on gamification

Priesbatsch, 2010

Funchs, 2012

Halter, 2006

The Flood-Dresher experiment or Prisoner's dilema is

one of the most populary known

Csikszemtimihaly, 1965

dames

Deterding et al. 2011

Described as the application of a game layer on top of the world, the use of game design elements in non-game contexts or the penetration of our society with methods, metaphors, values and attributes of games, gamification seems to have made an appearance which cannot be ignored, opening a new role for games in culture and society.

However the idea behind gamification is not new. The application of game principles in diverse areas of the cultural life can be traced to very remote times. One of the most classic examples cited all over the literature refers to the use of war games for strategic training in military contexts. But beyond this context, it is not difficult to discover more examples in the fields of education, psychology, work space or even within the art context as researched by the Situationist International or more recent cases as the phenomenon of pervasive games developed by artistic collectives as Blast Theory. All of these examples expose a rich precedent in the creation of a mixed reality understood by us as the projection of an alternative meaning into different environments. In the 2000s we start to notice a turning point that sees gamification as ultimately different from its precedents. The rise of digital games as a cultural medium of its own right is a landmark that helps us mark the beginning. During this period an increase in the institutional presence of games occurs as never before. Game studies start to flourish in the programs at the universities, game exhibitions begin to be curated claiming their own space, game museums are created, and the game industry experiences a remarkable growth.[•] All of these actions institutionalize games as objects of cultural worth.

From the marketing context several voices have been actively promoting gamification as a source of revenue. During this period we have witnessed the publication of a vast literature from which perhaps the most renowned title is *Gamification by Design* by Gabe Zichermann. Together with other publications like *Reality Is Broken* by Jane McGonigal and her multiple interventions as key note speaker, gamification starts to be defined, distributed and implemented in the form that is most recognizable today.

Beyond these concrete examples we've witnessed a broader *ludification of culture*[•] which shapes society at many different levels. This term refers to the cultural shift that brings playful experiences to the center of the use, design and study of media and technologies. Under this light gamification is then understood as an example of a far more general process.

All of these examples allow us to understand gamification as concept that describes a new age where game designers are thought to have the potential to collectively use their problem-solving skill to approach social and political issues. Games are looked at with the big expectations of a medium with the capacity for an ambitious change and with the capacity to identify in 2006 the industry accounted for \$2.6 billion in sales and in 2015 it is expected to reach \$111.1 billion. http://www.theesa. com/wp-content/ uploads/2014/11/ Games Economy -11-4-14.pdf

Raessend, 2006

According to ESA

all possible situations in need of solving. Gamification presents itself to us as the most perfected tool available for the knowability, controllability and perfectibility of the world: the ultimate celebration of the empowerment of individuals to improve themselves and the world around them.

Taking into account all of the preceding conditions we can understand that it is not by chance that different voices have met this phenomenon with skepticism. Many view it as another "colonizing attempt" linked to a new mode of *govermentality*. Rather than be directed towards fulfilling those utopias that reminds us that another world is possible, gamification can also work as a method to regulate individuals and their social lives. Games become a pleasant and entertaining regulator of behavior that have their biggest strength on the implementation of positive feedback, rather than on the application of negative penalties such as fines, punishment or even judicial measures.

A clear example of this application of games can be found in the marketing context. Over the last few years gamification has been promoted as a potential source of revenue[•] and its techniques have been applied to shape the different ways in which people think instead of how they behave. Influencing thoughts, attitudes and beliefs is a practice very much related to modern advertising techniques. Together with choice architecture and the big data techniques afforded by the contemporary technologies, gamification functions as a set of methods whose goal is to regulate individuals via rules for strategic purpose.

Regulation in this case is understood as a predictable behavioral tendency towards acquiring a specific brand which is interpreted as "consumer loyalty", the Markets and Markets predicts that gamification is projected to be a \$1.6 billion market by 2016

Bogost, 2011

Foucalt. 2008

commitment of a consumer to a certain brand. We don't need to look far to see many different examples of this. *The Miles & More* program by the Star Alliance airlines or the *Nike Fuel* sport application are two implementations of gamified systems.

Besides the marketing context, gamification has started to have a political tone as well. The European Commission is not the only institution that gives games the potential to make a real change in the life of a large number of excluded groups, enhancing their better integration in society. Many other public figures have joined this discourse as well. For example, the US politician Al Gore affirmed that games are the new normal[®] and King Alexander of The Netherlands publicly recognized the potential of the game industry to improve the quality of our lives and develop new sources of value in our economies or to improve animal welfare.

Founding Opportunities, 2014.

participants/portal/ desktop/en/

opportunities/ h2020/top- ics/ 90-ict-21-2014.html

Opening Keynote at the 8th Games for

Change Festival, 2011.

Speech at the 6th ASEM Culture

Ministries Meeteing, 2014

Zimmerman, 2009 Zimmerman &

Chaplin, 2013

Foucalt ibid.

Online:// ec.europa.eu/ research/

What all of these examples have in common is praising games and gamification mechanics as a model for political means. Addressing environmental issues, wellness, education, employability, skills or civic participation are just some of the potential applications in a time in which the way we live and learn, work and relax, communicate and create, will more and more resemble how we play games.[•] The 21st Century will be defined by games, [•] it is stated. And this resonates with a use of games that is very close to notions of *biopolitics* and *governance*.[•]

Citizens and communities are transformed into players positioned within a game in which they are seduced to become "better" customers, community members, students, etc. Human beings are thought of as computational and economic actors that function in a highly independent way, as rational processors of information, allowing them to plan and execute actions directed towards maximizing their self-interests. Gamification connects itself with the quantified-self and self-governance and becomes a symptom of our contemporary society in which every aspect is being captured, processed and fed back by computers and digital networks.

The potential of gamification doesn't stop here . At the same time we can witness its implementation in the work context. From this perspective games provide the terrain for a new economy with a *play ethic*[•] that dissolves the distinctions of work and leisure, play and labour, producers and consumers. Managers and regulators are given a tool to arrange more competitive and productive employees, solve collective problems and even expose undesirable behaviors. They can then use the collected data *to predict such things as which employees are at risk for leaving, who are going to be top and bottom performers, who is likely to get injured and file for workers' compensation.*

The world is presented to us as a playground in which, together as friends, we can cultivate ourselves while working on things that make a difference. And all of this while having fun.

Taking these applications into account it becomes clear that games have, in these cases, little to do with creating playful experiences and more to do with creating a subset of persuasive design. Motivation in this case is just a means towards an ultimate goal that generally takes the shape of a change in behavior outside of the game context which relies on the systemic nature of games: designed rule systems with which one can interact.

When looking through the lenses of computer science and systems theory, games come to be defined as *a set of objects or entities that interrelate with one another to form a whole.* And it is by playing the system and understanding, Kane, 2004 Paharia, 2013 applying and enacting the interrelationships of the parts, that the whole, the potential for change, emerges out of the parts.

The key thesis underlying this orientation is that *parts* have no existence or being, apart from the whole to which they belong and the relation in which they exist. In a game of chess, for example, the attributes of the pawns, queen, king, and the rest of the pieces are characterized by the rules, and its relationships are defined by their actual positions in space. But if we look at games as an interactive system we discover that this very same logic of interiority is applied: the players become the objects of the system whose attributes are rendered visible by the current state of the game via the tokens and the feedback system. Their relationships are determined by the strategies and sociability afforded by the rules of the game.

This is the reason rules are considered to be *at the very* heart of the games. Rules are the formal structure of the game, the abstract guidelines that define the functioning of the game-system, its identity and the space in which play takes place. The rules of a game are therefore the laws that determine what can and cannot happen, a deterministic system that is absolutely closed and unambiguous, to which the players *voluntarily submit their behaviors.* Once play begins, players are enclosed within the artificial context and must adhere to the rules in order to participate.

This structuralist conception allows games to melt with common non-game analog systems that share the same characteristics. Algorithms, or societal rule systems are specially relevant at a time when *software is the invisible glue that ties it all together.*[•] This systemic nature of games give us the entrance point to understand how contemporary power is exercised and



how these relations of interiority are established. Games on one hand work as an *abstract machine*[•] that gathers heterogenous elements and produces assemblages and strata beyond the human signifying practices. But on the other hand, games can function as well as a meaningmaking media, as an *apparatus*[•] that mediates between different systems – a state, a university or a designer - and are dedicated to program and project a symbolic reality on the natural world.[•]

Approaching games from an a-signifying point of view can help in a new understanding of govermentality techniques beyond that of symbolic human interaction. Besides representation, games can create social forms that have little to do with the different types of *cultural construction*[•] that have placed meaning in its linguistic form as the key object. A more material approach arises in which *affect*[•] is one of the key words used in thinking beyond both the signifier and the body as an individualized entity. It also helps us grasp the interrelated and connected nature of bodies of various kinds.

The focus instead is on the manipulation of energetic material flows, an understanding of stable bodies as always formed of *intensive flows* and their *molecular connections*. Bodies are not merely predefined *organs and functions*, they take form as part of the environment in which they are embedded. Focusing on the intensive qualities of beings (human and non-human) and their *capacities* we can understand that the different forms of life are not defined only by their stable forms of organization but by their potentials for experience and sensation. The emphasis therefore lies on *individuation and becoming*.

Under this view, the world is made of assemblages of many different sizes with different *degrees* of *territorialization and encodings*, compositions of affects



and passages in a state of becoming, whose relationality produce emergent properties that are neither contained in their parts nor fully exhausted by the larger assemblages to which they give rise. Affects are transitions, not possessed by anyone, but agglomerates that constitute individuals formed by a constant interactional sensing, movement and memory of their surroundings.

Any of these assemblages work on different spatial and temporal scales, therefore establishing an ecology. In addition to their openness to new connections we also encounter a space of potential, of virtuality, of *universal singularities* which limit what any assemblage can do. Potentials are *always articulated in and through specific historical situations* and the intensity of affects, regardless of the type of individual, is constantly captured as a part of the productive machine of media technology in an attempt to arrange the interaction of the bodies by controlling its future and standardizing an always fluctuating field of affects.

A gamified system works as a technological machine that creates non-linguistic individuations, as a *kind* of 'changing matter' that dynamically assemble as well as undo components drawn from diverse domains and extract from these their singularity traits (hybrid identities), not all of which will be constituted but remain virtual (pure potential)[•] In here games generate a process of double articulation[•] that implicates both the distribution of bodies[•] in the intensive, temporal space of technical media and the integration of knowledge of these bodies as parts of regimes of control.[•]

On one hand, games are a technological space with the capability to capture the attention, perception and sensation of the human body. They also exhibit a *diagrammatic capacity*[•] to define its borders and limit the directions into which it can actualize. They operate



by appropriating and activating pre-subjective and preindividual elements - affects, emotions and perceptions - to make them function like components. Human and non-human individuals find themselves in a certain territorial situation, coupled to its environment. Playing a game is engaging in an already programmed interaction between different bodies.

On the other hand, games implement a process of rationalization of the procedures of perception, communication and organization that occurs within this space. Once this information is gathered it becomes translated into constituent parts of the system that are distributed back from a technological context, into a social field as a continuous feedback loop. Functioning as a computational system, a gamified system processes and transmits information with the objective of changing their participants. They work as engines of change that transform both humans and non-humans and their spaces of action.

However, a game system is not enough to make a game. If a "playable" structure is necessary then a game only exists if this idea comes to someone's mind. A game is a game first of all because someone has been able to communicate it through a system of objects and rules; but second because this structure becomes a game for someone else through the evolution of its understanding and appropriation when it is played. The role of the designer is to communicate interactively about how to play the game and the role the players should take.

Operating via *part-signs*[•] or non-signifying signs, gamified systems are able to transmit information without necessarily providing semantic content, regardless of whether they signify something for someone or not, working prior to representation. Signs and bodies combine with one another independently

Lazzarato, 2006

, Thibault, 2014

Genosko, 2014

of the subjective hold that the agents of individuated enunciation claim to have over them. *Triggering is the key action of this part signs.* Part-signs do not mean anything to the player, they encourage the player to take an action.

Besides functioning in this non-signifying register, games also have the capability to operate as meaningmaking media. Games and its codes function as a sophisticated communicational mechanism that projects realities calculated from its interior into the world. Consequently they have the capacity to *capture*, *orient*, *determine*, *intercept*, *model*, *control or secure the gestures*, *behaviors*, *opinions or discourses of living beings*. Games serve as an implemented program that seeks the modification of being in the world by encoding and decoding and by acting on *the artificial veil that conceals nature*, *called culture*.

The immediate consequence of this is the change of human panorama into a contextual model of existence,[•] a magical circle from which meaningful play outcomes. What is called reality becomes constantly recalculated and modified in the context of the player, the ones who deal with a mosaic of elements linked by non-causal relations generated by the apparatus.

To interact with a game from a signifying point of view is to participate in the creation, manipulation, and storage of symbols that result in messages whose aim is to inform culture and other players through their observation and analysis. The player is left to manipulate the game, attempting to look into and through it, trying to discover ever new possibilities. And this manipulation is performed via their imagination, *their specific ability to abstract surfaces out of space and time and to project them back into space and time*.

Genosko, ibid Agamben, ibid Flusser, ibid Poltronieri 2014

Flusser, ibid.

A player under these conditions is no longer related with the concrete, natural world, but instead with a system of programmed symbols. The symbols permutated by these apparatuses are in constant movement, altering the form of the world uninterruptedly. The tool side of the apparatus is 'done with' and the human being is now only engaged with the play side of the apparatus,[•] emancipated from work and free to play.

And freedom in this case is understood as the player ability to take the necessary actions to reach his or her desired results as long as these actions are codified inside the interior of an apparatus. An apparatus programmed in such a way that they are presented as systems capable of projecting infinite possibilities, giving the player the impression that his very same actions are essentially free.[•] However, it does not matter how strongly the number of potentialities are amplified, they remain limited since they account for the sum of all possible interactions performed by the player.

Besides operating as a programmed interaction or a mediation, a gamififed system is in itself a negotiated position in a broader context beyond this dichotomy. As many scholars have stressed, *playing games is a voluntary activity.* However, the voluntariness of gameplay is mainly constituted by its social context: to what extent others trigger an individual to do something, and to what extent the individual, in relation to the actions of others, defines himself or herself as autonomous.

We usually think that games are an enjoyable activity with the capability to motivate people to play them voluntarily. But to a certain extent, the relationship with their social context points in the opposite direction. Every society has norms and conventions on how to understand what is happening within different types of social situations, and how to behave appropriately



in them. These understandings, norms, and practices around different types of situations are defined as *frames.* And the same holds true for the "playing games" frame, which among other things *is characterized by a bracketed morality.* And this larger bracket of fair play and collective enjoyment is enforced not so much by the rules of the game as by *the constant monitoring*, *enactment*, *and sanctioning of the play community*.

As we elaborated before, by specifying explicit goals and rules and creating quantitative forms of feedback, a gamified system creates social signals that inform that the gamified activity is to be taken as a "gaming" situation. However, without a play community allowing this usage, game systems can exert force on the opposite direction. Many of the situational norms of those non-gaming contexts do not consider "playing" as appropriate. Engaging in play is not a desirable activity since it would lead to *embarrassment*[•].

This duality between play and non-play therefore has the potential to allow the players to maintain a more or less critical distance with respect to the gamified system. This space between them and the game allows them in return to see its rules as just "the rules of the game" and therefore always susceptible of adaptation. A typology of in-between positions can be established regarding their level engagement with the system[•].

The first typology is the player who accepts that the rules of a game are absolutely binding and allow no doubt and plays the game as it was designed to be played, following its rules and respecting its authority. A second type closer to the previous one is the master. The players in this category seek excellence and to perfect their knowledge of the game. The cheater is the next typology. This player is aware of the explicit and implicit rules of the game and tries to deploy them in

Goffman, ibid. Raessens, 2014 Zimmerman & Salen, 2004

Goffman, 1986. Bateson, 1972

Deterding, 2014

order to gain an advantage. Next to him, in a different level of respect to the rules, we encounter the spoil-play, the player that modifies the game if the system allows for it and does not regard the implicit rules. Finally, we encounter the spoil-sport, the outlaw or revolutionary that does not recognize at all any authority of the game. The first four types are thought to still operate within the boundaries of the game or to oppose them, the fourth however creates a new community with rules of it own.

Once we look at this typology in relation to the phenomenon of gamification, the actions of the third, fourth and fifth typology can be described as *counter-gaming*: a form of opposition to the increasing use of game elements within non-game systems. As a concept it calls for a gaming within the system, a disrupting play with its rules and content. And this form of resistance seems to share common grounds with other tactics such as media literacy, hacking movements or ambivalence.

Dragona, 2014

Zagal, 2010 Gaines, 2013

Massumi, 2002

What all of these propositions have as an ultimate aim is to find a place for change and for innovation within and outside a pregiven implemented system. But to the extent that the in-between that they explore is conceived as a space of interaction of typified positions and systems, of already constituted individuals and societies, all of these proposals end up back on the positional map. This space, therefore, still is ruled by the same logic of determination. *Change is only understood as a negation of the determination.*

Unavoidably, when approaching the thinking about the intrumentalisation, domestication, pervasion or colonization of play and games we risk sharing the same fate. It does not matter if we value games for their potential for social change, their educational qualities or their economic impact. It doesn't matter that play ought to be *separated from ordinary life, and with no material* interest, unproductive and in a different time. In all of these cases what we do is reproduce very specific ideological discourses or rethorics of play and games, placing them in the grid of the multiple broad symbolic systems – political, religious, social and educational – through which we construct the meaning of the cultures in which we live.

What would it mean to give consistency to the inbetween? It would mean realigning with a logic of relation. For the in-between, as such, is not a middling being but rather the being of the middle, the being of a relation. It is only by affirming the exteriority of the relation to its terms that we can start tackling this problem. Games, play and the societies in which they are inscribed are inseparable. But they need to be addressed as differential emergence from a shared space of relationality that is one with becoming and belonging. We need to understand that there is a difference between social determination and sociality, between games and play.

By claiming that play is not *ordinary or real life*, temporary or free from a purpose, we easily forget that this "freedom from" is in itself a social norm. To play is already domesticated since a specific conduct must be adopted. *Play is freedom within an structure*[•]. Play, whose unifying characteristic across the different theoretical approaches is *adaptive variability*[•] seems to allow itself to be articulated in games and *all aspects of culture, from art to religion, law and war*.

Yet, if *play* is older than culture, [•] it always presupposes that human society and animals have not waited for man to teach them their playing [•]. By understanding play as an structured phenomenon we take the risk of assuming the precedence of terms in relation. Games and social structures back-project a stencil of the already-



constituted to explain its constitution, thus setting up a logical time-slip. The challenge then is to find a way of approaching play without falling into already existing categories of thought.

We all play occasionally, and we all know what playing feels like. But when it comes to making a theoretical statement about what play is we fall into silliness.[•] We feel that something is behind it all, but we do not know, or have forgotten how to see it.[•] All of these statements direct us towards understanding that the perception of play is articulated in its actions, that play cannot be effectively seen, only felt-thought in its movements, processes and arrivals as yet unthought, post-instrumental and preoperative.[•] Play demands us to be approached in play, through our bodies operating as transducers. Play forces us to claim back our bodies as mediators.

Play under this logic becomes felt environment, an analog process in self-varying continuity with the capability for transformative integration, translation and relay. Imagined and full of potential, play is a multiplicity of possibilities outside of any given thing, structure, sense or actuality. Becoming is not to imitate or identify with something or someone. Only within this logic can we allow play to stop being the overcome of unnecessary obstacles, and freely unfold its morphogenetic potential without the need of a goal.

In this we can be able to close the discussions about the pre-social and embrace the living of the social as fully open-ended, as becoming, as a collective individuation author of its own cartography. Sociality without determined borders.

If we are able to take play beyond the confined spaces and maximize his full potential, then we will experience the birth of new forms of game, culture and sociability as its result.



The question is then, are we ready to embrace its radical consequences?