES AS PLAYABLE CRITICAL THOUGHT’, available online at:

http://www.gamasutra.com/blogs/StefanoGualeni/20131029/202847/SELFREFLEXIVE_VI_DEO_GAMES_AS_PLAYABLE_CRITICAL_THOUGHT.php

purpose is principally pursued by having the player control a contributory character: a generic and disposable evil minion. Following established conventions of the games industry, the evil minion is a marginal character who plays a secondary role in the process of another character: the main one. The main character will be a hero (see figure 4). In *Necessary Evil*, and in strident contrast with video ludic tradition, the hero will be a non-player character (NPC).

As mentioned, the player controls a horned minion of evil confined in a dark cellar of sorts (see figure 3). The minion is deprived of any consequential interactive possibilities with the room. This design decision was meant to make the players experience feeling marginal and to practically reveal to them what a virtual world feels like, once it is designed around someone else's desires and perceptive possibilities. In the one room that the player can experience in *Necessary Evil*, in fact, nothing can be meaningfully interacted with: doors do not open for the player, chests contain nothing and objects in the room are mere theatrical props.



Figure 3: In *Necessary Evil*, the player's interaction with the environment is entirely pointless. The little horned minion of evil controlled by the player cannot meaningfully interact with the room or escape from it.

The game-world is presented as only exists to be explored and experienced by the NPC-hero. The presence of the playing character (the horned minion) only serves as a challenge to the hero, an obstacle to be overcome to continue on his heroic journey. Once the NPC-hero finally kills the little horned monster, he opens the door and leaves the room. At that point, the room and the player-creature are swiftly removed from the

computer's memory, leaving nothing behind. The de-allocation of the game elements and their disappearance corresponds with the end of the experience for the player.

In relation to what was discussed in the previous sections of this essay, the starkly limited possibilities afforded by the game's interaction as well as its narrative (forcing the players only into one out of two possible ending scenarios) make *Necessary Evil* a suitable experience for the conveyance of explicit philosophical messages or standpoints.



Figure 4: In *Necessary Evil* the hero is an eloquent and relentless non-player character whose objective is that of vanquishing evil. He will attack the monstrous player-character on sight.

6. CONCLUDING REMARKS

When heavily limiting interactive freedom and expressivity, virtual worlds can materialize notions, simple philosophical concepts, thought experiments, a various array of hypotheses and world-views. In disclosing such possibilities, digital mediation is crucially contributing to the raise of a new humanism. Both through my games and in my more conventionally textual academic work, the specific contribution of computer simulations and videogames to the development of contemporary culture can be recognized as twofold:

1. the interactive experiences of virtual worlds are recognized as having the inherent effects of fragmenting, distorting and extending human rationality;
2. acting in virtual worlds as well as designing such worlds are philosophical practices that can be complementary to – and in certain instances alternative to – traditional forms of mediation of thought.

Facilitated by the increase of computer literacy, the growing accessibility of development tools as well as the progressive diffusion of digital media in social practices, more philosophical questions are bound to specifically arise within virtual worlds. It is also likely that the new generations of philosophers will more and more frequently develop, test and distribute their ideas (new questions and classical philosophical interrogatives alike) in the form of interactive digital media content. In my work, I propose to call this new field of applied philosophy ‘augmented ontology’⁷ (Gualeni, 2013).

To be sure, I am not claiming that digital simulations and videogames are, are going to be, or should be the dominant form of mediation of the twenty-first century. What I am advocating for is, instead, a less intransigent approach to the articulation, the manipulation and the diffusion of ideas, notions and hypotheses. In other words, I am proposing an approach to the development of culture that can, where contextually desirable, hybridize or even substitute traditional media forms with simulational ones. The present essay not only upholds this vision, but puts it into practice programmatically offering its insights as the complementary combination of text and interactive virtual worlds. *Wanna play?*

⁷ The purpose of ‘augmented ontologies’ as a philosophical domain is that of understanding the effects of the experiences of virtual worlds on human thought and the potentialities for digitally mediated simulations to serve human beings in ‘overcoming’ the traditional (pre-digital) boundaries of human kinds of ontologies. According to the perspectives offered by ‘augmented ontologies’, and inspired by Heidegger’s existential phenomenology, the term ‘overcoming’ is not understood in the dialectical meaning of the German term *Überwindung* (surpassing) but must be embraced in the nuanced conjunction of two other terms: *Andenken* (remembrance) and *Verwindung* (distortion, twisting, incorporation): “a going-beyond that is both an acceptance (or ‘resignation’) and a ‘deepening’.” (Vattimo, 1991, xxvi)

To be sure, what I am claiming here is that even when armed with digital hammers, our projectual efforts cannot ever aspire to break down the operational, intellectual and perceptive walls of our inescapable humanity. Technologies, however, traditionally assisted humanity in making such walls more and more flexible to a point that we could progressively bend them, deform them and increase our room for manoeuvre in thinking about reality and reflecting on ourselves. It is in this sense that virtual worlds are understood in my work as mediators that afford the augmentation of human kinds of ontologies.

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