Just a Cyberplace

The rules in videogames: between Ontology and Epistemology

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ABSTRACT

In this essay you will find a theory about the relation of videogames and rules. The analysis illustrates the Social Ontology Project founded by John Searle and introduces some new concepts, such as Gameframe, Cyberplace and Interactive Figmentum. After some theoretical arguments you will find a double grill to categorize player types regarding to rules.

Keywords
Game, Rules, Ontology, Social, Searle, Gameframe, Cyberplace, Interactive Figmentum

INTRODUCTION

Let's start with a bizarre question: do mountains exist?

Of course, you would say. But «of course» according to who? Mountains «of course» exist just for who has to climb them up or to look the sunshine between the Alps. But for a geomorphic or geopolitics researcher this is not a banal issue: where starts, where ends and what is a mountain?

This question relates to the Social Ontology Project, a discipline that investigates things such as games, money value, economic contracts, cancer typologies, geographical entities and State frontiers.

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Here we have, at left, the map of India and, at right, of Indiana. What emerges as an evidence is that India's political boundaries are designed on geographic boundaries, mountains on the North and sea in the South. The Indiana's political boundaries are more interesting. Perfect lines do not exist in nature: the squared shape of northern Indiana depends on the fact that the frontiers between that State and others are made by a human convention that does not follow a natural property. In the South, however, the political boundary follows the course of a river, as in the upper left corner it follows the shape of a lake.

The biomedical ontologist Barry Smith argued that there are two different types of boundaries (Smith 2000). *Bona fide* boundaries are recognized by human interpretation and epistemology: they follow the physical borders of objects. *Fiat* boundaries are constituted by human interpretation and social ontology. Indeed, according to the philosopher of language John Searle, each State frontier has a sort of objectivity, regardless of its fiat or bona fide origin, because it is a collective status function constituted by a social group and the individual cannot modify its value when she prefers.

This is not an issue only for geographers or sociologists: each concept, activity and object, to be studied, has to be observed by many sides. Light and dark sides show what is *fiat*, what is *bona fide* and which is the process that constitutes the single (social) object. The darkest side of game studies is an issue: what is a game?

This question normally leads researchers to introduce, improperly, the concept of «rule». The reason is that game studies researchers need to explain the conventional property of games, so they use an element, the rule, that is at the origin of many games – but not of all games. We will see the only very few videogames have rules.

So in this essay you will find a survey on games and rules in general applied to videogames and videogamers. During the understanding of the role of rules in videogames, we will explore their boundaries, trying to say what is and what is not a

game. Is Super Donkey Kong a game? Normally we answer «yes». But is Super Nintendo Entertainment System (SNES) a game? And the arcade cabinet of Donkey Kong? We will see that we have not a single answer to all these questions, because the answer depends on the subject who is playing. But we will see too that there is a single way to describe what people do when they play.

THREE MYTHS OF GAME STUDIES SCIENCE

A single use of Donkey Kong can be a play session as well as not. It depends on the user. So what into the experience of player transforms a game device in a play session? And what transforms an hardware or software device in a game device?

Personally, I never played with a Tram Simulator software (Like *Sotetsu Line Simulator Online*), even when I used it (both when I made the virtual learning as pilot and when I used the software with no specific purposes). In the same way, I never played during the change-and-wait loading system (eleven floppy disks) of Indiana Jones IV The Fate of Atlantis (Barwood 1992), for Amiga 500: the game, for me, started after the loading time. Similarly (but with an inverted sequence), when I was gametester for Nintendo, I stopped to play after my first day of job (which continued instead for a long time).

Which is the process that carries us to play or not with the same device, transforming it in a game device? We need to look at three issues. In one of the most important articles in computer science, James Moor made a deconstruction of the three myths of informatics science of his era: the distinction hardware/software, the distinction analogical/digital and the absent distinction of program/model/theory. Even in game studies there are three myths: the distinction game/player, the distinction game/game device and the absent distinction rule/affordance. After this, we will see that actual theories of games are not epistemic theories, so they cannot preview phenomena. They are just normative theories, models directed to designers.

In his article, Moor explains that the distinction between hardware and software is not ontological (tied to an objective difference), but just epistemological (tied to an interpretative difference) (Moor 1978: 215, 218). The interpretation depends on the point of view of the user, which depends on her abilities and purposes. If you change the type of interaction between user and computer, you will change the constitution of software. Software changes its structures, depending on the point of view of the user.

From the a certain point of view the software is the logical-symbolical structure of a program, opposed to the hardware physical structure of the program. From another point of view the software is the modifiable part of the program (different users, programmers and engineers modify different parts of the a program). From the third point of view the software is the physically removable part of a program, such as a floppy, a file or a game controller.

What is seems shared by different epistemological models of software is the view that it depends on the hardware, which is less accidental than software (Duncan 2009). So, to individuate what is a piece of software we do not need to know which is its material and ontological structure. Rather we need the epistemological taxonomy determined by the type of involved interaction. That interaction is the relation among interface, user skills

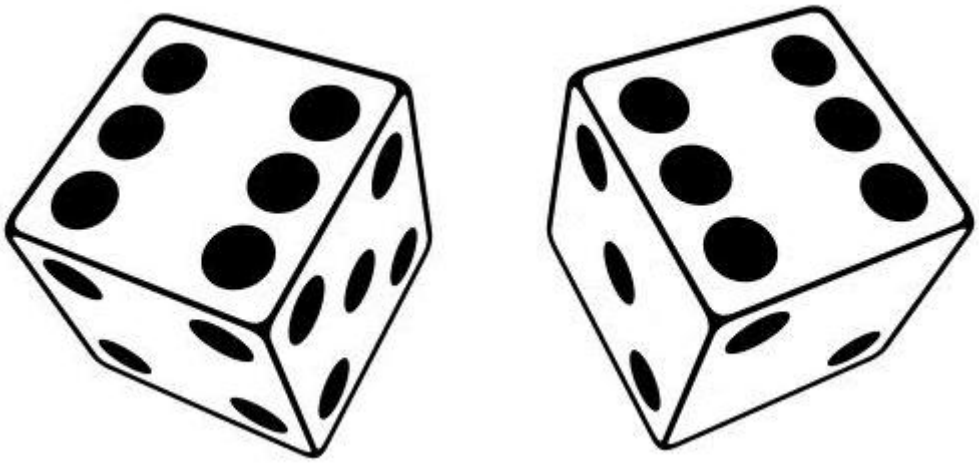
and her purposes. In a similar way, game constitution depends on the type of interaction, player skills and her purposes.

A similar case is the analogical/digital difference. According to Moor, there are two different ways to interpret the process of computation. The logic-symbolic level of a computer is based upon the division of information in discrete states. That division is made by our interpretation, whereas in the ontological level there are not divisions in the cause/effect sequence of electrical tension changes.

The inventor of computer, Alan Turing, wrote (Turing 1950: 439):

> [Discrete state computers] are the machines which move by sudden jumps or clicks from one quite definite state to another. These states are sufficiently different for the possibility of confusion between them to be ignored. Strictly speaking there are no such machines. Everything really moves continuously. But there are many kinds of machines which can profitably be thought of as being discrete state machines.

We *can think* a continuum movement as a collection of discrete states. Exactly like when we roll a die and we calculate that in 1/6 of cases the result is the same face. We can consider two different cases as identical for statistical purposes, but in an ontological (analogical) level those cases are not identical:



The left result of a roll and the right result of a following roll differ for temporality, causality and consequences; besides they differ for position. If we *count* two different tokens *as* a unique type because they are similar, we are operating in a certain epistemological level of granularity, a cognitive behavior that certainly excludes some ontological properties. Therefore the normal epistemology of rolled dice interpretation excludes from its data mining some pieces of information related to objective properties, such as position of dice on the table, which could explain ignored causes and unexpected consequences. This is why sciences tend to specialization and deep databases full of piece of information. It is the microgranularity effect: the map tries more and more to resemble, in a isomorphic way, to the territory. The goal is the perfect detail, with the purpose to find the perfect forecast. This tension risks to lose the view of the forest for a better

seeing of trees. Ontology can help the specialized epistemology of sciences to not lose a broad and strong view.

The shared ontology for any informatics discipline is coming: from the satellite geology to cars building planning, from the analysis of mortgages spread flow to the study of the breast cancer varieties, from the data mining of social networks to the game design. Smith has founded the Basic Formal Ontology with the goal to structure and share informatics data coming from different sciences. The upper ontologies like the BFO (important others are DOLCE by Nicola Guarino and General Formal Ontology by Heinrich Herre) are even used as vocabulary by different OWLs (ontology web languages) for the project of semantic web.

Informatics science make a discrete and digital distinction between software and hardware, analogical and digital. That distinction needed a reorganization made by Moor and applied by informatics ontologies. Even game studies could use ontology to reorganize the relation of game and rules.

The distinction between game and not game, rule and not rule is epistemological, not ontological. Rules and games are important elements of institutions which govern our society, that John Searle defines as «social reality», the set of objects studied by the «social ontology» and generated by a particular epistemology, the «collective intentionality».

SOCIAL ONTOLOGY PROJECT

Only recently the Social Ontology Project officially entered into the game studies debate (Mosca 2011b). Social reality is the portion of our environment that is constituted by beliefs that people do not recognize as beliefs. These beliefs constitute the social objects, immaterial things that cannot be amended by a single person, though they are created and maintained by the mind of persons (in the plural). The value of money, e.g., depends on a belief, nevertheless a single person cannot make that a 10 euros banknote is worth 20 euros (anyway we will see that she can pretend this). Searle describes the logical form of the "status-function assignation" which creates social objects:

> «X (physical object) counts as Y (status-function) in C (a context)»

This string of text is a «constitutive rule», that is a rule which precedes the object it regulates. At its opposite there is the «regulative rule», which follows the activity it regulates. Social Objects such as money value, weddings, parliament acts and games are generated by constitutive rules.

According to Searle, game in particular is the paradigm of any social object. In a similar way the eminent psychologist Winnicott build an Object Relations Theory which links the development of language and culture with the little children fictive symbolization of «transitional objects» (Winnicott 1935). According to Winnicott, game arises when the player pretends that a X-broom is a Y-horse in the C-game. When players end to make-believe that «X is Y in C» and starts to believe to their pretenses, the games end and the institutions born. The difference between real social objects, such as money value, and

fictive social objects, such as games, resides in the type of belief assigned to them by the subjects who create them.

We will not see here Huizinga's, Caillois', Fink's or Schiller's theories about what is serious and what is not. We just need to observe that after any match the Y-horse returns to being only an X-broom. According to Bateson (Bateson 1955, 1956), people do not treat games as objects but rather as communicative frames (in particular as negative meta-messages). Exactly the contrary of what people do toward real social objects, which are treated, this is the point, as objects thought they are just subjective beliefs. Therefore the game is neither an object nor a specific activity, but a fiat boundary in the Smith's sense, a way to intend different objects and activities: the *gameframe* (Deterding 2009).

Due to the universal applicability of gameframe, any object or situation can be conceived and treated as a game *or not*. You can play to America's Army (Wardynski 2002) as a game or as a training simulator; you can play to Somitsu Line Simulator as a game or as a boring Tokyo tourist guide.

Wittgenstein rightly wrote «don't think, observe!» (Wittgenstein 1953) showing that there is not a unique property shared by all the games of the social world: electronic soccer simulations, living role plays, ring-a-ring-a-roses and language jokes. Bernard Suits properly stated «don't observe, play!» (Suits 1978), but I think he not played too much, because Wittgenstein is right: there are not characteristics shared by all the games. Kripke (Kripke 1982) showed that the dark shared characteristic of games is the subject himself, who subsumes different activities in a single concept: the player.

WHERE IS IN GAMES CARMEN SANDIEGO?

Our Carmen Sandiego is the player, that we need to find in the labyrinth of social objects created by the player himself. A computer program is a game if and only if a player feels that it is a game. The player is influenced by her culture, psychology and subjective encyclopedia. The objective property of feedback is required to assure the possibility of the assignation of gameframe to a device. But the objective property alone cannot obligate a player to feel being in presence of a game.

To transform a device in a game, players have to apply the gameframe to something that could assure a feedback system (an interaction). The gameframe is constituted by a make believe which is applied to a feedback system, in a conjunction of a social ontologic fiat boundary and an epistemologic bona fide boundary. The gameframe is a logic negation, a «suspension of disbelief» could says Coleridge (Coleridge 1817), but I prefer the expression «suspension of belief». At the opposite of this suspension of belief there is the constitution of a social object by a rule. Rules are elements of social reality, not fictive reality, and they are tied to belief. I feel that I must obey to a rule only if I believe, not if I make believe.

There two types of such real belief. The first way to feel obligation is made by a prescription that I feel as right (a prescriptive rule). According to Legal Naturalism (Grotius 1625) the rightness of this prescription is a goodness, according to Legal Positivism (Kelsen 1934) is a validness and according to Legal Realism (Ross 1958) is a

concrete justifiability. Second way to feel obligation is made by a description that I see the rule as a means to obtain something (a descriptive rule).

Great theorists of game studies normally deal with rules (Zimmermann 2003, Juul 2005, Consalvo 2007, Lastowka 2009), lacking some fundamental differentiations between «descriptive» and «prescriptive» rules. Maybe due to that vacuum, their explanations are not really used by game designers; in fact they prefer the naïf categories of Bartle.

Following the deontic logic (Conte 1985), descriptive rules teach how to achieve a result describing the means. At the opposite, prescriptive rules impose a behavior to a subject who is free to obey or not. If a subject follows a prescriptive rule she knows that is doing it, otherwise she is not following a rule but she is constricted to act in a certain way.

As stated by John Rawls (Rawls 1955), cooking pizza is not an activity created by rules (you can cook pizza with no rules), but recipes describe this activity formalizing it in a rule system, with the purpose of communicating which means are modally necessary to obtain a goal. A recipe is a descriptive rule system, an algorithm which to have real effects in a real world needs to be processed (intended) by a human mind. Computers cannot intend instructions they manipulate; indeed they do not manipulate instructions, but just changes of electric tensions.

Descriptive rules of a cooking recipe are made by empirical observation and logical induction. Prescriptive rules are instead always imposed by a subject to another subject (or to herself) and they cannot derive from empirical observation: as Hume stated, it is not possible to derive «ought» from «is», we need a subject to produce it independently.

The meaning of descriptive rules is on an epistemological level, whereas the meaning of prescriptive rules is on an ontological one. Laws of physics sciences are descriptive, while the Law of States is prescriptive. Citizens of a State can disobey to their Law, differently from computers, that cannot voluntarily disobey to program code. Computers do not follow rules.

According to Bernard Suits, to play a game is to attempt to achieve a specific state of affairs, using only means permitted by rules, where the rules prohibit use of more efficient in favor of less efficient means, and where the rules are accepted just because they make possible such activity. I doubt of this Suits' claim. During the review process of this essay I discovered the Chris De Leon blog, where I find a really close intention to mine in the way to affirm the absence of rules in videogames, with arguments surprisingly similar to what I stated in some of my precedent articles (Mosca 2010a, 2010b, 2010c, 2011a, 2011b). Happy to find an effort similar to mine, I report the answer of De Leon to Suits' definition (De Leon 2011b):

> In a videogame the permitted means are of the same scope as the possible means. No means are possible and prohibited […] In videogame chess, unlike non-digital chess, we are truly unable place a piece where the rules do not allow for its movement

I completely agree with the De Leon statement that videogames have no rules, though I am completely at variance with De Leon when he says that due to the absence of rules, videogames are not games (De Leon 2011a) (so what are videogames?).

Bernard Suits substantially says that games are made by three types of rules: constitutive rules addressed to players by prescriptions (1), descriptive rules directed to help the individual to play fair (2) and finally another subtype of prescriptive rules which punish players inside the game, directed to help the group to play fair (3). But I do not find where are all these rules during a match to Tetris (Pajitnov 1984).

WHERE ARE WRITTEN THE RULES OF A VIDEOGAME?

We have seen that there are no ontological differences between hardware and software (while there is a difference between computer and interface) but just epistemological differences. We can epistemologically read input and output as rules which describe analogical processes into the computer, but we cannot find here ontological prescriptions, because they need a subject free to obey or not. Unconscious rules do not exist, therefore a subject chooses if obey or not just during awareness, otherwise it is not a choice. Computers have no such awareness.

The normative value of prescriptive rules depends on the point of view of the subject: without a subject, there are no rules. The same is for games. Neither a rule owns a causal power, nor a game device generates by itself a game: a subject is always required. As people cannot follow rules without knowing it, people cannot play unconsciously. Fiction, as prescription, is a matter of awareness. In a roleplay the «not playing character» is not a player. The supercomputer *Deep Blue* was a NPC whereas Kasparov was a player. To say «I play against my computer» is similar to say «I ride this horse» with a broom in hand.

Games and rules are elements of social and psychological reality and they depend on the mind who plays or o obeys. It is not possible to patent a game or a rule. What you can patent is a trademark, a name or a numerical sequence of the program code. Due to this there are thousand clones of Doom (Carmack 1993), Street Fighter II (Nishitani 1991) and SimCity (Wright 1989).

So descriptive rules use normativity to communicate to a subject «how an object works in a system». Prescriptive rules instead prescribe a behavior to a subject that, not being modally forced to obey, can choose to respond to the rule or not. In many (although not in all) sports, role-playing and board games, prescriptive rules have the role to constitute the ludical activity. Conversely, in videogames it is hard to detect this type of rules.

Controlling the sprite of Mario, the player neither obey to rules nor prescribe rules to her avatar. Screen entities and hardware/software bounds stay on a physical level, not a social one: they exist regardless the player, unlike rules or gameframes. The player interacts with screen entities and hardware/software bounds like she interacts with physical entities. A completely different situation is to interact with frontiers such as Indiana's or India's political boundaries, that, like a proprietary right or a Monopoly (Magie 1906, Darrow 1935) mechanic, are governed by rules. Like Concrete Pinballs and the boxed Arduino analogical Mario, videogames have no rules inside them, but just objective and material properties which are in relation with human controllers like hands and human input devices like eyes.

Recapitulating what we saw until here: rules and games are social objects, they depend on the point of view of the subject. On screen objects conversely are just physical entities external to the mind of player. The player interact with Mario's platform in the same way with which she interacts with platforms of her real house; in the same way the player can intend as ludic (or not) both the Mario's platforms and the real platforms of her house (for example by playing to hide and seek). Something is game or not according to a choice of the player, not of the programmer. Not every rule system are games: the criminal code is not a game. A rule system becomes a game only if the player intends as ludic some prescriptive rules. Not every games have rules: chess owns rules, but walking in Second Life does not.

These banal facts are not taken into account by anyone who associates videogames to rules. What I want to show is, as De Leon wrote, that playing to chess requires rules whereas playing to chess on computer does not. Contrary to expectations, just few videogames have rules and those are board game conversions (and not each board game electronic version has rules).

Consider *Magic the Gathering*, the cardgame (Garfield 1993): its official videogame, named *Magic Online* (Leaping Lizard 2002), enforces in automatic the effects of cards, which are descriptions of functions, not prescriptions. Conversely, the unofficial and low budget videogame (fantasy from low budgets!), named *Magic Workstation* (Magi-Soft 2002), requires to the player a manual enforcement of the cards effects. Due to this, in Magic Workstation is possible to break the rules, voluntarily or not. Rules are one of the most interesting new horizons of videogaming, not the concept to explain them.

On the contrary, a great theorist as Jesper Juul innocently affirms that «video games are a combination of rules and fictions» (Juul 2005: 197. Confront «while all games have rules, most video games project a fictional world»: 121). According to Juul, videogames are a real rules syntactic system where players can interpret fictional worlds (not necessary tied to narration) in which to enact those rules. This fictional *enactment* of the rules has some real consequences in and outside the fictional worlds. I am by Juul's side when he describes the half-reality of games: to be *and* not to be, that is the Quest (Mosca 2011b). But I do not find any reason to refer the game to rules.

The hardware/software entity does not operate following rules, neither as deterministic events (related to the game as object) nor as gibsonian affordances (related to the player as subject) (Gibson 1979). Players have not to choose to obey to rules or not, but just to use the screen entities in one way or another: ludic or not ludic, it depends on the application of the gameframe that generates the interactive figmentum.

NEW HORIZONS

Chris Crawford stated that (Crawford 1984)

> «rule disputes and administrative foul-ups are part of the unavoidable dangers of boardgames. The computer instead could administer the game, freeing the player to concentrate on playing it»

Crawford is right, unfortunately forgetting that there is a drawback: without rules the player is less central. Players, without disputes and administrative foul-ups, cannot develop will, sense for the group and respect for the promises: instead they simply stick to an objective status quo. Due to this, inserting rules in videogames seems a good idea, both for educational and for killer applications. The way to implement rules in games are fundamentally two: as prescriptions directed to players, or as prescriptions that could be transgressed. This second way is normally inscribed into the «emergent gameplays» ensemble.

To make play in this way, you should have to build the emergent gameplay upon the previous cultural perspectives which tell to the player what is permitted and what is not. *E.g.* some players could pretend that EULA or instruction booklets constitute the rulebook of the game, but other players could not.

But I think that the more innovative way to introduce rules in videogames is to do what Crawford think is a problem: inserting rules in the core mechanics of the game, like in board games. Differently from serious games, educational games, tutorials and other gamified activities which use descriptive rules to generate ludicity, the future of videogames resides in prescriptions.

As a corollary, prescriptive rules generate the «breaking rules» phenomena. Online games manage cheating as a problem, but it could be a game source. De Leon notes that videogames that simulate penalties for violating simulated rules transform penalty to an option. What I intend when I talk about rule-governed gameplay is not an option among other options, but a prescriptive structure directed to the player. Therefore I do not claim for simulated rules (like in sport games), but for real rules.

Normally, house rules, tournament rules and other metagames are not part of the videogame itself, but they are just gameframes which contain videogames. What I suggest is not to use the videogame as «very complicated dice» (De Leon 2011b), but as the central regulated mechanic of the gameframe. Maybe encapsulating cheating mechanics too.

Mia Consalvo explored very well the patterns of cheating in videogames and its social impact. Cheating, exploiting, griefing, twinking and farming are different emergent gameplay based on rules which in part are supported by designers. But they could be put at the core of game mechanics. A lot of emergent gameplays which today are banned by MMORPG (like secret alliances, play to lose, ownership of multiple characters and sharing of characters) could became core gameplays. A lot of other emergent gameplays actually are not conceived as cheating: customization of interface controls, customization of selling bill (EULA), mods of program code, mods of operative system, mods of server exchanging data software..

We have to remember that a machine cannot cheat because it cannot obey. The videogame is a toy that can be modified but that does not impose rules. The meaning of cheating is to pretend of respecting a rule without really doing it, therefore to cheat in a card solitaire it is not always cheating. Surely, you can cheat against yourself, but it is not sufficient to change a rule with a not forecasted exception to consider that this is cheating. To cheat you have to be conscious that you are cheating and to consider as illicit what you are doing.

Cheating is near lying and far away from pretending. If to play by the rules means to pretend of living in a world constituted by those rules, to cheat means to pretend to pretend, without doing it. Cheating derives from lying, that is pretend to say the truth without saying that you are pretending. Cheating and lying have always a subtext, while pretending is to create a text parallel to reality: they could be some exchanges between reality and make believe, but they are always explicit. The exchange could be from reality to make believe (like in evasion fiction), or from make believe to reality (like in critical fiction). During an interview Tolkien said that he wrote about dragons because he desired that dragons exist. This is the best way to define the evasion fiction. The critical fiction instead proposes what it yet exists from a different view, with the intent to change the reality and not to escape from it.

According to Consalvo (Consalvo 2007: 88-92) the single player proper gameplay is conceived in different ways by different player types. The *purist* feels that cheating is any introduction of new elements by the player, like asking friends' aid. Here I see a serious approach that completely delete the awareness of the role of the subject in making the game world. The second type is the *loyalist*; according to him, cheating is any action that modifies the challenge as it was designed by the programmer, so official written guides are admitted, but not cheat codes, exploiting bugs and hacks of any sort. This player type has a preference toward the object value, but less intense than the previous. According to the third type of player, cheating is just when other players are involved. So in this view code and hardware hacking are just a different way to play. This player type is a completely transparent and aware subject.

Consalvo notes that, according to some players, cheating to see the end of the game is permitted. Someone cheats for fun or to explore any path of the game. But it is in the multiplayer mode that Consalvo shots her best fires. During multiplayer mode, the *griefer* cheats not to achieve advantages but to stop playing other people, by killing them or simply by spoiling plots. The griefer «game the players» instead to «play the games». People normally cheat to gain innovations and to continue to play even where and when designer does not programmed. Finally, as Mäyrä stated, Consalvo sees four models of cheating: exploiting bugs, exploiting people, exploiting the code and exploiting a third-party (*Ibidem*: 113). This is a sort of exploiting theory of cheating. But I think that the phenomenology of player types relating to rules is more rich and schematic than this, even because Consalvo points out only about a deviant rule behavior, the cheating.

PLAYER TYPES BASED ON RULE-GOVERNED GAME TYPES

The Social Ontology Project supports us to understand that there are at least eight basic typologies of players regarding to prescriptive rules. I wrote another essay, more theoretically addressed, where I examined such player types (Mosca 2011b), but here I would expose a new, enriched, scheme that combines the Searle's theory of constitutive and regulative rules and the double game category of Italian cognitivist scientist Fabio Paglieri: «playing by the rules» and «playing with the rules» (Paglieri 2005). So we know that there are four different types of games about rules:

	Searle's **Regulative Rules**	**Searle's** **Constitutive Rules**
Paglieri's **«play by the rules»**	Regulative games Regulative players	Constitutive games Constitutive players
Paglieri's **«play with the rules»**	Deregulative games Deregulative players	Deconstitutive games Deconstitutive players

The *regulative game* is a game that uses rules to regulate an activity that existed before the game but that was not regulated. For example we can create a challenge about sand castles building (that in itself is not a regulated activity). A *regulative player* is who constantly tries to give a rule shape to a precedent play activity. For example a MMORPG group builder or a multiplayer tournament organizer are the typical player figures that give rules to something that is not regulated. Any game that uses rules has to encourage this type of player, because she involves into her game a lot of other players.

The *constitutive game* is a game that uses rules to constitute an activity that did not exist before the game. For example we can create or accept a rule that constitutes a game like chess (the board game). A *constitutive player* tends to accept any system of rules clearly presented as prescriptions. Players of games as *Magic Workstation* or games of the website *Brettspielwelt.de* or finally simple play-by-mail games are the typical constitutive players, but I hope to see a lot of new games based on rules that can be not obeyed. A certain type of *goldfarmer* is a constitutive player too, because he respects a rule-governed system of exchange inside the game. Finally the player that feels EULAs, program codes or normal ways to play as a sort of rules booklets of the game can be associated to a solitaire constitutive player. Constitutive players are the solid base of any rule system users community.

The *deregulative game* is a game that intends the rules as a system to be transgressed, without discussing the general value of that rule system. For example we can steal the marmalade or we can go over speed limits without any other purpose than to transgress the rule. A *deregulative player* has a transgressor attitude, so she plays by not obeying to certain rules. Hackers, exploiters, griefers and twinkers are the main types of deregulative players, because they do not obey to EULAs, fair play customs and design patterns (in the case that the players intends them as a rule system). The deregulative player is the most studied type of player, because of publishers. Normally publishers ask to developers design patterns that could stop any deregulative activities, though the main type of actual emergent gameplay based on rules is centered around deregulative player types.

Finally, the *deconstitutive game* is a game that deconstruct the meaning of a rule system, often voiding is prescriptive value capital. For example we can do jokes of language or

satire about a conventional habit. A *deconstitutive player* tends to not believe in institutions, so she constantly tries to deconstruct the deontic powers of the rules. Machinima and a wide variety of trolling activities are directed to deconstruct ideology and syntactic of games. These players actually have not spaces to act in game systems. But they need to be supported, for example by leaving the possibility to deconstruct and reshape game structures and ideologies not only in forums, but directly into the gameplay workflow, to give a way to deconstitutive approach to not being transferred in other media.

We need to understand that not all the players conceive rules in the same way. Near to these four basic types there other four types of player regarding to rules:

	VS rules	**For Rules**
I play only if..	Anarchic players	Legalist players
Cheating not as a game mechanic	Loser cheater	Unable cheater

The *anarchic players* associate the play activity to an absence of rules, a space of total freedom from constrictions that involve their awareness. At the opposite the *legalist players* associate the play activity necessarily to rules, maybe because they feel that prescriptions involve them in the process of the construction of the world where they are called to act. They have completely opposite psychologies and I doubt that a single game could satisfy both of them.

The *lose cheater* is who cheats because does not accept to lose, whereas the *unable cheater* is the player not sufficiently trained (normally because the game has not a good learning curve or too much long tutorials) but she wants to continue to play by exploring something that is not permitted.

By another side, there are different types of player regarding descriptive rules. A lot of educational and serious games use descriptive rules to give a shape of simulation of a situation that has not isomorphic relations to what is simulated. For example if I try to educate to civil solidarity I cannot simply enunciate paradigms and describing a correct behavior, maybe with a tutorial, but I have to implement concrete situations that involve the real possibility to do what is wrong, with all the good and the bad consequences. Therefore a real flight simulator has not to present descriptive rules («how to do») to illustrate the plane mechanisms, but it has to present the mechanisms themselves.

In a similar manner, too much ad-wares use descriptive rules, because their approach is to communicate a message to the user. But this is not the real structure of a game, which involves the player in a situation that she has to conceive as totally controlled by her. Ad-banners in free online and mobile games do not give to the player a control on them, so the player feels that her gameframe is restricted and she cannot perceive the banner as a part of the game, leaving it to as background of her perception. Therefore this type of ad-ware cannot attract *fugitive players* that accept to play only if they are not involved in learning, working or buying activities (maybe because those are contexts too much

related, in their experience, to the real world, from which they want to escape). These players have not to perceive the serious frame of the gameframe, in an ad-ware: so any product which presents itself as an educational, a tutorial, a job or an advertising will be not played.

In general any gamified activity runs the risk to be *a priori* excluded by some players. Translating a traditional philosophical distinction, Paglieri stated that there are «play activities» and «play to a game activities» (Paglieri 2005). The difference is really not tied to an objective distinction between a ludus-structured property or a paidia-chaotic property of activities themselves (adapting some categories from Caillois 1958). Rather, this issue is just tied to a different way to conceive by the player the activity they are doing. Therefore there are *traditionalist players* who play only to games that present themselves like objects and contexts normally conceived as ludic, opposed to *innovative players* who constantly export the gameframe to objects and contexts that they never associated to games before playing *that* match.

JUST A CYBERPLACE

What does it means the title of this essay?

The suffix «cyber» related to informatics has a mid-century history, starting from Norbert Wiener concept of cybernetics, a science dedicated to formal systems (Wiener 1948), and ending with Michael Heim's cyberspace (Heim 1993, 1998), a description of a brand new world near our real world. But, completely right with Lehdonvirta's, Heidegger's and Axelos' masterpieces, I claim that a world, to be a world, has to be one and only one. So if there are two different communicating worlds which share same objects and subjects, as the virtual and real worlds are, they are not worlds but rather different places of a single world. They follow the same physics laws, same social laws and same psychological laws, so they are parts of a whole. Therefore we cannot talk about a cyberspace, because it has the same properties of the real space, but rather we can talk about a series of cyberplaces, which differ from concrete places due to their ergodic structure.

Having games in mind, Aarseth defines «ergodic literature» any text that requires more material interaction to be enjoyed than normal plain texts (Aarseth 1997: 1). Ergodic literature is simple to use, because it carries with it the rules for its right use (*Ibidem*: 179). The cybertext is an ergodic text that involves the use of automatic machines, normally computers (*Ibidem*: 75).

Instead of talking about literature, texts and rules, I think that we should talk about places, contexts and affordances. Cyberplaces are sites and contexts that use computers to structure the interaction with users in an ergodic way. What I claim is that videogames are cyberplaces that players associated with a gameframe.

From this point of view, videogames are a good model of our contemporary culture, which combines materialism and images worship. The videogamer interacts with both the material and symbolic levels of images, recapitulating the characteristics of our culture.

Anyway «model» could not be the right word. A model normally simulates the behavior of an entity. The model is useful to understand and eventually to test a theory before to verify it for real. Due to this from a single model it is not possible to deduce a single theory. Theories are falsifiable, whereas models are not true or false. A theory indeed is a set of laws used to explain and predict a set of events (Moor 1978: 220), whereas a model is a set of objects or processes which have an isomorphism with some portion of what is simulated by the model. A computer program is a set of instructions, even written on a blackboard, that a computer could process (this means that what today is not a program tomorrow could be a program). To change a computer program in a model we need a theory that could be implemented in a simulation to produce a symbolic interpretation of the program instructions. Therefore what we tried to do in this essay is a theory, not a model. Maybe someone with good programming and theoretical skills could derive a model from that theory.

So videogames are a good image of our society. According to Searle, games are the paradigm of our society, and I am right with him. But unlike his founder, the Social Ontology Project today is moving toward the idea that social reality is made by constitutive rules, though it originates from a fictive level, the gameframe, that is not a rule. The reification of the gameframe subtracts it from the player control, transforming it in a rule. The rule resist to the obedient and to the objector like a «res» (the latin word for «thing»). In the social reality the rule presents itself as an object, whereas the gameframe presents itself as a part of the subject, the player, who controls it. So the society comes from a game taken as something that is not part of the player: this process begins as a *make believe* and it is concluded as a *make belief*.

Rules are discrete and digital elements. The functioning of a computer is based on continuous (analogical) structures that we can interpret as discrete (digital). The electric exchanges into a computer, exactly like the movements of balls into an abacus, do not «calculate» anything, but rather *we* think them as calculus. The same happens about the prescriptive value of an event on screen: its properties can tie up us only by their material affordances, but the prescriptive value comes from us (anyhow any affordance is a relational property: which is tying me could non ties you or a bat. See Gualeni 2011). Our interpretation rends digital something that is analogical, both in the case of prescription and in the case of gaming.

Player has centrality in any game or play activity: «player agency is central to understanding games» (Consalvo 2007: 2). This centrality must be perceived, otherwise the game disappears. The videogaming is a ludic use of a certain machine, often programmed to be a game, but sometimes not programmed with this purpose: «both the machine and the operator work together in a cybernetic relationship» as a videogame unfolds; «the two types of action are ontological the same» (Galloway 2006: 5). Pelé, the football player, played with a ball when he was a professional as he played with an orange when he was a kid: what it changes is the medium, not the gameframe.

Recapitulating the theoretical content of the essay: surely we cannot analyze games simply as (cyber)texts, but we cannot analyze them as systems of rules too. Rules, like games, depend on the subject. Not all games have rules. Just few videogames have rules. Game in general does not depend on rules, because it is an interactive figmentum produced by the assignation of a *status fiction* gameframe to a context. The videogame is a cyberplace where a player assigns a gameframe. The structure of social reality is a rule system derived from the reification of the gameframe. Videogames are a good metaphor

of our society because they are symbolic and material manipulations of images. I hope you enjoyed to read this, if you did we can continue by mail.

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