

HOW EXPERIENCE, ATTENTION AND UBIQUITY ECONOMIES AFFECT THE ROLE OF DIGITAL MEDIA ART AND ARTISTS

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ABSTRACT

This article seeks to demonstrate the impact three economic concepts that gained traction in the last decades of neoliberalism – experience, attention and ubiquity – have caused in the current role of digital arts and artists in society, both on and off-line, as well as how they have changed the arts ecosystem, namely by altering the relationships between artists, audience, curating, public spaces – material and virtual, academia and companies. It addresses the commoditisation of creativity and innovation, which are now organised and consumed like products. It also offers insights on how the concept of art ownership has been replaced by experience, how mass-individualization of the selfie generation artists in a globally aestheticised and exposure-addicted world has contributed to the dismantling of community and association mind-sets and how the architecture of participation, presented as a vector of globalisation, inclusion, and democratisation of access to creation and enjoyment, actually revealed itself as a vector of inequality. It concludes by showing how hacktivism and activism rise as new vanguards in an environment that is written and reads itself, bridging materiality and virtuality, in a multiplicity of blended spaces.

Keywords: New Media Art, Experience Economy, Ubiquity, Attention Economy, Art Ecosystem.

JEL Classification: Z11

1. INTRODUCTION

Digital media is interwoven into all areas of developed societies, as is art, and the boundaries between science and art are creating fertile intersections. Decades ago digital media art (DMA) was born in science laboratories and the artists/scientists re-emerged, as modern-day Leonardo's. DMA has now overflowed into a wide range of socio-cultural areas, categorised in genres as diverse as generative art, electronic music, web art, live coding, glitch art or video mapping, among many others.

The artist is at the heart of a complex network, or ecosystem, where art, technology, science, entertainment, society, politics and economy play intricate and interdependent roles. The different relations between the various agents in this network, whether physical or virtual, are analysed fluidly and it is precisely the increasing feedback loop in all relationships between the different agents, between virtuality and materiality, activism and entertainment, experience and ownership that is at the heart of the ecosystem blending concept, hereby presented.

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The DMA ecosystem concept also serves as a backdrop over which the authors analyse how individual needs have become one of the main economic and social mass-fuels of the present day, and how three concept-pairs, once presented as opposites, are leading up to a(n increasingly more) blended-society model, fuelled by location technology and ubiquitous computing: material and virtual, entertainment and activism, and (permanent) ownership and (transient) experience. These concept-pairs are not just becoming intertwined and complementary, rather than opposites: the apparent paradoxes they pose are a consequence of some of neoliberalism recent evolutions, namely the experience, attention and ubiquity economies.

2. THE RISE OF THE INDIVIDUAL, THE FALL OF ATTENTION AND THE REINVENTION OF CURATING

The Web 2.0 era was heralded as a haven of creativity, with websites like MySpace, Flickr, LinkedIn and the newcomer Facebook making their strong appearance, all fuelled by user-generated content and social interactions. For Time magazine, the 2006 person of the year was *You*, highlighted on the cover with a mirrored surface replacing a computer screen. In 2014, Marc Andreessen, Netscape's co-founder and investor, sent out a tweetstorm⁴ claiming that for the first time in history, humanity could fully and freely express its true nature: "*let's be who we want*". And this liberation would be focused on the *individual*, culture, art, science, creativity, philosophy, experimentation, and adventure.

Just like social networks, newspapers and television networks started asking readers and viewers to submit their own content, and everyone could become a reporter or a TV-star for 5 seconds. Anderson (2009) mentions the two more common motivations for this behaviour: money and reputation; and the latter is the key to massive unpaid spontaneous collaboration in a society where exposure means success (Labrecque, Markos & Milne, 2011). It is through this individual exposure mechanism, that socialites and entrepreneurs rise to stardom, just like artists or actors had done before.

New technologies paved way for new creators: new media artists were suddenly freed from the technical, space and time limitations of their predecessors: they did not even need to be artistically skilled, they could have physical impairments, as they based their activity in an almost exclusively intellectual relation with technology, through programming, automated control and the Internet. And they too sought exposure, like any artist would.

In the globally aestheticised and exposure-addicted western world there is now a massive digital artistic production, reflected on the amount of registered users in specialised websites – Instagram (400 million), Flickr (112 million), Vimeo (35 million), Deviant Art (38 million), SoundCloud (175 million of which at least 10 million are considered as creators)⁵, among many others. This global aestheticisation is dictated by the consumer market (Lipovetsky & Serroy, 2014), and digital artists have become interdisciplinary multi-consumers, acting as entrepreneurs, marketers, communicators, trying to rise above the global noise floor in order to be noticed, hoping to become celebrities (on YouTube, Instagram or Snapchat), paying for services and consumer market tools to gain exposure as a measure of success, buying leverage, likes and followers in reference websites and virtual universes, using communication and marketing techniques more complex than the very art they promote. They are striving on their own, no longer involved in communities and associations, which are suspiciously regarded as politically biased structures, reminiscent of the 20th century, but above all, as standing in the way of *individual exposure*.

⁴ <https://twitter.com/pmarca>

⁵ Sources: Brandwatch, Techcrunch, Venture Beat and Deviant Art

Creativity too is organised and consumed as a product: through reality shows, specialised websites and training courses, ranging from electronic music to special video effects, and all kinds of festivals throughout the year, and not just in capital cities, and not just in the material world – see “*The Wrong*”⁶. The neoliberal society requires that people become not just creative and innovative – like artists – but also that they have artistic, spectacular, and aesthetic lives – or at least that they are shared as such. But if everything is innovative, spectacular and creative, chances are that everything will soon become monotonous and repetitive. Extreme chaos is as uninteresting as extreme order.

For Deresiewicz, Baker, Cuddehe, Gold, Solnit, Cockburn & Gessen (2015) creativity is only a business concept, paired with other clichés: leadership, service disruption, innovation, and transformation. Creativity is not about becoming an artist. It’s about devising innovative products, services, and techniques — solutions for problems (faster, more beautiful solutions, but nevertheless solutions for already-known problems). The only change that education seeks today is technological and technocratic, within a social and market framework, in order to design better, more specialised products.

Even art-hacking is now organised in hackathons, being promoted by most major universities and industry partners, infusing TED talks (Technology + Entertainment + Design), making audiences reverberate with optimism about the role of hacking, brainstorming and crowdsourcing in the transformation of citizenship (Irani, 2015). Ebert (2009: 11) claims that “*this free zone is a necessity for capitalism: in culture, it gives individuals the freedom that it denies them in the working day*”. Despite the increasing amount of arts courses, master’s degrees and doctorates (in Portugal there are at least four master’s degrees and seven doctorates in the area of digital arts in 2016) – possibly influenced by the newly gained popularity of the *creative industries* – the tendency is to increasingly focus on markets, management, the use of new technologies in education, but less and less on social, political or economic intervention.

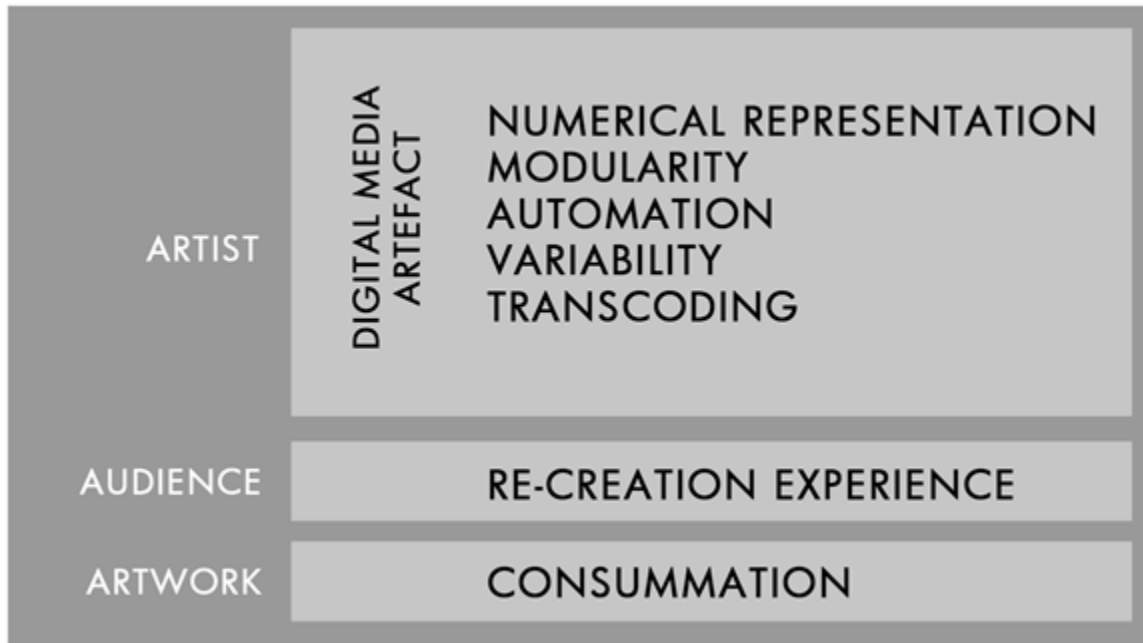
The rise of *Generation Me* (Twenge, 2006) is only possible at the loss of the sense of community, collective, and collaboration. If these were once seen as structures that fostered spaces for discussion, creation, and progress, now they are regarded as homogenizers and anti-innovation, anti-individual structures. The idea of the lonesome innovative mind was proposed several decades ago by Becker (1974: 767), who stated:

“Cooperation is mediated by the use of artistic conventions, whose existence both makes the production of work easier and innovation more difficult. Artistic innovations occur when artists discover alternate means of assembling the resources necessary.”

For the Critical Art Ensemble (1998: 59), “*market demands discourage collective activity to such a degree that such a strategy is unfeasible*”. In the age of innovation at all costs, communities risk being built solely around crowd-funding mechanisms, technologies or artistic genres, rather than ideals and concepts, and are marked by the re-commodification of art (Rorimer, 2001). The diversity of views is eradicated on social media through algorithms that make people see more of what they like – not what challenges them, the same social media used by artists to (pay to) promote their work – meaning that audiences who enjoy their “type” of work will likely also be flooded with suggestions of “similar types” of work.

⁶ <http://thewrong.org/>

Figure 1. From DMArtefact to DMArtwork



Source: Own Elaboration

But even the self-centred artists need audiences for their artworks. Manovich (2010: 27-45) enumerated the principles of new media artworks, even though the actual aesthetic / artistic / cognitive experience occurs beyond those characteristics, through a relation with another ecosystem agent: the audience. Dewey (2005: 213) distinguishes between artefact and artwork: for him the *experience* is the real work of art, as there is a re-creation every time it is aesthetically enjoyed. This connection between artist, audience and artefact – AAA – is at the DNA core of the DMA ecosystem, shown in Figure 1.

The shift in focus from the artwork to the AAA experience is another one of the core concepts of this article, while at the same time validating the foundations of the DMA ecosystems, which were built within the architecture of participation – presented as a vector of globalisation, inclusion, and democratisation of access to creation and enjoyment (Anderson, 2007).

Yet, considering that the digital artists are a fraction of the total number of artists; that the tech-savvy audience is a fraction of the global art audiences; that the supporting infrastructures, whether virtual or physical, are a fraction of the overall art-dedicated infrastructures, it is easy to conclude that they stand for an inequality with three multiplicative levels of segregation in the fruition of digital media artworks. The paradoxical conclusion is then that the DMA ecosystems thriving in globalisation are in fact systems of individuality and inequality.

The massive increase in artistic production brought along several problems for the audience: by facilitating free online sharing it encouraged unrestricted copying; by equalling (social media) exposure to success it hampered quality assertion – which came dangerously close to counting likes and comments, many of which are expertly bought online. And how can audiences find their way in this intricate setting, how can they tell the original from the copy, the good from the bad, how can they direct their attention towards what is “worth it”?

“*The Attention Economy*” is an approach to information management that deals with human attention as a scarce commodity, and applies economic theory to solve its problems, namely, the fact that attention has become the limiting factor in the consumption of information. Simon (1971: 44-41) claims that:

“(…) in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it.”

Curating was once not just regarded as elitist, but also deeply involved in the very creation of elites (Balzer, 2014). Nowadays the audience, tired of drifting online from link to link, welcomes counselling, quality assertion and selection. Media theorist and curator Dieter Daniels, as quoted by Cook (2008: 32), states that:

“I don’t see yet the real way to bypass what you call the legitimation structure of the art world. Because bypassing any kind of context-creating structure – which is galleries, museums, curators, magazines, education and all this – makes it so difficult for who should find whom. It’s a very good idea that artists might directly address the public but we have the problem of information overflow in general, and so there is no quality filter within. We just get lost and we don’t know how to choose and find what we want if everything is accessible.”

Curating addressed the attention economy *generatives* proposed by Kelly (2008): immediacy, personalization, interpretation, authenticity, accessibility, embodiment, patronage and findability. To do this, it needed to reinvent itself and move on to deal with the complex systems involving artists, engineers, scientists, physical and virtual spaces, both educated and curious audiences and a growing hunger for entertainment and fun, estranged from the conservative and traditional gallery or museum views and spaces. The curator became a business aware co-creator, working in collaboration with artists, but also with other curators, no longer *only* a guarantor of exhibition, collection and preservation, becoming a commissioner of mediation between artists, audiences, institutions, lenders, industry and infrastructures, both physical and virtual, and still as a trust inducer, attesting to the quality and authenticity of artworks and authors, and channelling *attention* to them, by creating *experiences* for the audience.

If this role seems to be directly inherited from the past, it has also been recreated by Blockchain technology in recent years. Blockchain allows for establishing a binding and lasting bond between creator and creation, in order to authenticate a given artwork. The chain starts with the artwork registration, and all subsequent transactions are recorded, thus enabling permanent access to certified authorship and copyright ownership. And Blockchain is not limited to the digital world, as the same type of authentication of physical/material artworks is also possible, through one of their digital representations (photography, film, compound registration, etc.). If e-society’s next iteration is heralded as *knowledge* (Towards knowledge societies, 2005), *value* is surely not far behind.

3. A CAREFUL MIX OF ENTERTAINMENT AND ACTIVISM

Festivals are an echo of the often-transient nature of DMA and contemporary society’s mobility and ubiquity, and are mostly created and managed with multiple goals, stakeholders and meanings attached to them. They embody a materialisation of the DMA ecosystem, and represent a balance between creation and consumption, bringing together artists and audience, culture and entertainment, patrons and buyers, where industry and companies

dazzle audiences with new technology, and where academia is present either institutionally, experimentally or through curating.

Festivals are celebrations, so by definition they have a theme and a variety of meanings, from different perspectives, that make them complex planned phenomena. The festival *experience* manifests itself at personal, social/group and cultural levels, and meanings exist at personal, social, cultural and economic levels. The experience itself is at once personal and social, with each type of festival representing a different experience potential. Event designers – or curators – are particularly interested in knowing how their manipulation of setting, program and various human interactions affects the audience and/or participants, and whether or not the desired experiences and consequences are achieved. This requires true interdisciplinary knowledge of culture, the arts, and environmental psychology. There is also a special appeal in festival studies that is associated with their inspirational potential for creativity, (hopefully) attracting large audiences, and generating emotional responses. In this way festivals are akin to, and part of the entertainment business, and are often featured in place marketing and tourism.

The term “*festivalization*” has been coined to suggest an over-commodification of festivals exploited by tourism and place marketers (Quinn, 2006; Richards, 2007). In this approach, drawing heavily upon consumer behaviour and other marketing concepts, motivations for attending festivals are studied at length, and more recently the links between quality, satisfaction, and behaviour or future intentions have been modelled. The roles of festivals in tourism include attracting tourists, both national and international, to specific places, and to overcome seasonality, contributing to place marketing, animating attractions and places, and acting as catalysts for other forms of development. Dominating this discourse has been the assessment of economic impacts of festivals and festival tourism, planning and marketing festival tourism at the destination level and studies of festival-tourism motivation and various segmentation approaches.

Getz (2010) generally suggests that escapism leads people to events for the generic benefits of entertainment and diversion, socializing, learning and doing something new, i.e., novelty seeking, but for Paul (2005: 66) “*most of those who attend new media festivals are knowledgeable about the field and not especially diverse*”. Challenging as this characterisation of the *typical* DMA festival audience may appear, the fact is that there are at least 12 festivals⁷ whose themes focus or embrace DMA that take place in Portugal. If in most of them the ecosystem is Academia-centred, a small number of them boast a professional business-oriented structure, and constant off-festival activity. The curating models vary between full centralisation to modular and distributive approaches. Many of these festivals capitalise on the growing international visibility that Portugal and Lisbon are gaining, although others do not go beyond the geographical environment in which they operate. Almost all of them involve an international selection of artists, and some of them even have already reached international media stature.

If festivals hope to attract larger audiences, they must present content in crowd-pleasing formats – concert, exhibition, workshop, party – as part of a profitability process based on ticket sales to audiences for whom the hedonistic value of entertainment is superlative. A careful balance between entertainment and art should then be reached: the economic viability of each festival depends on its capability to attract a large audience, whereas its artistic reputation and social impact rely on its ability to attract meaningful artists and artworks.

KissMyArs (2016) points out the excess of *hello world* type of creativity at the 2016 edition of the Ars Electronica festival, as mere proofs of concept or simple technology demonstrators

⁷ UnPlace, Future Places, Festival Audiovisual Black & White, Festival IN, PLUNC, Madeiradig Festival, Semibreve, The New Art Fest, Jardins Efémeros, Lumina, Post-Screen Festival, Trojan Horse was a Unicorn (THU)

or interactive entertainment shows, mostly overlooking the interventionist role of DMA in the critique of technology's political, economic and social impacts. Critical voices are also heard in Portugal, about this technology-as-merely-entertainment phenomenon, and for Sier (2015: 14) "*the connection between art, science and technology has permeated History and will always continue to do so. Now it has temporarily become a buzzword to host a lot of rubbish that thrives in the curve of changes that technology has fostered*". At the CyberArts 2016 exhibition, however, the 2016's Golden Nica for Digital Communities category was awarded to the P2P Foundation whose motto is "*transitioning towards the commons-based, peer-to-peer society*". The Foundation is:

"(...) a global network of researchers, activists, and citizens monitoring and promoting actions geared towards a transition to a Commons-based society. We are a decentralised, self-organised, globally distributed community building an information-commons ecosystem for the growing P2P/Commons movement. We examine the digital and the material worlds, their freedoms and restrictions, scarcities and abundances. We are an incubator and catalyst, focusing on the 'missing pieces' and the interconnectedness that can lead to a wider movement.⁸"

Gorz claims (2005) that hackers (or the hacking mind-set) and the free/open software community will be digital capitalism's dissidents "*because they operate in the sphere of production, dissemination, socialisation and organisation of knowledge, and have their activity based on an ethics of voluntary cooperation, they also allow for the experimentation of other ways of life and other social relations*". Artists and art-hacktivists share some characteristics, namely a desire to make improvements in society, pushed through art, with a focus on social, political, environmental, economic, racial, sexual or technological topics. Art-hacktivism is a type of artistic practice that may show significant variations in the artist's willingness to engage in illegal or legally ambiguous activities. The outlaw orientation will determine practices such as site defacements or sabotage whereas the transgressive orientation only challenges the law, without pushing the challenge to the point of immediate legal jeopardy (Samuel, 2004). Digital artists, on the other hand, will operate within legality, mainly through *culture jamming* and *subvertising*. Ensler⁹ defines activism as:

"a creative energy that comes from giving one's heart and soul and imagination to the struggle. Not aggression but fierceness. Not hurting but confronting. Not violating but disrupting. This passion has all the ingredients of activism, but is charged with the wild creations of art. Activism – where edges are pushed, imagination is freed, and a new language emerges altogether."

Activism is an organised practice by nature, naturally opposed to the individualization processes. It is then only legitimate to expect and hope that these organisations also produce their own events and festivals, often as self-curating artistic communities, which emerge as a form of resistance and survival, maybe not immune to consumerism, sometimes even collaborative by necessity, along the lines advocated, for example, by Furtherfield (Garret, 2013: 1):

"For over 17 years Furtherfield has been working in practices that bridge arts, technology, and social change. (...) Our artistic endeavours include net art, media art, hacking, art activism, hacktivism and co-curating. We have always believed it is essential that the individuals at the heart of Furtherfield practice in arts and

⁸ <https://p2pfoundation.net/>

⁹ See the 5th segment of http://www.nytimes.com/interactive/2011/12/02/opinion/magazine-global-agenda-big-question.html?_r=0

technology and are engaged in critical enquiry. For us art is not just about running a gallery or critiquing art for art's sake. The meaning of the art is in perpetual flux, and we examine its changing relationship with the human condition. (...) If we as an arts organisation, shy away from what other people are experiencing in their daily lives and do not examine, represent and respect their stories, we quite rightly should be considered as part of an irrelevant elite, and seen as saying nothing to most people."

4. UBIQUITY AS A BLENDING AGENT

"*Computing is not about computers anymore. It's about living*", claimed Negroponte over two decades ago (1995: 6). And maybe nowadays the Internet is no longer about networks; digital is no longer about binary representation; and virtual is no longer opposed to material.

"*What better way, then, to emulate God's knowledge than to create a world constituted by bits of information?*" (Heim, 1993: 95). But rather than serving as a promised liberation from materiality's restrictions, cyberspace quickly became a business simulacrum of materiality itself, with actual payments over the virtual occupation of equally virtual housing, virtual furniture and accessories, special virtual powers, virtual clothes, animals, plants and other objects of desire – including virtual sex – in environments like World of Warcraft or Second Life (which generates the equivalent of a small country's GDP - 500 million USD¹⁰).

And this circuit is now closed in both directions: from material to virtual, virtual to material, with feedback mechanisms, loops and interdependencies. Our perception of reality/materiality can be affected by virtuality, which, in turn, is built over material paradigms. Death is trivialised by TV series, computer games, soap operas, crime dramas, mysteries, documentaries, live television coverage of bombings, shootings, and executions (Despelder & Strickland, 2015). People simulate reality and then share those simulations as evidence of fact. As far back as 1922, Robert Flaherty's film *Nanook of the North* showed an Inuk actor directed into simulating real actions (seal hunting with harpoons, instead of the actual Inuk weapons, or displaying an overly inappropriate use of a gramophone) to illustrate ethnographic concepts in a *documentary* style (Kara & Reestorff, 2015). Or as more recent examples, consider photoshopped selfies and magazine covers, or fake holiday trips in Asia¹¹.

In the neoliberal society the daily experience of life is now a blended process, intimately linked to *onlineness*, which causes social space to be distributed, and allows for a seamless, constant flow between materiality and virtuality, resulting in a blending of the two worlds (some would say an *augmented-world* or *mixed-reality world*). There is no need to go somewhere in order to find one person or enjoy one experience – any urban space is a potential gathering and sharing space, the digital artist's place of creation can be anywhere, and correspondingly, it is expected that any urban space will facilitate permanent connectedness.

If virtual reality tried to create a virtual world inside the computer, the paradigm has now shifted to the computer that extends and amplifies the material world. Weiser (1999: 3) introduced the concept of ubiquitous, invisible computing: "*the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable*". He states the opposition between the notion of virtual reality and ubiquitous, invisible computing as being so strong that another expression – *embodied virtuality* – is used to refer to the process of drawing computers out of their electronic shells. "*The virtuality of computer-readable data – all the different ways in which it can be altered, processed and analysed – is brought*

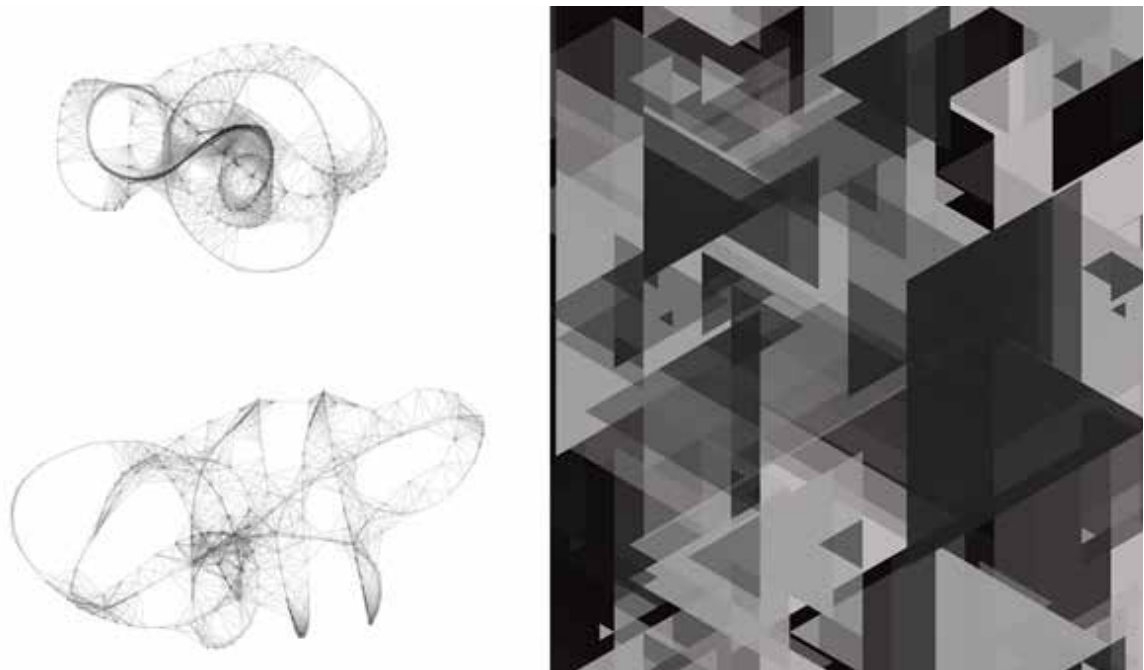
¹⁰ According to Ebbe Altberg, Linden Lab's CEO, the creators of Second Life <http://motherboard.vice.com/read/why-is-second-life-still-a-thing-gaming-virtual-reality>

¹¹ <https://www.washingtonpost.com/news/the-intersect/wp/2014/09/12/what-is-reality-a-qa-with-the-artist-who-used-social-media-and-photoshop-to-fake-an-epic-trip-even-her-parents-fell-for/>

into the physical world” (Weiser, 1999: 4). Embodied virtuality places everyone in the centre of permanently accessible and interconnected networks. This post-virtual world does not imply a return to an analog world; instead it means that networked devices have become so ubiquitous and that the scanning process of culture is so comprehensive, that it is now anachronistic to think about the real/virtual dichotomy: reality has truly become blended. (Gasparetto, Lima, Casimiro, Boelter & Santos, 2015).

This blended world (and market) is densely populated by various easy-to-use mobile apps, many of them free and many of them from companies that quickly disappear, which aim to almost entirely replace the classic tools of (artistic) creation, while essentially producing art without substance or meaning – yet very decorative and entertaining, as in Figure 2.

Figure 2. “Art” created on an iPhone in less than 15 seconds using Paint Magic and Deco Sketch apps



Source: Own Elaboration

In the words of Clark (2003: 6), “we have been designed, by Mother Nature, to exploit deep neural plasticity in order to become one with our best and most reliable tools. Minds like ours were made for mergers. Tools-R-Us, and always have been”. And it is the unobtrusive tools like the pencil, the hammer or the smartphone that promote imperceptible human hybridisation. “We reached a point where for every human need, there seems to be an app and for each social representation, there is a dedicated social network.” (Weiss, 2015).

For the festival-going *Millennials*, experience implies social, local and physical sharing but also social and virtual/digital sharing. In fact, the distinction is no longer important, the blending process is ever-expanding: information and cultural elements, characteristic of the digital universe, migrate freely to the material plane¹². Any experience will not be complete without proof – a *selfie* or Snapchat video – as a blended piece of evidence: from material to virtual and back, as many exhibitions are now made using printed material from digital sources¹³.

When making an off-season visit to the grounds of a temporary event, there is a material emptiness, yet densely populated with digital graffiti: geo-referenced images, videos or sounds of past events, hover like trans-verse echoes. If in the material world tagging emerged

¹² <http://jilliancyork.com/2011/10/16/hashtagging-real-life/>

¹³ <http://www.cnn.com/2016/09/02/your-next-instagram-post-could-land-in-an-art-exhibit.html>

as a form of graffiti, selectively used as a personal or crew signature, as proof of presence, ownership or territoriality, in the augmented world everyone can be a (hash)tagger, and will use the most popular hashtags not as a mark of individuality, but rather seeking exposure, so that their digital graffiti – their geo-referenced posts – will get the most visibility, comments and likes. Hashtags will often not only index, but also imbue added meaning to the shared content. The correlation between content (its theme and aesthetics) and location (by means of geo-reference) can then be established by simple textual data analysis, and can provide useful insights on the mobile city and the mobile audience (Kennedy, Naaman, Ahern, Nair, & Rattenbury, 2007). This riches of data provides ample *prima materia* for artists, scholars, philosophers... and surveillance mechanisms and agencies.

The physical experience is increased, instead of being hampered or cancelled by technology (Savicic, 2012). Ubiquitous computing and mobile technologies redefine public spaces and redefine the city, people feel that they are physically within the system, as opposed to being left outside; they use images and move objects; each *individual* feels like being “*at the very centre of things*” (Baker, 1993: 151). Thielmann proposes that (2010: 3):

“The appearance of new media applications has always initially resulted in ‘individual media ontologies’, which have then been extended to ‘general media ontologies’ through the synopsis of several media and the formation of an independent mediality. (...) It is exactly this genealogy that can now also be applied to media geography, which, since the millennium, has formed from the individual media geographies of ‘art geography’, ‘literary geography’, ‘music geography’, ‘psychogeography’, ‘film geography’, ‘television geography’, ‘telegeography’, ‘cybergeography’, ‘Internet geography’, and, finally, ‘Wi-Fi geography’.”

Locative digital art or *locative new media art* appears as a type of digital art that can express a level of spatial relationships. The use of locative media for artistic purposes has linked geography and maps to urban life and experience in novel ways, offering various transformations in the traditional relationship between the mapping process and the material space it portrays. Locations inspire the artistic creation of information mappings that may express, criticize, expose, challenge or motivate different aspects of urban life. “*We are confronted not by one social space but by many – indeed, by an unlimited multiplicity or uncountable set of social spaces (...). No space disappears in the course of growth and development: the worldwide does not abolish the local*” (Lefebvre, 2009: 86).

Although location-based arts have long and rich histories, Pope (2005: 1) suggests that “*the novelty of [locative] projects seem to be in the way they extend the human community to include an array of agents, arranged in space which includes antennae, rooftops, trees, buildings, masts and the like*”. And Albert (2004: 1) adds that:

“By experimenting with these tools and technologies, developing open formats such as RDF, and free software tools for manipulating and exploiting location-based devices and media, or developing low-tech hacks that do the job better than the expensive gadgets, locative media practitioners are keeping the technologies close to the ground, available for hacking, re-wiring and re-deployment in non-authoritarian ways. On a less technologised level, artwork that operates with locative media is not just about the public communication of this interesting new technological form. Nor is it necessarily austere and overtly political. Locative media art at its best enhances locative literacy. The ability to read, write, communicate is vital for any person needing to act, take power, to have

agency. An awareness of how flows and layers of information intersect with and augment a person's locality, and the ability to intervene on this level is a further extension of this literacy, and of their agency.”

This may be an indicator that in the near future, the socially excluded individual is the one that does not have a permanent mobile connection, and may come to be defined as the digitally immobile subject: digitally anti-social (Beiguelman, 2013).

The exploratory dwellings of locative media lead to a blending of geographical and data spaces, reversing the trend towards digital content being viewed as placeless, immaterial. Ubiquity materializes virtuality.

5. FROM OWNERSHIP TO EXPERIENCE

Groys (2009) claims that society has become globally aestheticised, that people are now addicted to the spectacularisation of reality, of everyday situations, and this spectacularisation is centred on seduction and celebration, and its success is determined by the level of exposure and social engagement. The eagerness for showing-off novelty and innovation, and its trivialisation, determined the rise of a paradox: with media and technology's fast obsolescence, the ease of creation is nearly matched by the ease of destruction. “*Denouncing the recent past as outdated and announcing the arrival of a brand new, cutting-edge reality, in other words, is part of capital's interpretive logic of self-legitimization*” (Ebert, 2009: 11).

Permanent ownership is incompatible with the thirst for novelty, therefore a new paradigm was needed: *the experience*. Even art has increasingly become the object of transient experience. How to sell a screensaver, a gif, a piece of code, which can be perceived as something that is easily and readily copied and destroyed without even a second thought? Destroying an art print or silkscreen would raise concern, but deleting a jpeg or gif file is done without a second thought. If McLuhan heralded the medium as the message, in present times the medium became the business, and the message sells the medium. Chayka (2011) asks how is it possible to sell something that is impossible to own? Take net-art as an example. If it is online, it is replicable, and since the desire of ownership (or perceived value) is intimately connected to exclusivity, it wouldn't be perceived as enticing or alluring. Therefore the strategy to take it offline – thus eliminating replicability – would seem like a good idea. However it would disrupt the very nature of the artwork. In short, applying old rules to new realities will likely contribute to the distortion of both¹⁴, and such is the nature of the ecosystem: evolve and adapt.

Music business is now centred in selling subscriptions to streaming services and players, even if that means users will never own the music files, and they don't really seem to mind that. The current *festivalization* trend is also a sign of this shift: the event/experience overtakes the content; the Festival itself becomes more important than the artists and/or artworks it showcases. “*The Experience Economy*” is an expression coined by Pine and Gilmore (2014: 1) that translates this shift:

“While prior economic offerings – commodities, goods, and services – are external to the buyer, experiences are inherently personal, existing only in the mind of an individual who has been engaged on an emotional, physical, intellectual, or even spiritual level. Thus, no two people can have the same experience, because each experience derives from the interaction between the staged event (like a theatrical play) and the individual's state of mind. Experiences have always

¹⁴ This discussion around the sale of an animated gif file is representative of this topic <http://hyperallergic.com/19769/how-do-you-sell-an-animated-gif/>

been at the heart of the entertainment business – a fact that Walt Disney and the company he founded have creatively exploited. But today the concept of selling an entertainment experience is taking root in businesses far removed from theatres and amusement parks. New technologies, in particular, encourage whole new genres of experience, such as interactive games, Internet chat rooms and multi-player games, motion-based simulators, and virtual reality. The growing processing power required to render ever-more immersive experiences now drives demand for the goods and services of the computer industry.”

But experiences must be selective in order to be meaningful, and therefore capture *attention*. The brave new digital world, filled with promises of a creativity, art, and culture haven, has gone rogue. The same artists that welcomed the fall of creation barriers have now to face harder to overcome barriers, if they expect to make a living out of their art. They conclude that exposure (alone) as a measure of success does not pay bills. Artists whose work is mainly digital or virtual are faced with the need to transition over to the material plane, through direct, indirect or hybrid instantiations (e.g.: printing, 3D printing, video-mapping, among others) to create experiences in the material world and monetise their creations. The very physical and elegant EO2¹⁵ technological frame materialises virtual art on the walls of any home, like an mp3 player does with a music subscription: attention has shifted to the technological mediators, as symbols of status, rather than their content.

Kelly (2008) suggests that publishers, studios and labels – to which the authors add galleries and museums – will never disappear, even if they are no longer needed to distribute artworks; in fact their new role is distributing the audience’s *attention* back to the artworks, enabling the *experience*.

Yet, some artists hack the ecosystem relations and traditional principles, and the hacking itself gives rise to creative processes, such as Swedish artist Jonas Lund¹⁶ who, in one of his most recent works called “*Your Logo Here*”, as a take on the bartering economy, grants promotional space to brands or companies in exchange for services, favours, materials or exposure – but does not accept money.

6. CONCLUSION

In a world where hybridisation, creativity, innovation, and brainstorming risk becoming market clichés, where the individual is being driven into creative isolation by the competitive *start-up-like* mentality, borders must be crossed, amended or abolished, promoting a real blending of human knowledge and restoring true social, aesthetic and cognitive interaction.

“The totalizing belief that social and aesthetic value are encoded in the being of gifted individuals (rather than emerging from a process of becoming shared by group members) is cultivated early in cultural education. If one wants to become an ‘artist’, there is a bounty of educational opportunities – everything from matchbook correspondence schools to elite art academies. Yet in spite of this broad spectrum of possibilities, there is no place where one can prepare for a collective practice.” (Critical Art Collective, 1998: 60).”

At the core of the DMA ecosystem is the AAA triple connection between artist-artwork-audience, but their relations are extended to/by several actions: creation, enjoyment, curating, entertainment, education, training, research, socialisation, economic return, social

¹⁵ <https://www.electricobjects.com/>

¹⁶ <http://jonaslund.biz/>

impact, among others. These actions flow, almost incessantly, between the physical and virtual planes, and interweave urban multi-layered spaces, with social media layers, where interactive experiences are created that question the sense of belonging: to society, place, time, materiality or virtuality. The ecosystem space is constantly written and constantly reads itself, and establishes successive bridges between materiality and virtuality (Spagnoli & Gamberini, 2005). The digital media artist is transdisciplinary by nature. According to McGregor (2004: 2-3):

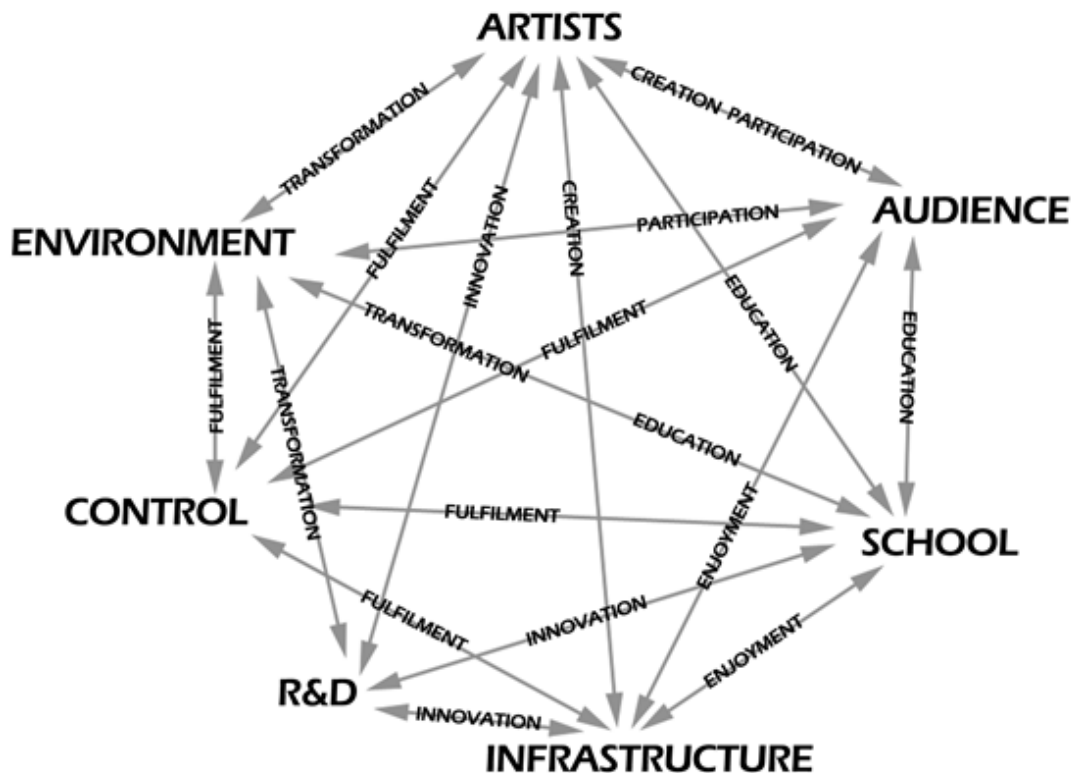
“There are four very compelling pillars that underpin this new knowledge: learning to know, to do, to be with, and to be. (...) Very briefly, learning to know refers to training in permanent questioning of assumptions and in building bridges leading to continually connected beings. Learning to do certainly refers to acquiring a profession, but doing so within a profession that authentically weaves together several competencies at the same time as creating a flexible, inner, personal core. The latter refer to always being an apprentice of creativity and of creating our potential. Learning to be with others means that not only do we learn to respect others but we learn a new attitude that permits us to defend our own convictions. This new attitude makes a space for both open unity and complex plurality—they do not have to be in opposition to each other. Finally, learning to be does not mean the same thing as existing. It means discovering how we have been conditioned, determining if there is any tension between our inner self and our social life, and testing the foundations of our convictions and to question—always question.”

This questioning extends to DMA curating, since it implies a displacement of the curatorial approach in equal parts to the production, distribution and exhibition of the artefact (Cook, 2008), thus emphasising the relevance of other ecosystem agents: technology suppliers and artisans (industry, companies, experimental laboratories, etc.), distributors (editors, curators, networks, managers, specialised websites, virtual worlds, mass media, etc.), and exhibitors (museums, galleries, public spaces, festivals, virtual and material infrastructures, etc.).

The ecosystem relates artists and artistic communities, audiences, infrastructures (venues, public spaces, galleries, etc.), education (including universities, conferences, seminars, training courses), research and development institutions and practices, control mechanisms and agents (curating, financing, marketing, etc.) and the socio-economic environment (including political aspects), as shown on Figure 3.

Technology is the relational backbone in the DMA ecosystem, much like the natural environment of biological ecosystems, and is increasingly devoted to processing the surrounding physicality, to channel the *attention* of people on the move – including artists and their digital artefacts.

Figure 3. The DMA ecosystem



Source: Own Elaboration

The digital media artists will evolve between two limits: on one extreme those who aspire to create (only?) technologically innovative, increasingly blended locative artefacts, and who are compliantly and fully engaged in the *experience, attention* and *ubiquity economies*, and on the other extreme the digital media artists and art-hackers who use their vision to collectively and socially engage in critical interventions through art and technology, accepting that they must act inside an economic scenario, while also deconstructing it. Challenging neoliberalism does not mean refusing it, but transforming it into a *playground*, both to appropriate it and expose its incongruities. Like the blending of materiality and virtuality, DMA will mostly be a blend of those two extremes. It is however more likely that true innovation will be linked to the hacking mind-set rather than the compliant mind-set. In Wark's words (2004: 1):

“Hackers create the possibility of new things entering the world. Not always great things, or even good things, but new things. In art, in science, in philosophy and culture, in any process of knowledge where data can be gathered, where information can be extracted from it, and where in that information new possibilities for the world produced, there are hackers hacking the new out of the old.”

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