

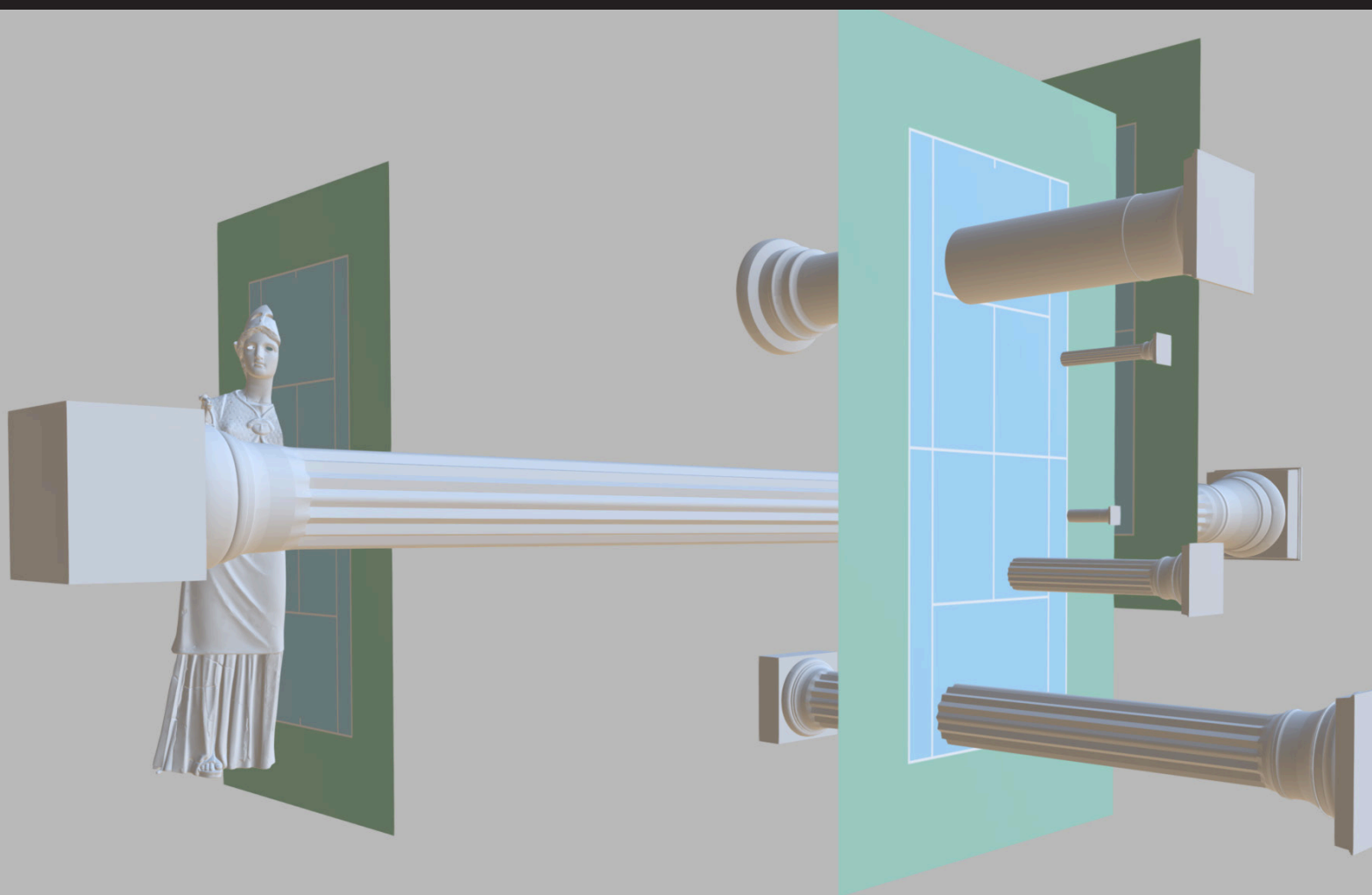
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Guest Editor: Markus Heidingsfelder



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OF DEFECTIVE GODS & LUCID DREAMS

(THE MUSEUM IS CLOSED FOR RENOVATION) 2017

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Notes on Contributors:

Holger Briel is Professor of International Business at Monarch University, Switzerland, and Programme Director in the School of Film and TV Arts at Xi'an Jiaotong Liverpool University. He has written books and articles on Digital Media, Cultural Changes in the Digital World, Media Theory and Intercultural Communication. His latest book, *VisionBytes*, re-evaluates vision in the digital era and will be published later in 2018.

Charlotte Gould exhibits interactive installations internationally and through her research she explores how we can maximise opportunities for meaningful participation using large urban screens and how this impacts on our culture, changing the way that we engage in the urban environment, contributing to a collective memory and sense of place. Her interactive installations provide a framework with an environment that offers a visual context to prompt interaction, engagement and play across social and cultural boundaries.

Franz Kasper Krönig is Professor of Didactics and Cultural Education at the Cologne University of Applied Sciences. His research focuses on the theory of education in general and (critical) inclusive pedagogy in particular from sociological, philosophical and communication-theoretical perspectives. His main reference points are the sociological systems theory (Luhmann), symbol theory (Cassirer), phenomenology, and the critical theory of the Frankfurt School. As a singer/songwriter he has released six albums under the name of Franz Kasper (Day Glo/rough trade). He has worked as a community musician in several fields and developed projects with inclusive orientation and experimental ambition.

Paul Sermon is Professor of Visual Communication at the University of Brighton, UK. He has developed a series of celebrated interactive telematic art installations that have received international acclaim. Paul was previously Professor of Creative Technology at the University of Salford and has worked for over twenty years as an active academic researcher and creative practitioner, primarily in the field of interactive media arts. Having worked under the visionary cybernetic artist Professor Roy Ascott as an undergraduate Fine Art student at the Newport School of Fine Art in the mid 1980s, Paul Sermon went on to establish himself as a leading pioneer of interactive media art, winning the prestigious Prix Ars Electronica Golden Nica in Linz, Austria, shortly after completing his MFA at the University of Reading in 1991. It was an accolade that then took Paul to Finland in the early 1990's to develop one of the most ground breaking telepresent video installations of his career, *Telematic Dreaming*, in 1992.

Pavel Slutskiy is a full-time lecturer at the Faculty of Communication Arts, Chulalongkorn University, Bangkok. His research and background drove him towards the areas of political theory of communication (both meta-theory and normative theory), applied communications (particularly PR and cross-cultural comparative studies), as well as art criticism. He has published three monographs, three university textbooks and numerous articles on these topics. He has 17 years experience as an industry practitioner, entrepreneur and PR-consultant. He is a founder and co-founder of several communication and research agencies which worked with multinational companies, including Walt Disney, Sony, MSD (Merck), Tuborg, Chanel, Tetra Pak, Audi, Subaru and many others. He also curated exhibitions of contemporary art in Russia, which is his home country.

Guest Editor's Introduction

Welcome to the latest issue of the *IAFOR Journal of Cultural Studies*. This is a special issue with a focus on art and artistic cultures in the “digital world”.

The future of art is unknown – any future is. That is its exact definition. Of course, there always exist attempts to bind the future; oftentimes, they are made in the way of norms or predictions, which, given the complexities of the modern world, can hardly make any greater claim to authority than the prophecies of Pythia. The Oracle of Delphi was inspired by the spirit of Apollo, today's prophets are possessed by statistics. But any statement made about events to come happens in the present, the former past, not in the future.

The future of art is unknown because art is autonomous or “free”. If it is not, we refer to propaganda or design. This does not mean that there are no structures that regulate the selectivity of art. Its operations are synthetically determined, they can only take place in the framework of existing structures. However, they are analytically undeterminable, because every single work of art is able to change these structures. This is the reason why art can surprise not only us, but also itself: Marcel Duchamp's “Fountain”, Joseph Beuys's “Fat Chair”, Andy Warhol's coke bottles, Damien Hirst's shark and Rosemarie Trockel's knitted pictures all moved the entire ensemble in such a way that a new, different dynamic state of art arose.

Art is autonomous but it does not happen in a vacuum. In other words, art is a social enterprise. It gets irritated by external factors – by technology, politics, economy, the law and by the bodies and minds that create it, but cannot control it. Art is dependent on them, as is its need for freedom in conceptualising, commenting on and transforming them. This is why anyone who analyses art also analyses the society in which it takes place.

This issue will discuss art and aesthetic theory from a very specific moment in time, from the here and now, when the situation of art is once again changing rapidly – changing so much that even the here and now becomes relative as demonstrated, for example, by Gould and Sermon. The contributors to this issue have set themselves the task of highlighting some of the more pertinent of these changes.

Holger Briel's text, “A Portrait of the Computer as a Young Artist”, begins with a short overview of the history of digital art, stressing the fact that entry into the digital world has important repercussions for artistic production, dissemination and reception. He focuses on two particular aspects of contemporary art: first, its digital nature and, second, the rise of globalization which has made art available to all earth dwellers and beyond (think of time capsules or cars in space). He sees these two conditions as levers for immense changes in art and proposes a new term for “seeing” this kind of art: the *VisionByte*, an approach at once dependent on and resulting from digital globalized art. His article ends with a discussion of a number of artists who are already taking this notion seriously in their works.

Franz Kasper Krönig's “Difference-theoretical Analysis of Aesthetic Media and Forms” is a valuable gambit for the next section of this special issue. In his dense text, which engages with Peirce and Luhmann, Krönig explores the differences between media and form for aesthetic appreciation and theorizes that there are exactly three possible ways of observing medium/form-differences, namely “Focusing on the Form”, “Focusing on the Medium” and “Focusing on the Medium/Form-Difference”, with only the last describing the specificity of

art. Artistic forms can only be observed in a complex observation mode which relates forms to media, thus combining the first and the second focus with the last one. Following Peirce, when confronted with a novel piece of art, it can be referred to as an “abduction”, as traditional categories fail to properly describe this work. This opens up new approaches to the artistry of a product and to a particular creative process. For Krönig, the lynchpin for ascribing artistic creation to a phenomenon is the *improbability* of such forms arising, as “this is the key term for medium/form-difference theoretical aesthetics”.

In his “From Edwardian Selfie to Telepresent Comic”, Paul Sermon traces the public's role as main actors in films. He begins by analysing the self-representation of English workers in Mitchell and Kenyon's historic films from the early 1900s and argues that such self-representation has survived in the medium even into the twenty-first century. An important way-stage for this self-representational continuity is the *Hole-in-Space* happening, organized in 1980 by Kit Galloway and Sherrie Rabinowitz which digitally linked public spaces in New York and Los Angeles. Paul Sermon's own contribution to this filmic history were the *Occupy the Screen* (2014, Berlin-Riga) and the *Peoples Screen* site-specific artworks, connecting public spaces in Guangzhou and Perth in 2017. These site-specific artworks allow people to live out trans-spatial imaginations and performances (at times timidly, at times in a more rowdy fashion). All of these are linked by a Bergsonian humour, to which Sermon takes recourse in the final part of his text so as to explain the particular filmic performances on display.

Charlotte Gould's text, “Open Interactivity A Model for Audience Agency”, interacts with Paul Sermon's text in that she provides a comprehensive historical-theoretical overview of approaches to technology in and of (audience) films and how such approaches have informed present-day practices. She also discusses the project she undertook with Sermon in Guangzhou along these lines and comes to the conclusion that this project is one in a long line of projects engaging the audiences visually and uniquely.

Finally, in his “Is Video-art Becoming a Form of Popular Art? The Case of Apple TV's Aerial Screen Savers”, Pavel Slutskiy examines a recent visual phenomenon, Apple TV's screensavers. He argues that now that the technical need for screen savers for computers has passed, they have become a piece of art in their own right, “interest-free”, as Kant might have put it, thereby allowing “ordinary” people to be on par with the video art elites of bygone eras. If this kind of art catches on, Slutskiy speculates, more and more people will become creators of their own artistic screen savers and it will also influence private life, interior design and the creation of works from and for a grounded aesthetic; “. . . the same way the earliest screen savers with their images played this role of escapism in bureaucracies where corporate disgust or indifference likely reigned.” But is art that is supposed to “save the screen” truly free? Should it not be allowed to endanger them instead?

The texts in this issue are not so much about providing conclusive answers but rather about producing a variant in theoretical practice that facilitates follow-up discussions. Just like art, science is also free. And just like art, it is in a constant flux, transforming irritations into its own operational mode. While the impact of the digital is far too new and on-going to warrant an overall, grand analysis, there are several points from which these developments can be viewed and assessed. As the articles in this issue show, prominent among them are aesthetic, technical, demographic and interactive nodes. I am especially proud that we were able to combine views from art insiders (Sermon, Gould) with those from the outside, that is, science. My special thanks go to German artist Florian Meisenberg, who provided us with the cover art

for this issue which demonstrates how art transforms the external irritant digitality into its own circuit of reproduction.

It is hoped that this issue will act as a springboard for further discussions and developments, and thereby help us find better ways of describing these emerging cultural shifts and suggest new ways to enrich our lives.

Markus Heidingsfelder

Karachi, March 2018

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A Portrait of the Computer as a Young Artist

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Abstract

From Emojis to Manga, from western adverts to “foreign” brand consciousness, visual products are continuing their near instantaneous circulation around the globe. Especially their apparent “naturalness” and freedom from translation is appealing. But here also lies the problem: many of the consumers of these images are oblivious to the fact that these materials have been constructed by social actors with specific backgrounds and specific agendas in mind; thus, especially their “foreign” receptions create challenges, including ethical ones.

In order to properly study these fairly new phenomena, a different kind of terminology is needed, not one that relies on older media concepts, but one that does them justice in terms of their contextual and technological complexity, multivalence and mobility. I will propose the term “VisionBytes” for these phenomena. These denote complex visual arrays, oftentimes of foreign cultural origin and consisting of still or moving images. They circulate within a system of non-photography as sketched by François Laruelle (2013) and are akin to the “objects” described in Quentin Meillassoux' *Beyond Finitude* (2010). Invariably, they touch on issues of belonging, identity, exclusion, globalisation, human and AI rights, all points featuring strongly in this text. Already today, these images have begun participating in the preparations for the gaze of the (technological) Other, of a possible singularity which for the first time will allow humans to re-view themselves and thus be seen by non-human intelligent others, a trajectory already taking its course.

As so often, art is at the forefront of these mediated upheavals. In the final part of the article, I will examine a number of recent art pieces/installations from a 2016 Art Fair in Shanghai, from the 2017 *Dokumenta 14* in Kassel, and from an ongoing internet project. These select pieces all point to an ever more life-permeating media future where wanting to merely live with media will never do.

Keywords: VisionBytes, visual products, visual, digital art

The Rise of the Visual

Throughout history, vision and images have gone in and out of favour. From hero worship in the form of statues and images to the orthodox iconoclasts of the past and of the present, images have been eulogised and reviled. But they have never gone away and today, more than ever, they have imposed themselves as the preferred way of cognition and communication. In the process, they have successfully challenged the recent reigning mode of cognition and communication, the written text, and have opened up the age of the image.

With a very broad stroke, one might posit the reign of the text from ca. 3000 BCE to the 1920s. Since then, and in many guises, images have begun to challenge the power of the text and especially so since our entry into the digital age.¹ This was a long road leading from medieval illustrated texts to captioned images to “pure” images, with such recent way stages as newspapers admitting images into their textual universe, the acceptance of Manga, anime and graphic novels a “high” culture, and the rise of online social networks where communication is almost exclusively conducted via images.

The popularity of the image is not surprising. Many people feel that images are more natural than text and promise/give quicker access to realities. But right away, and partly due to their promise of instant comprehension, they are also considered only a stepping stone, an early stage to deeper knowledge to be acquired from written code. At first, children are given picture books, but once in kindergarten or primary school, they are expected to concentrate on the written text and popular items such as comic books are still considered a waste of time by many parents.

Yet, images are on the rise. Proof for the reign of the image is compelling. Thus, on 1 August 2016 MTV celebrated its 35th anniversary. This was not only quite an achievement in the fast-changing world of mass entertainment, but also in the way consumers used the station to negotiate both individual and hybrid audiovisual media. On the one hand, MTV is credited with revolutionising the production, marketing and dissemination of music, in itself no mean feat. On the other, it also revolutionised the way music is processed today, namely synthesised with images. YouTube, another hugely popular video/music channel, would not be imaginable without the foundation laid by MTV for general visualised music consumption.

Another milestone was reached in September 2017 when Instagram reported 800 million users. Already in 2014, it had overtaken Twitter with then 300 million monthly users. For the first time, the sharing of images had superseded the sharing of written code. No doubt also due to technology and a continuing increase in computing capacities, today iconic communication seems to have become more desirable than text-based communication.

This is certainly also the case when observing the communicative practices of the young and the not-so-very young. Invariably, in these groups, a large part of communication is instigated through selfies. While one might argue that this in itself is a move toward (visual) authenticity, this argument falls to wayside when one learns that in many circles, up to 100% of selfies are modified before uploading.²

¹ This is of course only an overgeneralisation. One might also claim that vision and decoding images is always already at the heart of reading. However, in its abstraction, reading did win out against most of the visuals originally making out the alphabet for instance.

² This is certainly true for all my students, as empiric and anecdotal evidence has shown.

Joanna Finkelstein's *The Art of Self-Invention: Image and Self-Identity* (London: Tauris, 2007), written just at the breaking of the Selfie fashion, already made it very clear that one's good image is more important than ever before. This includes a good dose of auto-voyeurism and narcissism, as mobile phones' ever popular mirror function clearly demonstrates.

If further proof were needed, one might point to one more event that attests the victory of the image:

On February 27, 2015, much of the globally networked virtual world was only discussing one question: "What colour is it?", leading to the first globally synchronised discussion of images and sight. A photograph of a dress had been uploaded onto tumblr.com and the question of the colour of the dress had been posed. Within hours, twitter and buzzfeed were inundated with tweets and posts, with two fractions bitterly opposing each other: those who saw the dress as gold and white and those who saw it as black and blue.



Tumblr.com

For the first time ever, netizens were deeply engrossed in discussions of colour theory, image philosophy and reception theory. The image had truly arrived.

The last example makes it clear, however, that images are not as innocent as many might claim and that serious interpretative work has to be invested in order to come close to any meaning images might possess. The very fact that they are so powerful, especially on an emotional level has led to iconoclasts rejecting them outright. But once a few aspects of theirs are accepted, their power might actually be harnessed for a better understanding of the realities surrounding us. Some of these aspects include:

- a) All images are in need of interpretation
- b) All images are constructed
- c) Their representational functions are complex
- d) They come without translations, subtitles or instructions for usage, which need to be supplied by their viewer and/or the communities of practice within which they appear.
- e) Words are only able to describe images in a very limited way. This is already true for the names we give to visual media. Take for instance the words “film” or “movie”, both of which are able to describe only certain aspects of the phenomenon; the former using the material upon which the phenomenon appeared at a particular moment in its history, the latter describing part of the illusion created by it. It can be rightly claimed that this phenomenon is so much more than that. At times, languages do allow to delve deeper into the subject, though, as is for instance the case for the Mandarin equivalent of these terms: 电影院 (Diàn yǐng yuàn), the “space for electric shadows”, a promise with a warning, opening up many ways with which to interpret and analyse this particular medium and a much stronger phrase than the more aspectual terms “movies” or “film”.

Fortunately, over the last few decades, more and more academics have begun to take images more seriously and have used points such as the above to gain a deeper understanding of them. In the following, due to space constraints, I will briefly sketch the visual reception situation prevalent today and how to make it more fruitful to visual studies.

Philosophical and Disciplinary Contextualisations

Academia has been trying to catch up with image proliferation, with varied results. Over the last 40 years or so, the field of visual studies has grown exponentially. Today, much research is done on vision from a variety of angles and disciplines. These include, medicine, psychology, advertising, aesthetics, philosophy, art, and literary and cultural studies.

While this visual turn is still a relatively recent phenomenon, in the early 21st century Visual Studies or an equivalent thereof are taught in many large-scale universities in the world. The field had received its initial push with the publishing of W. J. T. Mitchell’s 1986 *Iconology* and his positing of the “pictorial turn”. This new method of analysis became necessary as traditional humanities departments found themselves unable to properly study and account for this explosion of constructed visual materials due to their interdisciplinary nature. Especially in the USA, and mostly within the context of cultural and communication studies, visual investigations increased. In Europe, other scholars, most notably those coming from semiology or semiotics, have had much influence, some even prior to *Iconology*. Guy Debord, Roland Barthes, Vilém Flusser or Hans Belting come to mind, with others such as Nicholas Mirzoeff, James Elkins or Irit Rogoff following more recently.

Yet, despite all these texts arriving, they are still not enough to find an appropriate approach. Case in point is the unusually frank admission by Kirsti McGuire in the Introduction to the 2013 *Theorizing Visual Studies*: “We tried to come up with a theory – and we failed.” (2013)

I believe that here are three elements in the study of vision that are being underrepresented and that these contribute to the challenges visual studies are facing today. The first is the

overreliance on terminology borrowed from other disciplines; the second the underestimation of the intrinsic interculturality of most images; and the third the rise of the technical image.

Linguistics and Vision Studies

First of all, a disclaimer: The following is not intended to subtract from the validity, and indeed necessity, of linguistic analysis made fruitful for media studies. It is merely intended to sensitise readers to the fact that interdisciplinary approaches at times might need to come with a warning label.

In the 1970s, all of the material of cultural, sociological, media and humanistic studies underwent a number of re-evaluations. One aspect of this was the way in which cultural material was viewed and referred to. Suddenly, everything became a “text”. Even today, we are still describing many of the present phenomena with the instruments of textual analysis. It was especially Christian Metz with his formalist grammatical approach for film studies who was very successful with creating such a “textual” media universe. In his *Film Language: A Semiotics of Cinema* (1974), Metz discusses narrative structure via his “Grand Syntagmatique” by splitting up scenes into syntagms with a strong reliance on Saussurian linguistics. I do believe there is some valence to this as it opened up new ways of inquiry for filmic and visual material in general; however, at the same time it did a disservice to attempts aimed at creating a more native vocabulary for describing such newer phenomena. Especially where visual material wants to differentiate itself from textual material, using a nomenclature borrowed from the other might be disingenuous. These are defined with a non-visual system of inquiry in mind and cannot fully account for the image’s unique features.

More recently, this linguistic challenge has reappeared in another guise. Here I am referring inter alia to Lev Manovich, who in his 2013 *Software takes Command*, underlines the fact that multimedia have become unicode, images, music, text can all be rendered via the same programming language and that traditional disciplinarity needs to add this fact to their basic manner of self-understanding. As a result, Manovich and a number of other academics want to establish software theory as the meta-discipline for all things online. A similar line of reasoning is found in Federica Frabetti’s 2014 *Software Theory*, where she argues that such a theory ought to be considered constitutive of culture and human thought.³ Once again, I agree with both, but only up to a point. The study of software is necessary, but its alphanumeric units do not yield enough relations to digital reality to make them into a meta-science. Manovich proposes a linguistics of the digital, but just as the linguistic mode of enquiry does fall short when trying to describe visual phenomena, a software approach is not sufficient to sketch our world and only works in conjunction with the social sciences, the humanities and the like. It is no doubt constitutive, but also utterly co-dependent on other modes of analysis.

This is not to say that there are not important lessons to be learned by visual studies when looking at linguistics. For instance, there is a lot of mileage to be gained when trying to find

³ Fuller puts this the following way: “And it is this paradox, the ability to mix the formalised with the more messy – non-mathematical formalisms, linguistic, and visual objects and codes, events occurring at every scale from the ecological to the erotic and political – which gives computing power effects, and which folds back into software in its existence as culture.” (Fuller 2008: pp. 5–6) I would still argue that the cultural ascription/projection is done by humans and is not generated by the code itself.

answers to one of the main areas of debate, the question of whether there exists a universal grammar. This will question will for instance have an impact on the next section of this text when discussion the possibility of universal vision and asking whether there exists a universal weak visual matrix of cognition, akin to the weak Whorf-Sapirism that continues to have a large number of followers today. However, due to the interculturality of the sign, there are breaking points, significant metonymies of meaning between cultures and also visual cultures.

Coming back to the linguistic approach to visual studies, I would suggest that for diacritical reasons, quotations marks around such words as “text” or “plot” or grammatical descriptors when referring to images are desirable. Linguistic terms are appropriate as long as they are metonymic in relation to the described phenomena and not mimetic in their application.

Visual Interculturality

When it comes to cultural studies, many texts have been published which treat the subject. Theories of inter-, trans-, and multi-cultures have been en vogue for more than 30 years and have contributed immensely to the changing ways in which cultures are viewed/view themselves (e.g. Samovar 2011, Sorrell 2012 and a host of others). But within these cultural theories, visual (re)presentations have not featured prominently, if at all. Even when they are taken up, they are generally restricted to mere intra-cultural discussions, or they imply that the dominant culture’s interpretation would naturally stretch to any foreign reception as well. That this is not the case is fairly easy to demonstrate: one only has to think of the aversion to film subtitles in certain cultures and their acceptance in others. Visual codes do differ and this difference needs to be addressed. Oftentimes, the above-mentioned books start from the premise that while visual regimes might differ from time period to time period (cf. J. Crary, *Techniques of the Observer* (1992)), they are one and the same when viewed synchronically.

If within intercultural studies visual media do not feature very prominently, the reverse is true for media studies, where intercultural enquiries are few and rare in between. Media studies approaches elicit exciting results when looking at vision, but either remain within one cultural setting or posit a universal application. Case in point is the work of François Laruelle. If in the 1830s people rejoiced because it was thought that photography would yield scientific and universal results for the understanding of reality, these hopes were quickly squashed. At the latest, with Benjamin it became clear that this understanding would come at a price – if not the loss of a stable identity, at least it becomes a pale shadow of itself. More recently, François Laruelle (2011) has claimed that photography was actually a wonderful tool, because it deconstructed the reality of which it took a picture, turning the common approach to photography upon its head. He calls the result of image taking “photo-fiction”. This is a much deeper going kind of fiction, questioning our sense of reality vis-à-vis photography than the more traditional approach taken even recently by Wheeler for instance, who is still trying to distinguish between “photo-truth” and his “photo-fiction”, as gleaned from press photography. (Wheeler 2002). Laruelle questions a stable reality everywhere, which is a major task, but he does not ask about differing visual realities as they might exist in different cultures. Most theorists so far have underestimated the intercultural aspect of vision. So far, there is little movement to establish a visual pendant to Stanley Fish’s pluralistic “communities of interpreters” for visual studies.

To my knowledge, there exist only very few texts which explicitly deal with intercultural implications for visual studies, and even most of these shy away from more theoretical investigations. One of them is Ronald and Suzann Scollon's *Discourses in Place: Language in*

the Material World (2013), in which they study the social meaning of the material placement of signs in the world. The book is a valuable compendium of examples of how image interpretations differ from place to place. It takes a semiotic approach, but it is telling that the words “discourse” and “language” still figure prominently in the title of their book. Another text is Irit Rogoff's *Terra Infirma: Geography's Visual Culture* (2000). She takes seriously Donna Haraway's “situated knowledge” approach when discussing spatial displace sign systems of luggage, mapping, borders and bodies in the work of a number of artists. Both Scallion and Rogoff's books can thus be seen as attempts of de-universalising vision, but on a limited turf.

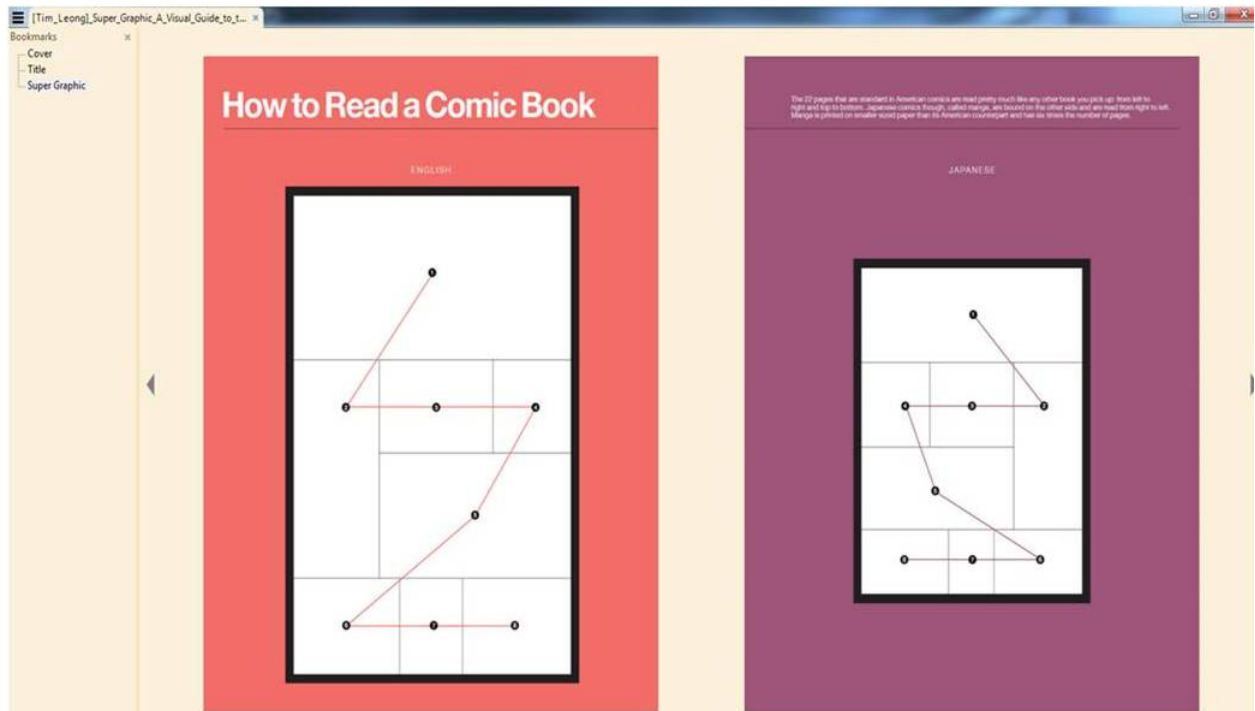
One prominent omission from the canon of visual culture texts therefore remains: *visual studies treated as an intercultural and transcultural process*. There exists this strange situation, then, that neither intercultural studies nor media studies have treated the phenomenon appropriately, each of them assigning it to the realm of the other. And this despite the fact that developing intercultural visual proficiency is one of the most important skills anybody working internationally would need to acquire. It is very seductive to think that while texts require translation, images do not, but this would be very far from the truth.

This omission is even more surprising as there exists much scientific support for the cultural determination of vision. One example is a study conducted on the recognition of other-race faces which clearly shows that with proper training, recognition processes can improve:

In the present behavioral study, with more face items to remember and to test, we find clearer ORE (other race effect) with Caucasians who are within 1-year of stay, and gradually toward other-race advantage, or better recognition memory for Chinese faces than for own-race Caucasian faces, with more years of stay in Taiwan. This not only indicates that ORE could be observed both in behavior and in their neural substrate but shows again the influence of life experience upon one's face recognition ability.'

(<http://i-perception.perceptionweb.com/journal/I/volume/2/article/ic238> 2011)

Another helpful example comes from the realm of comic books. Here the constituent fact is that language and images are inextricably linked, but with a preponderance of the latter. This is especially the case for Japanese Manga which are more image-laden than their western counterparts. When testing how “readers” view their comics, it became evident that westerners (left panel below) read comics differently from Japanese ones (right panel below). This of course has to do with how panel sequences are constructed. Roughly following the sequence of the differing scripts, Japanese ones are sequenced from right to left, whereas western ones are sequences from left to right. This was considered natural in their respective cultural and linguistic domains, but became problematic when Manga began to be exported to the west. While the textual elements were duly translated, early exports neglected to flip the panels as well, thus seriously hampering comprehension.



How to read a comic book in Leong (2013).

Studies such as the two outlined above question whether a stable global vision exists. Some researchers have stipulated that this is the case, or at least for certain areas of vision. For the last 40 years or so, Paul Kay (2011) for instance has been rather successful in trying to prove that colours are viewed similarly across all racial and cultural barriers. But other research exists as well, at least challenging a strong visual universalism. Thus, Anna Wierzbicka (2010) criticises the following points: 1) The existence of true colour terms cannot be proven; 2) Semantic ranges of colour have not been sufficiently examined; and 3) Western universalist tradition remains with its conceptual confines.

Be that as it may, it seems clear that while images were mostly produced and circulated within the same cultural realm, their interpretation was less problematic than is the case today, where digital social media spread image across the globe in real-time.

The Technical Image

The technical side of the image has certainly been under discussion ever since daguerreotypes and photographs appeared. This discussion received an additional boost by Benjamin's work on film in the 1930s and has continued unabated since then. With the arrival of social and digital media, this discussion has necessarily deepened and today most of our images are arrived at, disseminated and consumed in digital form. Take for instance the images we are confronted with when looking at Google maps. This is not the older generations' map anymore: "Wrapped up in this enterprise is a complex and cross-hatched tapestry of time and space which is woven together through the hypothetical person's use of Google Maps: social time and cyberspace; digital processing time and subjective sense of place; biological time and corporate "geo-services"; global networks and local navigations" (Stroem 2015). Furthermore, the discussion of the map does not only relate to its use value, but has to be begun even earlier, namely when Google vans were beginning to circulate in countries and municipalities in order to cartograph areas for its maps. Especially in Germany at the time, many people successfully

objected to their cartographical registration which they saw as invasion of their privacy and commodification. This serves as an important reminder that technology is never socially neutral and is always already involved in power processes.

The technological processes interesting me here, though, are not merely related to the traditional creation of images, but rather to how technology creates images for its own purposes. FeiFei Li (2015) has recently pointed out the way in which computers are being taught to understand images. This involves a moving away from a human-centred approach. The about-face in philosophy gaining hold in some form of speculative realism is commensurate with the about face which is taking place in Artificial Intelligence (AI) Research, where machine (re-)cognition research is progressing in leaps and bounds. Machine vision is already revolutionising the way our social lives are administered. This does not come without its own problems, for instance with neural networks being able to detect sexual preferences (Wang 2017). Or compare the following statement taken from an AI Research company's website:

The human face evolved over millennia to instantly communicate a range of complex emotions. Affdex harnesses this information in a clear, readable form, using computers to measure emotional response. The system captures a user's facial expressions through their existing webcam, in real time. Tracking gestures and key points on the subject's face, Affdex is able to analyze subtle movements and correlate them with complex emotional and cognitive states. This is much more than simple facial recognition. The Affdex system can identify and follow dozens of precise locations on an individual's face. The muscular micro-shifts of every smile, yawn, or moment of confusion are captured and reflected in the data.
(Protected: Affdex Anywhere (2017))

This is not the question of a male or female gaze anymore, with all philosophical and social implications they entail, but it is the question how humans are being viewed by machines. It is the move from the gaze on an other to the gaze of oneself as an other, where oneself can be read by the machine, but the machine is beyond being read by us. As mentioned above, this move is also in line with recent philosophical investigations into what is termed “speculative realism. Meillassoux and Brassier (2010) maintain that since Cartesian times, the insistence on the “I” as the sine-qua-non arbiter of philosophy was mistaken. They posit that a reversal of inquiry perspective ought to take place, including the gaze of the other onto us in our gaze fastened on the other itself. This would include a necessary redefinition of the notion of “representation” and something they call “speculative realism”. The speculative part here is not a reverting back to transcendental philosophy, but rather to a speculation on how meaning is contingent. This would certainly be the case when considering the interaction with AI, where our necessary shortening of our temporal horizon might lead us to believe the optical illusion that we are approaching either paradise or apocalypse.

The VisionByte

In order to address the issues in visual studies highlighted in the previously said, it seems that new conceptual tools are needed and it is the intention of the following paragraphs to establish such a tool. Besides the partly conceptual dearth in visual studies already outlined, another movement would need to be taken into account here, and that is postmodernism. Since 1979, Jean-François Lyotard has insisted on the demise of the *grand récits*, of the grand narratives, which had underpinned ideological positions for decades if not for centuries. Such a demise of ideologies has not happened in visual studies, where at least some older meta-narratives of

investigation still hold sway. But the subject of these more semiotic approaches has inevitable changed: it is not the long visuals any more that used to entertain viewers, clad in ideology, but rather the short ephemeral viral content found on ubiquitous handheld devices. The long take has been replaced by rapid images or videos coming from afar, or to use Lyotard's words once again, the visual equivalent of his *petit récits*. These are more and more determined by interculturality and technological development, rather than a universal humanist approach.

The reader might recall that one of the reasons why McGuire failed with a definition for visual studies was that she did not possess the instruments necessary to describe and understand the breadth of newer visual material. It is therefore time to propose one tool which might be of help here. It is perhaps not so much a tool than a cognitive shift, a re-imagining of visual phenomena indubitably shaping our life world.

The VisionByte: A Definition

VisionBytes are complex visual arrays which are usually of foreign or intercultural ordinance. They are formed by electronic (moving) images and are ephemeral and permanent at the same time, akin to Laruelle's quants in his quantum philosophy (2013).

As moving images, they would be of a length of three seconds or more to be consciously meaningful due to the limitations of human vision.

VisionBytes are post-spectacle and hyper-social in their ubiquity.

VisionBytes circulate within a changing non-system of production, dissemination and consumption.

VisionBytes are typically perceived through electronic communication devices.

VisionBytes are born of cinematic digital effects, vertigo-inducing and questioning every other moving image in the first instance, and then rapidly assemble into open systems of non-meaning.

VisionBytes can be deconstructed through visual participation and the application of transtheoretical tools of analysis.

Many, if not most VisionBytes are at culture specific and contain inter-cultural elements.

VisionBytes are ruled by and akin to products and processes of artistic production.

Art Works

The above definition of VisionBytes necessitates a look at art as it is constitutive in their make-up. When trying to understand the recent explosion of digital art, one needs to have a quick look at the way art has been represented/created with electronic means.

Already during the early film and TV era of the 1920s, artists took to the screen in large numbers. One might think of expressionist films such as *The Cabinet of Doctor Cagliari* (Robert Wiene, 1920) or the films by man ray, Luis Bunuel or Dzigo Vertoff. Moving images were seen by many artists as the new direction into which art should develop. The rise of the

commercially oriented Hollywood studio system and the war in Europe interrupted this development and while film remained an important art, in the 1940s and 50s film *as* art was quickly relegated into a negligible niche market.

This would change dramatically with the rise of the 1960s counter culture. Artists such as Andy Warhol in the United States, the Nouvelle Vague in France and the artists associated with the 1962 Oberhausen Manifesto in Germany would once again view film as a revolutionary tool.

Beyond the overt political art created through such films, other artists would begin to treat the medium as a creative physical tool in itself. Stan Breckenridge would insert glue or feathers directly onto the celluloid and Nam Jun Paik would incorporate physical receivers such as TV sets into his art. Others, such as Bill Viola, would come to understand and treat film as an installation, as an immersive environment, thereby already foreshadowing the fulfilment of film makers' dream to negate the distance screens create between their work and their audience. One of Viola's largest exhibitions, his 2003 *Five Angels for the Millennium*, was on display at the Oberhausen Gasometer, an industrial ruin turned into art platform, thereby making clear that his video art did see itself in the tradition of radical critique, something oft forgotten when being immersed in his installations. Much earlier on already, in 1966, Robert Rauschenberg had formed the group *Experiments in Art and Technology*, or EAT, in order to bring artists and engineers together. For the first EAT event, called "9 Evenings: Theatre and Engineering", Rauschenberg applied infrared cameras, radio transmitters on tennis rackets and video projections to create a multimedia performance.

With the arrival of digital technology these artistic film movements received added impetus.⁴ Its beginnings can be traced back to the early 1970s when Manfred Mohr presented his show Computer Graphics, aptly subtitled *Une Esthetique Programée*. He had begun using computer algorithms in his art in 1969 and his work was displayed in 1972 at the Musée d'Art Moderne de la Ville de Paris. For his time, he asked revolutionary questions with and in his work, such as, 'What do you think of aesthetic research made with the help of a computer?' Today, this question has been roundly answered as many artists regularly create art with the help of a computer and some computers create art without the help of humans.

Over the intervening 40 years, digital and video art has proliferated, with many artists working with these new tools and a number of important and dedicated festivals opening their doors, e.g. the *Ars Electronica* in Linz. At first, artistic production was hampered by lack of computing power, but this has changed dramatically. In the following, I would like to quickly present four pertinent artworks which exemplify the theory of the VisionByte.

⁴ For more on the history of digital art, cf. Cubbitt (1998), Colson (2007), and Pollock (2010).



Maria Hassabi, staging solo 2017 (c. Holger Briel 2017).

Maria Hassabi presented several video works at the 2017 Dokumenta 14 in Kassel. Her videos consisted of still background images from the collection of the Ethnologisches Institut Berlin overlaid with moving images of natives from the countries featured in the background image. The work received its power from the visual connect and disconnect of the two images which

seem to coalesce in a timeless fashion, but remain discrete enough to make a statement in regards to their differing intentions: While the background images were part of the colonising drive of the last centuries, the newer images question the older ones and reveal the perfidy of creating ethnographic institutes pretending to serve science while in reality being used to cement the belief in the superiority of the white race and to thus provide an excuse to continue with the looting of and the killings in the colonies. The overlaid images create a much more realistic and assertive image of individuals from these erstwhile colonies. Both images have travelled from afar, but with very different intentions. That they are now entwined, entangled speaks to their attempt at overcoming spatial and temporal rifts.



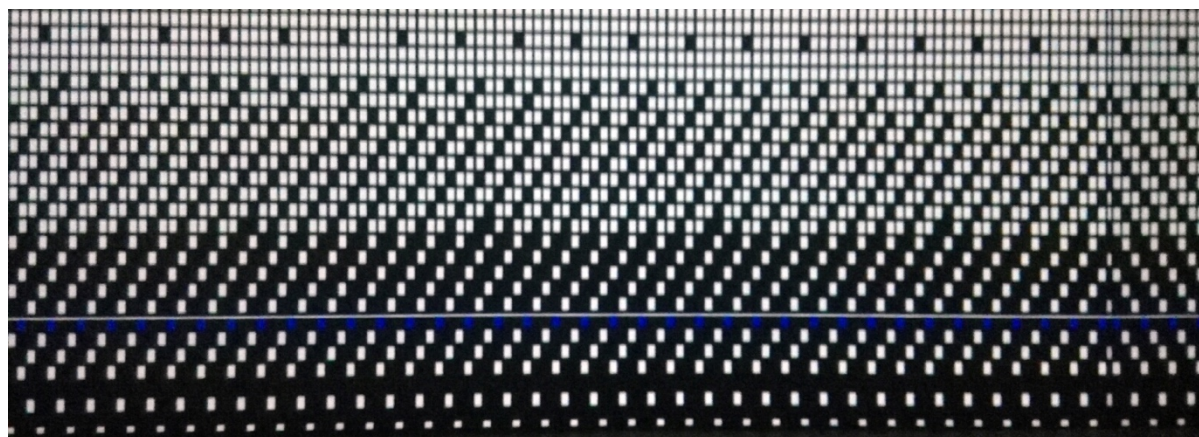
Xianodong Liu, *Weight of Insomnia*, Chronos Art Center, Shanghai, October 2016 (c. Holger Briel 2016).

Quite a different work is *Weight of Insomnia* by Xiaodong Liu. It is a computer generated gallery installation, but which receives live feeds from city street corners. The catalogue explains:

LIU Xiaodong translates traffic streams, human movements from multiple locations monitored in real time, into emotional residues precipitated over extremely long time-lapses. It is as if the artist, reincarnated in a robotic consciousness, wrestles through an endless, restless insomnia to piece together an ever-evolving jigsaw of amorphous desires and anxieties, fleeting nightmares and ruptures, which cannot be otherwise amassed without his technological accomplice, to construct a new awareness of contemporaneity. It also implicitly invokes the imperative of the post-human present in which a new sensibility of inter-objectivity begins to emerge, in which humans and other objects reciprocally co-create the world as we know it.

(*Weight of Insomnia* (2016))

Here, the human becomes a negligible co-creator for a computer creating real-time presentations of distant street scenes. Humans need to sleep, the computer will continue as long as there is electricity, a live feed and paint. The weight of insomnia of the title is the negation of the *conditio humana*, which the computer easily transcends. Meaning is invoked and rescinded with every brushstroke, with more and more proto-images overlaying each other spatially and temporarily.



Carsten Nicolai (Alva Noto) *unitape* Chronos Art Center, Shanghai, October 2016, (c. Holger Briel)

Another piece shown in conjunction with Liu's work was Carsten Nicolai's *unitape*. It is a film in which lines change mostly slowly with serial sound motifs accompanying the changes. It was installed in a large darkened room and the slow changing images along with the serial music exuded a mesmerising quality. The piece is a comment on the industrialisation process, invoking the invention of the Jacquard card which played a major role in the creation of mechanical looms. Its creation by Joseph-Marie Jacquard (1752–1834) allowed for the quick production of complex fabrics using automated punched cards. This technique was introduced in 1830 in Saxony, where it revolutionised textile production, as it eventually did throughout Europe (Nicolai 2016).

Nicolai here “reflects on communication processes in the industrial era while at the same time addressing issues related to the socio-psychological aspects of the interaction between man and machine” (Nicolai 2016). In particular, it is the mesmerizing effect that stays with the onlooker, the vastness of the screen and the feeling of being lost in front of the machine. The machine has not lost its spell-binding power; if at all, it has increased. And herein lies the threat and promise of the computer at the end of the industrialised era, with the machine remaining an instrument of magic, even after 200 years of mechanisation and against better judgement.



Screen grab from Sebastian Schmieg, *Search by Image*, 2011
<http://sebastianschmieg.com/searchbyimage/>

The last piece to find discussion here is Sebastian Schmieg's *Search by Image*. The title is a reference to one of the search modes in Google. The project started in 2011 and has been exhibited in various locales since then. At that time, Google's Search by Image function had existed for over 10 years, and millions of people were using it on a daily basis. Few of them ever thought about the algorithms behind this feature. Schmieg explains:

There are two strong currents running through my practice. One, which started with *Search by Image*, is looking at computer vision and archives of images. The other one is looking at how this constant connectivity changes the way we work A friend told me about this brand new feature which instantly fascinated me. I was basically just playing around with it, without having any idea where it would lead. I was just throwing any image that I could find at it, and trying to find out what would happen. And when I saw that, for example, when you feed dogs into it you get back naked men or women, it became clear that this is a totally different way of searching to the one Google regularly offers. I then instantly had the idea to generate videos with it and I made lots of experiments with that. Out of this process the video that got the most exposure is the one starting with a transparent PNG.

(Malevé, 2017)

Schmieg here raises important questions about the way AIs are processing images and creating data for humans. It is not the human anymore who can control the search process, but the machine. As such, machines are creating a visual world, complete with artificial contextualisations, with minimal input from us and which we then inhabit. One might question the results for a moment (from dog to naked man or woman), but as humans are pattern dependant, we will probably accept and try to rationalise the search result and its contextualisation in one way or another.⁵

All four artworks share the definition of the VisionByte – they bring to the fore issues of interculturality, machine/AI – human interaction and question our “blind” reliance on images. They do not fall into a dichotomy of good technology – bad technology, but investigate visual phenomena further. They do take worries about the power of the image (and the AIs behind them) seriously. That danger is clearly there. Earlier art had already given us hints of this danger. Thus, pointillism, Gestalt therapy and Benjamin and Adorno's constellations – all of these point to the power of the human mind for creating visual images despite/because of missing information. While this was largely a visual game, with big data, this missing information is easily filled in. As such, it is not just an artistic loss, a loss of a certain kind of aesthetic, but rather also a political loss, a loss of power ranging from consumer profiling to face recognition at traffic nodes and restaurants, from health monitoring to issues of identity and continuing on deep into social media.

Much of today's art is a commentary on these developments and it is up to its audience to draw the right conclusion from it. Heidegger's infamous statement, “Nur noch ein Gott kann uns retten” (Only a god can save us) (Heidegger, 1976, p. 193) is perhaps more apt than ever before, as we are poised to become creators of the digital divine, if we have not already done so. It is as if Benjamin's Angel of History, looking backwards while being blown into the future by the force of history, has indeed become alien made flesh. And the gaze of history has taken on a new meaning from the eyes of an Other, for us and for the other. While we are still perfecting our performance, awaiting the gaze of the Other, the Other has already begun watching us and we are left with (anxiously) watching the Other watching us.

Conclusion

As this text attempted to demonstrate, dealing with visual images has become one of the main tasks of humanity and its technical Other in the 21st century and beyond. While scientific theories abound on interculturality, cybervision and the fears and chance of AI technology, research on the day-to-day circulation of billions of VisionBytes, many of those already generated by machines for machines, is still in its infancy. In my own research, I have begun looking at some of these phenomena, be they the ritualisation of other-cultural products (2013); filmic adaptations of ideologically opposed ethnographic ideals (2012); entertainment visualisations and their neurological underpinnings (2009); or the attempted translation of Manga for western audiences (2010, 2014).

While the time horizon of image consumption is becoming shorter and shorter and the time stamps of and for image conservation are aging quickly, images have begun to supplant texts

⁵ At the time of this writing, Google had suspended its search by image function, apparently due to a deal struck with Getty Images relating to copyright infringement. (<https://searchengineland.com/google-image-search-removes-view-image-button-search-image-feature-292183>) Whether the removal will be permanent remains to be seen.

as the main building blocks of human and machine communication. Over the centuries, art has consistently shown the way on how to deal with and adapt to new social situations and continues to do so. It is guiding and warnings about neoliberalism's attempts at completely commercialising images and reducing them to mere brand signs. Viewing these images as VisionBytes helps to remember where they come from and to give answers to pertinent questions such as: Which agenda do they have? Who profits from them? Which messages do they carry? What translative strategies might be applicable in decoding them? What do they tell us about the ghost in the machine? While not all answers might be to our liking, they will serve to better understand ourselves and vis-à-vis the Other. The age of the VisionByte has begun.

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Difference-theoretical Analysis of Aesthetic Media and Forms

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Abstract

The general medium/form-difference-theory as proposed by Fritz Heider (cf. Heider, 1959) has been seized on by the sociological systems theory as an epistemological and heuristic basis of such a generality that it can be applied to virtually all conceivable fields of research. One could arguably speak of a new paradigm that overcomes traditional differences such as subject/object and cause/effect. This approach has been applied to all types of art¹, and various research questions in the fields of aesthetics and art theory. This paper proposes a differentiation and categorisation of aesthetic media and forms in order to lay the groundwork for art criticism on a third way between subjective appreciation and objective reasoning. Musical examples demonstrate the applicability of the medium/form-difference-theoretical approach for the aesthetics of music and music criticism.

Key words: aesthetics, art criticism, medium/form-difference-theory, systems theory

¹ For example: baroque music (Kreidler, 2007), popular music (Heidingsfelder, 2012), Literature (Jahraus, 2003; Luhmann, 2008; Ort, 2007), architecture (Lippuner, 2008), the Avant-Garde (Baecker, 2006).

1. What is Art? The Specificity of Aesthetic Medium/Form-Differences

There is a tradition of semiotic and information-theoretical analysis of aesthetic forms and media (Bense, 1969; Birkhoff, 1933; Simonton, 1984) that focuses on the same goal: to overcome both subjectivist and objectivist approaches towards artistic forms. Saying that this third way is relational is not enough. The point is that the relation is not one between subjects and objects but rather one between elements and forms. Neither a form nor an element can be seen as an object as such but only from a difference-theoretical perspective in relation to each other. However, it is questionable whether these approaches deal with artistic forms or rather with highly reduced forms (simple geometric forms, note-to-note transitions) that have – at least from an art-philosophical perspective – nothing of relevance in common with objects of and for aesthetic experience. This article proposes an analytic approach towards artistic forms and aesthetic media in the strict sense and consequently brings itself in the difficult position to define the concepts of artistic forms and aesthetic media, or in short: art communication.²

There are many possible arguments against any attempt of defining art. First, “what is?” – questions generally ask for essentialist answers.³ Second, art in particular may be regarded as something which flees definitions by ongoing self-transformation (cf. Weitz, 1956). Third, one can object that the field of art is too complex to be defined. Furthermore, such definitions are means of power which discriminate observations and exclude actions and works out of the realm of art. Lastly, definitions of a historical object are to such an extent historically conditioned that the term “the blind spot of the observer” is certainly an understatement. Nevertheless, Niklas Luhmann gives a very clear and easy definition of art which comprises all forms of art through art history. Before the specification of art can be given, it is necessary to say something about the field this specification takes place in: the field (or medium) of medium/form-differences.⁴

The difference between media and forms is the most general and universal: (a) Any observation makes a difference. (b) Any difference needs a medium in which it can take place. (c) The actual difference as a selection from a medium is called form. (d) The general relation between media and forms can be described as coupling of elements.

a) Any Observation Makes a Difference

The epistemological position of a difference theory in the broadest sense cannot be seen as a contingent position among others. At least the tautological – thus undeniable – statement that everything we observe is an object of observation makes clear that there is no observation without difference (observer vs. observation vs. the observed). Moreover, every object is not only distinct from the observation but also distinct from all other objects. Spinoza’s *omnis determinatio est negatio*⁵ is still valid, since objects are always something and not something

² The hypothesis is that artistic forms cannot be simply perceived but must rather be understood in the sense of interpretative approaches. The supposition that a certain form is intentionally produced by someone triggers a question regarding its social meaning. Performing this supposition is defined as the constitutional difference between perception and communication (cf. Luhmann, 2001).

³ The understanding of the problematic nature of essentialist thinking is not a post-modern, difference-theoretical, or deconstructivist accomplishment, but can be traced back – at least – to the »Kantian revolution« (cf. Wiesenfarth, 1981, p. 104).

⁴ The following introduction to the medium/form difference theory is neither meant to be original nor thorough. For a deeper understanding: (cf. Luhmann, 1992, p. 98); (cf. Luhmann, 1995, pp. 165-214; Luhmann, 1997, pp. 195-202; 1990) and especially the point of departure of this concept: (Brauns, 2002).

⁵ Spinoza’s *determinatio negatio est* finds its famous form in Heider (1959).

else. The term “observation” has the great advantage that it can be applied to all kinds of actualized differences. Whenever a difference is made, thus marked, there is an observation taking place. When there is no observation, there is (and not even) nothing. Differences can be marked by psychic systems, social systems, organic systems and neuronal systems.

b) Any Difference Needs a Medium in which it Can Take Place

When we speak of systems which operate differences, it is clear that the general medium for such operations must be time. Without differences in the medium of time there is no process and thus no operational system of any kind. This does not imply that time is an a priori or a transcendental condition in the sense of a pre-existing timely order. Time is rather a medium that must be “switched on” when systems operate. Besides the universal medium of time, there are most important differences in respect to the media different system types use for their operations. Differences of organic systems are differences in the medium of space: Here, not there; there, not here. Organic matter is only organized spatially. In clear contrast to that, psychic systems are not spatial at all. Differences in psychic systems take place in the medium of meaning. Thoughts, perceptions, feelings are not somewhere as opposed to somewhere else in space but only something as opposed to something else. The same goes for social systems.

Beyond these highly general media of time, space, and meaning, differences in the medium of meaning necessitate various higher orders of media. Differences between scientific theories, religious practices and artistic styles for example, are no simple this-not-that-differences. In other words: the medium of meaning is extremely differentiated and specific differences can only be understood against the background of a specified domain (genre, style, discourse . . .). The difference between a fugue by Bach and by Telemann is no difference in meaning, not even a difference in music, not even a difference in classical music. The higher medium of polyphonic composition is necessary in order to find the specific differences. This explains why many listeners are not capable of telling baroque music from Viennese Classic or even from romantic music – an observation which puzzles those who are familiar with the media and to whom the differences are most apparent.

c) The Actual Difference as a Selection from a Medium is Called Form

The concept of form simply refers to differences which are actualizations from a medium of other possible differences. On this rather primitive basis some conclusions are nevertheless possible: First, forms are – as possible selections – contingent. Second, forms are – as contingent selections – improbable. Third, forms are relative to media. When tones are forms in the medium of sound, tones are the medium for tonality as a restrictive order. Tonality again, is a medium for major/minor-tonality, which is in turn a medium for a certain melody. A certain interpretation, lastly, is a form in the medium of a certain melody:

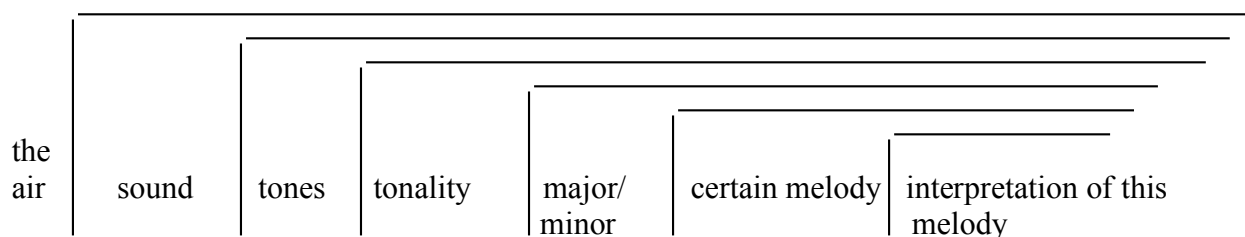


Figure 1.

Of course, we do not apply this primitive medium/form-cascade, which is not yet historically defined while listening to a song. Only a performer of a perfect Husserlian thematic epoché was able to listen to a melody as a form in the medium of a major scale. If not, a melody is automatically related to much higher media like style, genre and personal taste. For example, pop songs are forms in a highly sub-differentiated medium of »pop song«. Only in reference to this medium does the listener decide whether a certain melody is beautiful, original, interesting, boring, epigonic, irritating or whatever. Estimating the medium in its historicity asks for historical knowledge. Relating a certain song to this medium asks for connoisseurship. Finding the »right« medium for a form requires creativity on the side of the listener.

d) The General Relation between Media and Forms can be Described as Coupling of Elements

Forms can be called selections, restrictions or actualizations of potential element couplings of a medium. The great advantage of the term element is that it makes no difference between different media. All media, may they be located in the general media of space or meaning, consist of reference points for differences. For an aesthetic theory it is most helpful to have a concept of aesthetic material which is indifferent towards dichotomies like matter/form or content/form, since the ontological status of elements seems to be completely uninteresting and even misleading for aesthetic observation. With this medium/form-difference-theory it is possible to deal with colour differences in the same way as with differences in narrative style without speaking metaphorically. In both – and all – thinkable cases there is a medium of possibilities for form selections. In the aesthetic medium the elements (colours, tones, expectations, body movements . . .) are relatively loosely coupled: painters are free in their colour choice and the choice of one colour does not exclude other colours on the canvas, a tone does not pre-determine the next one, an aesthetically focused expectation is not bound to other expectations and the body of a dancer is more than any other body trained to make any movement possible without being determined by precedent movements. All restrictions of aesthetic choice lie on the side of the form and not of the medium when the idea of a perfect medium is assumed. A perfect medium can be described as a pool of elements which are extremely loosely coupled so that the choice of the form is not restricted by the medium at all. This goes for aesthetic medium/form-differences as well as for all medium/form-differences in communication. The air is a better medium for communication when it is free of noise. Otherwise, this would restrict that what can be communicated immensely where shouted two word sentences cannot be understood as free choices of form.

After we have seen that every observation can be observed as a medium/form-difference, the question of the specificity of aesthetic medium/form-differences arises. The thesis is that there are exactly three possible ways of observing medium/form-differences and that one of these is specific to art.

1) Focusing on the Form

Whenever we are interested in information, no matter if it is perceived or communicated, we pay our full attention to the form and none to the medium. When we see a tree we do not question our faculty of seeing or the lighting conditions. When we want to read a written sentence, we are not appreciating the font of the writing and not even language as such and its style in particular. This would afford the imagination of alternatives and more generally: attention to the underlying medium. In every day communication situations such attentiveness would make communicative interaction at least very awkward if not impossible. To make

language a subject of discussion would either turn an everyday conversation into a conflict system – as a medium language only becomes visible due to opacities and perturbations – or into a scientific debate.

2) Focusing on the Medium

As indicated above, science is fundamentally interested in media. Forms, for example, certain utterances, are only interesting in order to sound out the medium of language. Works of art (forms) tell the scholar something about style or genre (media) evolution; animals are taken as specimen (forms) of species (medium). Whether induction, deduction or abduction is performed makes no difference: in all cases the result brings light into a dark medium. Hypotheses and laws are not concerned with forms as such but only with structures of a medium. Science is never really “ideographic” in the sense of Windelband (cf. Windelband, 1982), since every research object is not an object in itself but an object of scientific observation. It is an operative element of the science system and thus a form which either stabilizes or irritates the medium of truth, or better: the actual domain of the truth medium which hosts a certain theory or method.

3) Focusing on the Medium/Form-Difference: The Specificity of Art

Art can be defined as the observation mode which focuses on the selectivity of forms out of a medium. For an aesthetic view forms are contingent and improbable selections that mysteriously manage (or fail) to appear as – more or less – necessary. This observation is only possible when the medium is not ignored, since only the relation to the medium defines the selectivity of the form. A painting can only be aesthetically responded to when the perceiver develops a hypothesis on the space of possibilities the forms are selected from. A still life is, of course, not a form in the medium of colour or oil. Only when there is a productive idea regarding the specific medium as the frame for the artistic form selections, can aesthetic observation emerge. Seeing forms in their relation to the medium they are taken from is an observation mode that can be called art-specific. That this definition of art does not refer to objects of observation is rather an advantage than a disadvantage as the examples in paragraph 3 should make plausible.

2. Observing Works of Art: The Abduction of the Medium

The thesis of medium/form-difference-theoretical aesthetics is that artistic forms can only be observed in a complex observation mode which relates forms to media. This makes it necessary for the observer to develop a hypothesis about what the medium of a certain work of art is. This identification of the medium is a process that demands both a high level of specific historical knowledge on art and a creative and intuitive faculty. Of course it is possible to read any novel as a novel, but in case of a novel like “Malone dies” by Beckett this reading attitude will hardly facilitate any kind of aesthetic pleasure. The medium of narration, which is naturally presupposed by novel readers, lets the forms of this novel appear as absurd, obscure, contingent and inconsistent. Novels like these demand other – it is often said: more sophisticated – hypotheses on what the medium is. However, sophistication has a different meaning in this context: When as a young teenager, I heard my older brother’s hard rock music from the next room, I analysed this music as sound thrash where hundreds of guitars played whatever they want. I could not even differentiate one of these noise episodes (i.e. a song) from the next. One year later I could not understand my former problems with this very moderate and traditional music with clear and conventional formal structures (e.g. Guns ‘n’ Roses). I had the same

experience again with Heavy Metal and later with Bebop music. The point is that there is no way to go from the Beatles to Charlie Parker or Megadeath directly, since there is no chance to find the “right” medium for the forms. Charlie Parker’s themes cannot be adequately viewed as beautiful “melodies”. In the same way, Adorno’s strong indictment of Jazz needs to be partly regarded as misguided, as his medium hypothesis in reference to harmonic and rhythmic complexity and melodic innovation is inappropriate (Adorno, 2001). One can say that Adorno is right with everything he writes about jazz except for the aspect that he did not develop a sufficient hypothesis on what the medium of the jazz music he listened to actually was. Which forms could Louis Armstrong have chosen and which impression does this selection make? What is the aesthetic medium of Hot Jazz, of Bebop, of Heavy Metal, of Beckett’s novels? Naming a genre is not an answer to a question but a hint that there is a specific medium which applies to the number of works that are attributed to this genre. Speaking of a genre or a style implies the invention of a new medium, respectively the sub-differentiation of an aesthetic medium.

Identifying the medium of a work of art means understanding this work, which of course includes misunderstanding. How can an observer increase the probability of identifying the medium which is most adequate, which delivers the best results for aesthetic observation, which is the most specific? This is the crucial question for art criticism and the justification for professional art observation. Critics can be regarded as observers who spend much effort on the development of hypotheses on media for works of art. If one hypothesis lets a novel appear as a nice and entertaining work of literature, maybe another hypothesis lets this novel become an original masterwork that even invented a new medium. With Peirce, one can call the development of such a hypothesis an *abduction* which begins with the observation of a form selection (surprising fact) that can only be understood as a meaningful communicative offer due to an assumption of an *out-of* (medium) of this selection: “Abduction makes its start from the facts, without, at the outset, having any particular theory in view, though it is motivated by the feeling that a theory is needed to explain the surprising facts” (Peirce, 1958 CP 7.218 – 1901).

When abduction is understood as a creative process of inventing a new theory or rule which helps understanding a case in a productive way it is clear that we can hardly speak of a method in the strict sense (cf. Reichertz, 2013). On the contrary, Peirce describes abduction rather as a mystic case of emergence: “The abductive suggestion comes to us like a flash. It is an act of insight, although of extremely fallible insight” (Peirce, 1958 CP 5.181 – 1903). Though there might not be a proper method of abduction in this understanding of a creative process there can be strategies to increase the probability of abduction by fostering a certain attitude or mood or musement, Peirce describes as a play without rules.⁶ These strategies refer, of course, to the behaviour of the observer and would be part of subjective aesthetics which we are trying to overcome. However, that we have not found a method for medium abduction does not mean that the idea of a medium/form-difference-theoretical aesthetics has failed in its attempt to overcome the analytical problems of the subjectiveness of aesthetic observation. Rather, the research program of medium/form-difference theory begins one step later. When an observer observes a form as a selection out of a medium, the judgement about the form as an artistic decision can be scientifically described. First, the hypothesized medium can be analysed; second, the observed form can be analysed and third, the relation between form and medium or in other words: the selectivity as such can be analysed.

⁶ For a detailed discussion of the question whether abduction can be strategically induced (Luhmann, 1993, p. 51).

3. Properties of Media and of Forms

In his essay “The Medium of Art” (Luhmann, 1990), Niklas Luhmann makes some remarks on the properties of media and forms, although a truly systematic approach in this field does not yet exist. Luhmann does not like to talk about properties at all, since media are only media for forms and it makes no sense to describe a medium as such. However, I am attempting to trace the dimensions in which media can relate to forms. In which regards can a medium assume certain properties that facilitate a medium/form-difference?

a) Analysing Media

First, Luhmann names the “differences of magnitude” (Luhmann, 1990, p. 217), for example, the *quantity of elements* as a general medium property in our sense. If we want to describe a medium of art we can analyse its quantity of elements. For example the quantity of elements for diatonic music (tones in a scale) is 7, whereas the quantity of elements in sonnets (words) is in the thousands.

Second, the “combinatory possibilities” (Luhmann, 1990, p. 217) is a parameter for media analysis which explains why some media like the medium of diatonic scales can facilitate a sheer endless number of form selections. The medium of rhymed and rhythmicised poetic language of a sonnet is on the contrary rather limited in its combinatorics. That there are sonnets consisting of word formations which comply with the conditions of rhyme, metrical structure, the sonnet form, and semantic and expressional aspirations can be regarded as a miracle. That there are melodies according to a diatonic scale is, however, no miracle at all.

Third, there is a level of media Luhmann does mention. With reference to media of perception we can find easy examples for differences in this dimension. It is very important that the sounds we make disappear after their utterance; conversations would otherwise be impossible or very limited. On the other hand, the low ability of dissolution of elements in written texts is a condition for writing culture and in the end a condition for a modern differentiated society (cf. Luhmann, 1998, pp. 249–290). But does it make sense to analyse the ability of dissolution of elements in aesthetic media? In other words: are there differences? The concrete question would be, whether an event of coupling of elements (form selection) influences the following coupling behaviour of elements. This could be the case when there are traces of coupling history in the medium conserved. It seems that there certainly are differences between aesthetic media in this respect which could be analytically interesting. For example, conceptual art seems to have a manifest problem with the dissolution ability of media elements. If something has already been done; if a certain expectation has been used as a medium for form selection in order to demonstrate its medium character, the medium of expectation has been performatively changed. If an artist like John Cage presents a musical performance without intentional and artistic sound production by musicians, there can hardly be a second artistic form using the same medium of expectation in the same way.

Fourth, the *degree of pollution* of a medium can be analysed. I would speak of pollution when the elements of a medium are agglutinated by a history of artistically failed or worn out couplings. Some media more than others are characterized by things, for example, form selections, “one cannot do anymore”. Trivial art could be described as a selection not of elements from a medium but as a selection of agglutinated elements from a medium. That the hero of a trivial love story is handsome and tall and only at first dismissive, since he has made painful experiences – as found out by the heroine in the last chapter – cannot be traced back to

pure form decisions. Rather, it is plausible to find a reason for stereotypical form selection under the circumstance that the medium itself delivers elements in packages. The existence of such packages which are products of already tried and used artistic form decisions can be called the pollution of the medium. Thus, genre satires of are indicators of medium pollution.

Fifth, there exist great differences concerning the *opacity* of media. Some media are to such an extent transparent that the elements of the medium are obvious. This, for example, is the case in a medium like the fugue. The composer and the connoisseur know the tone material and its combinatorics and even the history of fugues which influences form selections with the aim of originality. A kind of middle position takes the medium of still lives. It seems clear that the elements of still lives are representations of inanimate objects. However, in the course of the centuries the repertoire of such objects was extended, altered and exchanged. The medium appears to be transparent until it becomes obvious that there were opaque corners in it that become greater and more transparent as one approaches them more closely. The opacity of media is a strong argument against the material repertoire concept of the information-theoretical approach of Bense's. Especially in modern art we continuously come across forms (works of art) that do not display their medium at all. In these cases the form is to the highest degree a negation of material choice (Minimal Music, monochrome painting, ready-mades). The decisive role of the unchosen couplings, which are not transparent but rather an unmarked space, cannot be considered adequately from the ground of a material repertoire theory. The medium/form-difference-theoretical medium concept, however, can easily describe a medium as a pool of negations, expectations, symbols and of course: of differences as opposed to materially manifest elements.

Sixth, we can benefit from Max Bense's differentiation of the *types of order* in media (or as he says: repertoires). The difference between chaotic, regular, and irregular order is a very important but nevertheless only *one* aspect of media analysis. Whether the elements are symmetrically distributed or whether there are present structures or rather eventual asymmetries is a question which can easily be addressed to every medium. For example, the diatonic scale is a medium of a highly regular, even hierarchical order, whereas chromatic or whole-tone scales are regular, highly structured but significantly less ordered since they lack a central or hierarchical reference point. In contrast, abstract painting works with a medium of analogous, not predetermined elements (there is no repertoire of distinct colours or forms) so that we could speak of a chaotic medium. Forms in this medium have to establish order out of noise and not out of lower types of order.

Summing up, the parameters of aesthetic media analysis drawn from Luhmann (1990) that we have expanded by additional parameters (4–6) are:

1. The quantity of elements
2. The combinatory possibilities
3. The degree of dissolubility
4. The degree of pollution
5. The degree of opacity
6. The types of order

b) Analysing Forms

The analysis of forms is something that is, of course, performed by every aesthetic theory. Works of art as forms are described and compared to other works of art. The singularity of a

medium/form-difference theory of aesthetics lies in the fact that it works with a concept of form which does not depend on a material concept of works. Of course, aesthetic observation is bound to sensuality, but this does not mean that observing material differences is sufficient for understanding form selection. The history of philosophical aesthetics can be interpreted in the way that it does not make much sense to apply ontological differences to aesthetic observation, for example in the shape of forms and content. If there is progress in the epistemology of aesthetic theory, this can be seen in the growing insight into the inseparability of form and content (cf. Luhmann, 1998, p. 249ff). A medium/form-difference theory can observe forms as selections both in material and non-material media. The question of how the selection of non-material elements works is then another question which can – by the way – only be asked in the frame of this theory. Not only non-material elements are chosen, but it must also be taken into account that form choices are defined by non-material elements in media. A certain phrase in a poem or a certain melodic motif may look alike at different times. Certainly, when such a form is repeated it is a completely different form choice though the material basis is the same. I see no case of a work of modern art, poetry or music that could be interpreted materially at all. Moreover, it makes no sense to limit form analysis to certain types of artistic forms which are regarded as intrinsically aesthetic (pregnant⁷ figures) due to a high degree of order and a low degree of complexity (cf. Cassirer, 1953; Hanslick, 1854).

On the highly general and primitive basis of a form concept only referring to the selective coupling of elements, there are no such preliminary decisions concerning ontology and quality of forms. Nevertheless, some parameters of aesthetic form analysis can be established:

First, the *structural length of element couplings* can be analysed. In order to evaluate artistic form decisions it is highly informative to observe the quantity of elements which structure a form. The longer the structure, the higher the complexity, risk and improbability of the form. All these parameters are at the centre of the aesthetic observation of forms, nota bene of aesthetic observation itself, and not only of the scientific observation of aesthetic observation. On the one hand, a good example for the aesthetic effect of structural length may be found in melodies of songs. The Beach Boys' famous "God Only Knows" which is often called the best pop song ever (e.g. by Paul McCartney) develops the verse melody over eight bars without splitting this for songs extraordinarily long phase into smaller groups like call/response structures or a symmetrical up and down. At the most, one could speak of a structure of four melodic segments of seven to nine notes each, but the organization of these segments is more serial than reducible. There can be no meaningful interpretation of this song which does not take the structural length of this melody into account. The effect of such a long structure is a special contingency problem. The melody appears as complex, highly improbable and hard to remember. The extraordinary arrangement and especially the role of the bass line in this song can be interpreted as a solution to this problem. On the other hand, we have songs with melodies which struggle with the converse problem. The refrain of Dylan's "Knocking on Heaven's Door" consists of eight notes which barely widen the scope of a single bar answered by a response phrase with only the last note altered. Of course, the almost empty second and fourth bars of the melody must be taken into account but still the difference to the ambitus of the "God Only Knows" melody is obvious. One can observe that all vocal interpretations of "Knocking

⁷ From a symbol theoretical perspective (cf. Cassirer 1953) forms are not arbitrary material signs for immaterial content but rather something like a materialization of an idea in the sense that there is no idea without materialization. Also, the meaning of a certain idea is co-constituted by its materiality. Thus, the materiality of a symbol has a kind of expressive power; at least its sheer material appearance conveys the promise of (aesthetic or not) meaning. Not every, in fact almost no, material object invites us to ask for its meaning. Those who do, so the argument, do this due to their symbolic pregnancy, that is, their relatively high intelligibility as a symbol.

on Heaven's Door" try to solve this problem by using all types of vocal techniques which help modulate the melody, whereas "God Only Knows" is sung in an extremely straight and clear mode.

Second, the *complexity* of forms is a classical parameter of aesthetic form analysis. Birkhoff's numeric aesthetic theory even considers complexity beside order as the aesthetic key concept which is made the subject of quantitative analysis. The medium/form-difference theoretical approach shows that complexity is not a proper analytical parameter, since complexity is in itself a too complex concept. I would argue that complexity of artistic forms cannot be observed but rather constructed on the basis of other parameters like structural length for example. It is often said that classical music is more complex than popular music. This observation cannot be backed up by objective analysis at all, since the harmonic and melodic structures of, for instance, the Viennese Classic are much simpler than those of "God Only Knows". The same problem occurs when one attempts to connect the highly reductive prose of Beckett or the monochrome paintings of Yves Klein or Minimal Music to the idea of complexity. However, complexity can serve as a heuristic instrument if taken phenomenologically. The observer might have a basic impression of complexity and this impression can be taken as a point of departure for medium/form-difference theoretical analysis. Why does Viennese Classic not appear as simple and why does Baroque music not appear as complex although they are for example on the level of harmony and melody?

Third, the *improbability* of forms is the key term for medium/form-difference theoretical aesthetics. It would not make much sense to try to make predictions about the improbability of forms, since this would afford divine knowledge about the probability of real and imagined events. Again, the phenomenological approach promises help. Artistic forms appear as more or less improbable to observers. This goes for any kind of communicative forms, since improbability is the phenomenological condition for communicative form perception. The improbability of a form is an indication of its being-intentionally-produced. Forms have, as Cassirer puts it, symbolic pregnancy. They look like forms and the core of this look is the improbability of element coupling. If sounds are articulated, if graphic structures show regularity, these couplings are so improbable that an observer would regard them as intentionally produced communicative events. Directly linked to the degree of improbability of forms is the (environmental) medium of attention. Attention is not specifically an aesthetic medium but artistic objects depend on an extraordinary amount of an observer's attention. Only highly improbable forms have a chance of acquiring attention, since only improbable forms are noticeable, informative and thus interesting. A boy-meets-girl type of story can hardly attract the attention of aesthetic observers as this form is too probable and thus simply too often consumed (if the story, or better put: narrativity, is the key medium! Of course, against the backdrop of a simple story other aesthetic media and forms can play the artistically more relevant roles). However, highly improbable forms appear as highly contingent. The improbability that marks communication is extended enormously in order to mark a specific domain of aesthetic communication. To make sounds appear as communicative utterances it is sufficient to introduce a simple level of articulation. If a sound producer establishes a repertoire of rhythmic and/or tonal elements which is used for form production, observers are likely to interpret these forms as meaningful differences, since both the possibility of other selections is present (repertoire/medium) and the actuality of selections which could have been different (forms) is reconstructed. In order to mark communicative forms as artistic forms, further improbable efforts must be made. When the improbability of forms becomes very high, the attention problem is intensified in the shape of a contingency problem.

Fourth, *The contingency/necessity relation* can be regarded as the core of artistic forms. All aesthetic theories emphasize the role of the freedom of choice in the aesthetic field or the playful character of aesthetic observation. This freedom and playfulness implies that artistic form decisions are not necessary and follow no rules. There are no reasons for the work of art outside of the work of art and if a reason for an aesthetic decision is attributed by observers, they lose their aesthetic attitudes towards the work. Necessary forms, which means: forms that defer to reasons (e.g. usability, prescriptions, or preferences of other systems like truth, payments and transcendence), risk being excluded from aesthetic observation. On the other hand, forms must not be contingent, either. Why should anyone pay any attention to a contingent form? Forms that are regarded as beautiful manage to appear as (almost) necessary. An often-heard cliché (but not entirely baseless) expression for this matter is that, if a certain work of art had not been produced by its author, someone else would have done it. Furthermore, even the smallest detail in a work of art is of the highest importance and necessary for its integrity. Works of art as compact selections are not like a scientific paper; the former are of a much denser consistency. No one would ask artists why they have done this and not that, at least not with the idea that the alternatives are equally possible. The critical question of aesthetic analysis is how a certain work of art manages to appear both as a contingent and a necessary form. Only then can artistic forms be analysed as solutions to the contingency/necessity problem.⁸ Why does Frank Zappa arrange his complex instrumental passages in unison? Of course, these melodies appear as less contingent when more than one musician plays them. The listener instantly understands: this is not improvised but on the contrary written, arranged and well-practiced. Stylistic devices of literature fulfill the same function. A great problem for art observation occurs when artistic forms deny all efforts to appear as necessary. That the avant-garde proceeds in this way by presenting pure contingencies (aleatoric art and great parts of conceptual art) can be understood as inquiries into the form of art itself. The bare claim: this is art, since I am an artist (and not for aesthetic reasons) plays with the border of art on the border of art since it denies to cope with the constitutive contingency/necessity-problem of art. However, the contingency/necessity relation is obviously – like complexity – not an elementary parameter of analysis. On the contrary, the contingency of a form can only be observed in relation to its complexity, its improbability and its structural length. Obviously, the higher the structural length, the complexity, and the improbability are, the lower is the contingency of a form as a form, since it does not appear as a random product. For aesthetic observation this is not enough. Artistic forms are not only intentionally produced communicative offers but also such extraordinary offers that appear as (more or less) necessary.

Properties of Forms:

1. Structural length of element couplings
2. Complexity
3. Improbability
4. Contingency/necessity relation

⁸ Luhmann's remark that the contingent production of something which appears as necessary afterwards was only one possibility among others (cf. Reichertz, 2013, pp. 111-124) is not plausible, since it leaves art with the functions of irritation and mockery of the audience. Clearly, these aesthetic ambitions are only possible as parasitical operations that presuppose observers who expect artistic works to deal with the contingency problem in one way or another.

Only the application as an analytical instrument for art criticism can show which parameters for forms and for media are more or less important in specific cases. But for sure, further dimensions for such properties must be found in all cases when there seem to be aesthetically relevant differences that cannot be related to the proposed form and media properties. And this result is, again, a creative development of hypotheses (abduction) and thus both an empirical and a creative undertaking.

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From Edwardian Selfie to Telepresent Comic

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Abstract

Drawing on the media archaeology accounts of “Illusions in Motion” by Erkki Huhtamo (2013), this paper will compare and discuss audience participation in three specific self-view artworks involving interacting public audiences captured and presented in live telepresent film and video performances since 1900. This comparative study will draw out an underlying cultural fixation and amusement with the self-image, analogous to Henri Bergson’s understanding of laughter in meaning of the comic (1900). These case studies will include my own artistic practice that focuses on telematic encounters and shared visual dialogues between public audiences linked via Internet videoconferencing in “Peoples Screen”, in collaboration with Charlotte Gould for the Guangzhou Light Festival in 2015. The seminal live satellite public performance “Hole-in-Space” by Kit Galloway and Sherrie Rabinowitz in 1980, providing the passing public in New York and Los Angeles with opportunity to converse, co-create and play in the first live public connection of its kind. Lastly, they include Mitchell and Kenyon’s historic films of Edwardian public crowds in the 1900s, allowing audiences the opportunity to play and perform in front of the film camera in the knowledge they could watch their spectacle in its screening at the local traveling fairground. In all these cultural events the audiences become both performers and viewers by creating an improvised response to the camera and screen. The striking similarity with the way audiences react and perform comical narratives from these early self-view film screenings to telematic performances possess all the unique traits of telepresent interaction and the selfie phenomenon.

Keywords: telepresence, performance, embodiment, laughter

Media (Art) Histories: Analogies and Cycles

This article aims to go back and forth over one hundred years of telepresent phenomena through self-view representations in media forms, from the invention of film to the instant global distribution of personal reflective images. In doing so we consistently discover similarities in technical endeavours, but most strikingly and more poignantly, as this article attempts to prove, the parallels can also be seen in human behaviour and social norms. Media (art) archaeology has already charted this timeline, predominately through the identification of analogies of technology that continue to spiral and cycle, as one invention at the beginning of the last century appears to be in the same pursuit as another, at the other end of it. Since the early 1990s, media art historian and curator Erkki Huhtamo, has continually pointed out the very same endeavour to recreate and re-experience reality. From the 360° surrounding diorama paintings of the 17 and 18 hundreds to stereoscopic photographic viewfinders, such as Das Kaiserpanorama (Crary, 2001), found in the later 19th to early 20th centuries; a viewing system that provided audience groups with sequential 3D photographic depictions of the wonders of the world. This phenomenon repeats and resurfaces again and again, most recently in the Google Cardboard head mounted virtual reality display released in 2014. This repetitive discourse recurs almost periodically throughout history, as Huhtamo precisely identifies, in his most recent in-depth historical analysis *ILLUSIONS IN MOTION, Media Archaeology of the Moving Panorama and Related Spectacles* (Huhtamo, 2013).

For the purposes of this article, the repetition in pursuit of re-experienced reality provides a historical technological underpinning upon which we can evaluate and compare audience reaction and behaviour with equivalent similarities and levels of repetition, regardless of historical context. The intension here, however, is to identify particular artistic events and technological developments that directly involve and confront the participants taking part. These public artworks, happenings and screenings extend the paradigm of a “virtual reality” to the mediated experience of group presence and the “self” within them. This has become perhaps more commonly known as “telepresence” or the phenomena of the “digital other” and its reoccurring role throughout the 19th, 20th and 21st centuries.

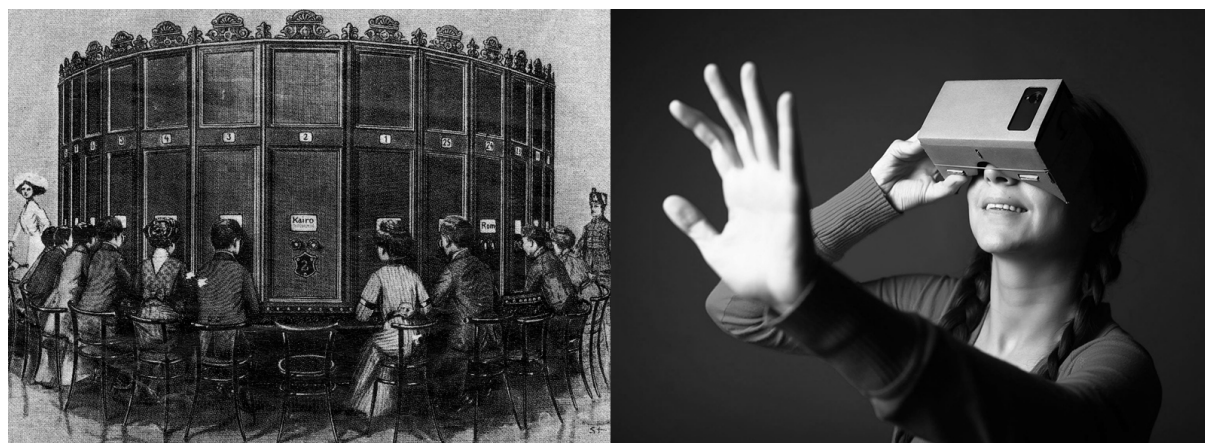


Figure 1: Das Kaiserpanorama with 25 stereoscopic viewing stations from circa 1890 (left). The release of Google Cardboard’s virtual reality head mounted display in 2014 (right).

Comparative Study from 1900 to 2017: Repetition of Presence and the Self View Comic

Here we will consider and compare three unique practices/artworks/happenings, from circa 1900 to the present day through the unique self-view footage of the events themselves: Mitchell and Kenyon, *Local Films for Local People*, circa 1900; *Hole-in-Space*, by Kit Galloway and Sherrie Rabinowitz, 1980 and *Peoples Screen (Occupy the Screen)*, by Paul Sermon and Charlotte Gould, 2017. Through the extensive documentation of these three artwork occurrences we have the unique opportunity to view and review recordings of participants' behaviours, reactions and conscious experiences. Throughout the following comparative case studies of these works, it is essential to remember that we will be looking directly at the image that caused the very human response we are looking at. These documentary recordings represent a rich layered depth of complexities and subtleties. We will need to observe, discuss and compare the slightest and most exaggerated human response to their telepresent other who quickly adopts the external comic performer for the pleasure and amusement of themselves as well as the others taking part. We shall return to this crucial point, which is recurrent throughout the three works discussed, towards the latter stages of this paper, at which point it will be necessary to introduce Henri Bergson's understanding of laughter to fully interpret and deconstruct the phenomena we are being faced with. But first we need to recount the works in question and identify the comparative characteristics that are being presented.

Mitchell and Kenyon, Local Films for Local People, Circa 1900

The pioneering films from the start of the 20th century by Sagar Mitchell and James Kenyon were largely unknown until 1994 when two workmen discovered three metal drums containing the largest surviving collection of early non-fiction film in the world, in the basement beneath Sagar Mitchell's original business premises in Blackburn, Lancashire in the north-west of England. In 2000 the Mitchell and Kenyon films were painstakingly restored using techniques to produce remarkably clean and scratch-free positives and archived with adjusted speed to smooth out the variations in these hand-cranked films (Toulmin, 2006). The Mitchell and Kenyon restoration and archive was a major partnership research project between the National Fairground Archive (NFA) the British Film Institute (BFI) and the BBC, funded by the Arts and Humanities Research Council (AHRC). The research in particular examined and contextualised the films from these pioneer film makers, who used the fairground Cinematograph and Bioscopes shows through commissions from fairground showmen to expand the exciting new medium of projected film, (Toulmin, 2006) a significant point we shall return to momentarily. The vast majority of the films were shot in and around the north-west of England between circa 1897 to 1909, capturing Edwardian street scenes and industrial urban life that has provided significant new insights of Edwardian Britain. The Mitchell & Kenyon Project has been responsible for the most comprehensive account of their work in *The Lost World of Mitchell & Kenyon* (Toulmin *et al.* 2004) published by the bfi as well as the three-part BBC/bfi Television documentary, *The Lost World of Mitchell & Kenyon*, screened in 2005.

What these publications and resources capture, in particular the BBC/bfi documentary, is the enthusiasm with which the passing public plays and performs in front of the film camera. The activity of filming public crowds and in particular people (men, women and children) streaming out of the factory gates at the end of the working day always provided an opportunity for improvised comical acts and gestures to the camera. But all this was done in the knowledge that what was being filmed there today was going to be projected on screen at the traveling fairground for all to see tomorrow. Although the Lumière brothers attempted similar factory-

gate films a few of years earlier, Mitchell and Kenyon found the northern heartland of industrial England the perfect location to capture audiences and their appetite to see these self view productions. They founded the firm of *Mitchell & Kenyon* in 1897 and under the trade name of *Norden*, the company became one of the largest film producers in the United Kingdom in the 1900s, using the appropriate slogans of "Local Films For Local People" and "We take them and make them" to attract ever more eager and playful audiences. If these slogans were not enough they are also seen on some occasions in the films handing out leaflets to the public explaining where to see the film that is being shot, and in some cases they are seen trying to keep the crowd moving on past the camera in order to capture as many people as possible.



Figure 2: Still from "Electric Edwardians: The Films of Mitchell & Kenyon", employees leaving Storey's Moor Lane Mill, Lancaster in 1902.

The only documentation we do not have is that of the screenings themselves. But we do know the public films were the most popular item on the bill at the traveling fairgrounds of the time. Photographic evidence of large elaborately decorated attractions/show-booths provides further evidence of large crowds of people queuing up to enter these shows. Referred to as Bioscope shows, Cinematographs and Picturedromes, their prominent Showmen owners exploited the invention of the electric dynamo to provide lavish illuminations for these highly decorated Bioscope show entrance facades. Mitchell & Kenyon developed a reciprocal working relationship with the travelling Bioscope shows, commissioned by a variety of fairground showmen to make individual films for showing at local venues. (NFCA Mitchell & Kenyon and the Showmen, 25/10/17). What we can tell from the films of Mitchell and Kenyon, the Bioscope records and their popularity was that their screenings provided hugely comical

entertainment for the hoards of visitors who wanted to see them, and most importantly themselves. In the context of the “local” traveling fairground this provided a community engagement, whose audience could join in the collective experience brought together through the laughter (most likely hysteria) of the group upon the individual’s comical act caught on camera, who are most likely present themselves in sharing their disembodied “telepresent” experience with their families, friends and colleagues around them.



Figure 3: The Wonderland Bioscope Show, a travelling Cinematograph owned by fairground showman Pat Collins, presented in Nottingham, England, circa 1900.

Hole-in-Space, Kit Galloway and Sherrie Rabinowitz, 1980

In November 1980 the California based artists Kit Galloway and Sherrie Rabinowitz presented one of the most ground breaking and celebrated telecommunication artworks of their career, “Hole-in-Space”. Having negotiated and obtained access to United States satellite television communications they were provided with a live video link between Los Angeles and New York for three consecutive evenings. But rather than linking east coast and west coast television studios, as is normally the case, Kit Galloway and Sherrie Rabinowitz located their live video cameras and large format screens in the shop window of the Broadway department store at Century City Shopping Centre in Los Angeles and the window at the Lincoln Center for the Performing Arts at Avery Fisher Hall in New York City, providing the passing pedestrian public with a surprising encounter with each other, via a live two way video link between these two locations. The geographically remote public audiences were instantly transformed into performers in the first networked narrative performance in a social context of its kind. What initially appears to be a random choice of locations for this public intervention – from the point

of view of the user/actor, becomes increasingly apparent that the artists chose these cities and locations for very specific social and political reasons, creating a networked narrative within an extremely dynamic context. Hole-in-Space was, what Kit Galloway and Sherrie Rabinowitz referred to as an “Interactive Communication Sculpture”, in what was the first videoconference meeting or public “Skype” call of its kind.

“Suddenly head-to-toe, life-sized, television images of the people on the opposite coast appeared. They could now see, hear, and speak with each other as if encountering each other on the same sidewalk. No signs, sponsor logos, or credits were posted – no explanation at all was offered.”

(Galloway, Rabinowitz, 1980)



Figure 4: Hole-in-Space by Kit Galloway and Sherrie Rabinowitz in 1980. The Broadway department store, Century City Shopping Center in Los Angeles (left). Lincoln Center for the Performing Arts, Avery Fisher Hall in New York City (right).

The Hole-in-Space “happening” began on the evening of the 11th November 1980, with a series of chance encounters in what Galloway and Rabinowitz dubbed “Unannounced”. As passers-by in Los Angeles and New York simultaneously stopped and realized the image on the large screen in the window was not a local camera image reflecting themselves, but a live image from the other side of the continent – but what’s more, a live image and audio link of people looking inquisitively at the same phenomena. From here on the communications portal was open, and conversations, jokes and performances unfolded. The second evening, labelled “Word-of-Mouth” brought more acquaintances and friends together as word spread of this opportunity to meet and converse across time and space. The evening ended with local TV news reports spreading the word even further in preparation for the final evening event on the 14th November, “Mass Media Announcement”. Hole-in-Space culminated in huge crowds of people in the two cities, eager to see and be seen, described by Galloway and Rabinowitz:

If you have ever had the opportunity to see what the award winning video documentation captured then you would have laughed and cried at the amazing human drama and events that were played out over the evolution of the three evenings. Hole-in-Space suddenly severed the distance between both cities and created an outrageous pedestrian intersection. There was the evening of discovery, followed by the evening of intentional word-of-mouth rendezvous, followed by a mass migration of families and trans-continental loved ones, some of which had not seen each other for over twenty years. (Galloway, Rabinowitz, 1980)

In many ways the success of Hole-in-Space relied on the locations of the public interfaces and the cultural and geographic differences, clichés and comparisons the audiences could play with. Public participants were instantly transformed into performers in an “east coast meets west coast variety show”, confronting the pedestrian passes-by in New York and Los Angeles and bringing them up on a telematic stage to play charades, dance, sing songs, such the “New York, New York” classic and tell jokes – of a particular east coast/west coast nature . . . “Question: how many New Yorkers does it take to change a light-bulb? Answer: None of your fucking business!” (Hole-in-Space documentary video, 25/10/2017).



Figure 5: An audience in Los Angeles watch participants in New York on screen. Hole-in-Space, an “Interactive Communication Sculpture” by Kit Galloway and Sherrie Rabinowitz, 1980.

Through the video documentary, it is possible to see that what began as isolated moments of encounter and discovery on the first evening of Hole-in-Space escalated to hordes of people screaming and shouting to each other by the end of the last evening. But within this build-up of participants we also witness the communication between the local groups taking part, sharing in each other’s acts and encouraging comical moments of discovery, not only between the two cities but also locally. This is exemplified by a recorded moment, when a participant in Los Angeles asks Pricilla in New York if she has met Howard yet? Pricilla looks to the screen and camera and replies . . . “hello Howard” assuming he is in Los Angeles, only for Howard to chirp-up from behind her to say “hello Pricilla”, much to everyone’s amusement (Hole-in-Space documentary video, 25/10/2017). This moment highlights the participant’s eagerness to embrace the objective opportunity to perform and interact in this disembodied space. The joke in this instance is the embodied reminder that “Howard” is just behind you. As

with the work of Mitchell and Kenyon, the participants perform comical acts to each other and themselves through this process of disembodiment and re-embodiment with the group, but in the case of Hole-in-Space this is not a self-view screen, but a view of the self in other people's responses on screen, three thousand miles away.

Peoples Screen (Occupy the Screen), Paul Sermon and Charlotte Gould, 2017

Occupy the Screen was a site-specific artwork by the author of this paper, Paul Sermon, in collaboration with Charlotte Gould, commissioned by Public Art Lab Berlin for the Connecting Cities Festival event, Urban Reflections, from 11–13 September 2014, linking the passing public outside the Supermarkt Gallery in Berlin with pedestrians on Riga's Esplanade square for the European Capital of Culture, Riga2014. This installation builds on our practice-based research and development of previous interactive works for large format urban screens such as Picnic on the Screen, originally developed for the BBC Public Video Screen at the Glastonbury Festival in 2009. In November 2015 Public Art Lab commissioned a new version of Occupy the Screen for the Guangzhou International Light Festival in China. Sharing the same time zone, the installation was connected for 12 evenings with the Northbridge Piazza public video screen in Perth, Australia from 14 to 29 November 2015. The project was extensively reworked to converge scenes from the cities of Guangzhou and Perth. Renamed Peoples Screen, which the Guangzhou City Government was slightly more comfortable with, the installation was hugely popular, involving over 25,000 participants in Guangzhou alone.



Figure 6: Participants in Guangzhou, China greet telepresent visitors from Perth, Australia in “Peoples Screen” by Paul Sermon and Charlotte Gould for the Guangzhou International Light Festival in 2015.

Occupy the Screen and Peoples Screen linked two geographically distant audiences using a telematics technique; the installation took live oblique camera shots from above the screen of each of these two audience groups, located on a large 50 square metre blue ground sheet and combined them on screen via an Internet based high-definition videoconference connection in

a single composited chroma-keyed image. As the merged audiences started to explore this collaborative, shared ludic interface they discovered the ground beneath them, as it appeared on screen, to be a digital backdrop that located them in a variety of surprising and intriguing environments. By providing a range of anamorphic playful ludic scenes, drawn from urban environments in Riga and Berlin, and Guangzhou and Perth, the audiences immediately started playing within these virtual locations, where from a particular angle and position the characters appear to be in a landscape of precarious situations. The appearance of walking across a bridge, standing on a plinth, stepping over buildings or falling into a hole intuitively inspired the audience to engage in comical and playful improvised narratives in this public theatre space.

Occupy the Screen and Peoples Screen aimed to include the widest range of participation possible in public urban spaces, akin to a “telematic fluxus happening” in a move away from the art object towards the street environment and the “every day” experience as the artwork (Sermon, Gould, 2016). The position of the urban screen as street furniture is ideally suited to engage with people going about their everyday life, and often the most interesting outcomes are discovered through ways that the public interprets and re-appropriates the content of the screen in the work. The interaction is an open system aiming to offer the audience a means of agency to be creative and make individual decisions (Sermon, Gould, 2016). This intuitive public response is at the core of this project. Where a particular psychological sense of disembodiment and telepresent re-embodiment occurs and where the activating body becomes less sensorial aware than the effective interacting one on screen. Through this research project, we have developed a framework for open participatory artworks for urban screens to maximise audience agency through play, engaging the public in new ways in the urban environment that creates community memories and legacy (Sermon, Gould, 2016).



Figure 7: Visitors in Riga's Esplanade square balance on an anamorphic bridge with participants on screen from Berlin in “Occupy the Screen” by Paul Sermon and Charlotte Gould, 2014.

This installation pushed the playful, comical, social and public engagement aspects of the work into new cultural and political realms in an attempt to “reclaim the urban screens” through

developments in ludic interaction and Internet based videoconferencing. By using visual references to site-specific landmarks in Berlin and Riga for Occupy the Screen, and Guangzhou and Perth for Peoples Screen, audiences were invited to occupy the screen by climbing the (telepresent) statues and sites in both cities, with scenes reminiscent of the crowds claiming the Brandenburg Gate after the fall of the Berlin Wall in 1989. The concept development of this work was inspired in part by the anamorphic technique of 3D street art and its comical illusionary outcomes. But it also clearly borrows from the work of Mitchell and Kenyon, capturing large crowds from an oblique camera angle, where audiences were equally transported to alternative realities through both the large format urban video screen and the early film screenings of public audiences presented at the traveling fairs. The digital interface was derived from the ludic landscapes of computer games as a means to navigate the urban space; once within the frame the audience participants become characters immersed within the digital environment.

Through this research we found that the environment and timing have a large impact on the way that an audience responds. The inspiration was drawn directly from the cities involved, with input from the different communities, cultures and environments. The installation ran at night time for three to four hours each evening, adding further to a sense of playfulness, as audiences unexpectedly encountered the installation differently in each city; whilst walking through the park in Riga, on their way out or back from bars and clubs in Berlin, as part of the spectacle for the Guangzhou Light Festival and summer evenings sitting on the lawn at Northbridge Piazza in Perth. We therefore introduced ludic or nonsensical elements at times such as an inflatable boat in Berlin, which people immediately responded to by jumping into. The area of interaction was clearly demarked as a space via a blue box groundsheet in all the cities, identifying a theatre of play, once in the space the participant engages as they wish. In many ways Occupy the Screen and Peoples Screen broke down cultural and social barriers, both in the local communities, but also between the cities of Berlin and Riga, and Guangzhou and Perth, where new collocated spaces and creative encounters could be founded and occupied.

Parallels to Henri Bergson's Meaning of the Comic

In order to draw out a comparative study of these three artistic projects, I will reflect on the observations and analysis of the comic episode as identified by Henri Bergson in his 1900 paper "Laughter: an essay on the meaning of the comic", in which he asks . . . "What does laughter mean?" Without going into the contextual depth of Bergson's philosophical position as whole, his assertion here is primarily that the function of laughter is a social one of correction on human behaviour. In identifying the act of the mechanical absent-minded character as a common source of comedy, Bergson asserts that laughter has a moral role, it is a factor of uniformity of behaviours and it eliminates ludicrous and eccentric attitudes:

Beyond actions and attitudes that are automatically punished by their natural consequences, there remains a certain inflexibility of the body, of the mind and of the character that society would like to eliminate to obtain a greater elasticity and a better sociability of its members. This inflexibility is the comic, laughter is the punishment.

(Bergson, 1900)

This is clearly evident in the visual and physical comedy of Charlie Chaplin, Buster Keaton, and Harold Lloyd, who are of Bergson's time. But it is also evident in the artworks discussed

in this study, where we see clear parallels to the characteristic comical language of silent-cinema, particularly in Mitchell and Kenyon's films and Peoples Screen, that do not use audio communication, but also in silent moments from Hole-in-Space, the participants intuitively adopt comical melodramatic "Chaplinesque" traits and gesticulations. Through the method of editing and looping short video clips (GIF animations) from the three works discussed it is possible to identify many of Bergson's observations when viewing the three works alongside each other as follows:

Its Social Role . . . "Our Laughter is Always the Laughter of a Group"

In Chapter I, THE COMIC IN GENERAL THE COMIC ELEMENT IN FORMS AND MOVEMENTS, Bergson highlights the significance of the group, which he referred to then as "strictly human", but it should perhaps be noted that due to more recent studies of animal behaviour this should at least extend to the inclusion of other primates. In the context of the three artworks discussed here, the contagion of laughter amongst the group is communicated in and between the spectators as both comic performers and viewers, establishing and sharing in the experience of the group:

Our laughter is always the laughter of a group. . . . The first point to which attention should be called is that the comic does not exist outside the pale of what is strictly HUMAN. . . . To understand laughter, we must put it back into its natural environment, which is society, and above all must we determine the utility of its function, which is a social one. Such, let us say at once, will be the leading idea of all our investigations. Laughter must answer to certain requirements of life in common. It must have a SOCIAL signification."

(Bergson, 1900)

In comparison we see large crowds of people gathering in all three artworks, whose improvised comical acts and scenes are quickly distributed and copied amongst the participants involved. Whether its waving hats and umbrellas in the air for Mitchell and Kenyon (Mitchell, Kenyon, Cruickshank, 2005), or hordes of people screaming, shouting and waving in Hole-in-Space (Hole-in-Space documentary video, 25/10/2017), or a synchronised wave and dance in Peoples Screen (Peoples Screen documentary video 25/10/2017), all the participants review and respond in very similar ways as they identify with the group through the self-view screen. This disembodied experience allows the individual the opportunity to identify themselves as a member of the group/ theatre troupe, or more specifically with the group's conscious experience and comical exchanges.



Figure 8: Comparative scenes of group behaviours seen in film and video stills from Mitchell and Kenyon in circa 1900 (left), Hole-in-Space by Kit Galloway and Sherrie Rabinowitz in 1980 (centre) and Peoples Screen by Paul Sermon and Charlotte Gould in 2014 (right).

Its Mechanical Role . . . “That Side of a Person Which Reveals his Likeness to a Thing”

In Chapter II, *THE COMIC ELEMENT IN SITUATIONS AND THE COMIC ELEMENT IN WORDS*, Bergson reveals the significance of the mechanical body. The comical act as portrayed through the automatism of the performer, the ridiculous human portrayal of rigidity, mechanistic movement – that is movement without life . . . “When materiality succeeds in fixing the movement of the soul, in hindering its grace, it obtains a comic effect.” (Bergson, 1900).

The comic is that side of a person which reveals his likeness to a thing, that aspect of human events which, through its peculiar inelasticity, conveys the impression of pure mechanism, of automatism, of movement without life. Consequently it expresses an individual or collective imperfection which calls for an immediate corrective. This corrective is laughter, a social gesture that singles out and represses a special kind of absentmindedness in men and in events.

(Bergson, 1900)

This impression of mechanised human automata is experienced and expressed time and time again in all three projects. Through the method of editing and looping of video clips, the disembodied experience appears to be played with and performed through mechanical reproductions of the self, as though a momentary suspension of self-awareness has occurred between the conscious experience of the participant manifested in their mechanically rigid representation on screen. A comparative example shows a young man walking out the factory gates in one Mitchell and Kenyon’s films (Mitchell, Kenyon, Cruickshank, 2005), as he approaches the camera his arms in unison start swinging in an exaggerated automated manner, so much so the beer from his tankard (which was a regular after-work beverage in the 1900s) spills out uncontrollably. In *Hole-in-space* a group of participants attempt a game of charades via satellite, where they proceed to walk around bent over like lifeless beings to portray the word “slouch” (*Hole-in-Space* documentary video, 25/10/2017). And in *Peoples Screen* a boy walks down some anamorphic steps as though he was operated by clockwork, clearly playing (with) his human avatar image as an automated figure in a ludic landscape. Throughout the examples the comical act is with the self, reflected in the screen (*Peoples Screen* documentary video, 25/10/2017).



Figure 9: Comparative portrayals of “mechanical movement without life” in film and video stills from Mitchell and Kenyon in circa 1900 (left), *Hole-in-Space* by Kit Galloway and Sherrie Rabinowitz in 1980 (centre) and *Peoples Screen* by Paul Sermon and Charlotte Gould in 2014 (right).

Its Reflective Role . . . “It Is Comic to Wander out of One's Own Self”

In the final Chapter III. THE COMIC IN CHARACTER, Bergson discusses the individual character element, which is perhaps the most relevant and poignant reminder of how individuals adopt roles and characters in each of the three artworks discussed in this paper. It is clearly comical to wander out of one's own character, and equally amusing to the participants involved by adopting the typologies of comical characters and acts of their own through a range of melodramatic behaviours and mannerisms. But it is the opportunity to imitate our selves that is most striking in these projects. We have used Bergson's framework to understand why we laugh, but what these artworks show us is the significance and compelling desire to be able to laugh at ourselves:

In one sense it might be said that all character is comic, provided we mean by character the ready-made element in our personality, that mechanical element which resembles a piece of clockwork wound up once for all and capable of working automatically. It is, if you will, that which causes us to imitate ourselves. And it is also, for that very reason, that which enables others to imitate us. . . . It is comic to wander out of one's own self. It is comic to fall into a ready-made category. And what is most comic of all is to become a category oneself into which others will fall, as into a ready-made frame; it is to crystallise into a stock character.

(Bergson, 1900)



Figure 10: Comparative comical character roles seen in film and video stills from Mitchell and Kenyon in circa 1900 (left), Hole-in-Space by Kit Galloway and Sherrie Rabinowitz in 1980 (centre) and Peoples Screen by Paul Sermon and Charlotte Gould in 2014 (right).

In this final clip comparison, the individual characters speak to us (and themselves) directly. A brief moment in one of Mitchell and Kenyon's street scene films shows a crowd of people assembling to be filmed from across the street, when a distinctively upper-middle class "gentleman", complete with top hat and winged moustache, walks directly in front of the camera, slightly out of focus and therefore clearly not intended for the shot. He stops to slightly tip his hat and give a wry smile before carrying on, making a characteristic joke of his interruption of the shot (Mitchell, Kenyon, Cruickshank, 2005). On the final evening of Hole-in-Space, a woman falls to her knees when she sees a long lost friend or loved one on screen, with her arms and head waving, screaming and slapping the ground in complete euphoria she momentarily up-stages everyone else's act (Hole-in-Space documentary video, 25/10/2017). And, finally, in Peoples Screen, just when everyone is busy taking selfies, a lady in Guangzhou raises her arms to the sky, looks up at the camera and twirls around in what appears to be a show of thanks (Peoples Screen documentary video, 25/10/2017). Each of these edited clips, of which there are many others, not only illustrates the individual character performance to us,

and them, but also to the group involved who receive this “stand-up” moment by offering them centre stage.

Over 100 Years of Telepresence: From Edwardian Selfie to Telepresent Comic

The striking similarity with the way audiences react and perform comical narratives from these early self-view film screenings to live satellite happenings and telematic performances possess all the unique traits of telepresent interaction and the selfie phenomenon. They clearly are performing to themselves as well as everyone one else who is present, but in that process of telepresent disembodiment their human avatars are no more representative of themselves as they are of the entire group. In all these works the performers on screen are the focus of our attention in a continual comical dialogue with them where the conscious experience of the group has melded between them from camera to screen and back. When watching these “two-way mirror” recordings, we are taking up the position of the persons within them, looking directly at the very same image that caused the effect we are now experiencing for ourselves. By watching these clips and recordings repeatedly we can start to unpick the subtleties and intricacies of these exchanges and the multitude of experiences within this rich web of social behaviour.

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Open Interactivity: A Model for Audience Agency

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Abstract:

Artists have increasingly acknowledged the role of the audience as collaborators both in the construction of meaning (Bathes, 1977), through subjective experience (Dewey, 1934) and in contributing to the creative act by externalising the work. (Duchamp) Lucy Lippard identifies 1966–72 as a period where artists turned increasingly towards the audience, representing a “dematerialization of the art object” (Lippard, 1997) through “Happenings” and “Fluxus” movements. Digital media has facilitated this trajectory, implicit in the interactive computer interface (Manovich, 2005), but interactivity per se may offer no more than a series of choices put forward by the artist (Daniels, 2011). Interactivity represents interplay between artist and audience (Dinka, 1996) and is potentially a process of audience empowerment to offer agency, defined as real and creative choice (Browning, 1964).

Public screen installation “Peoples Screen” Guangzhou, linking China to Perth Australia (Sermon & Gould, 2015) offered a partnership between artist and audience to co-create content through playful narratives and active engagement in a drama that unfolds using improvisation and play. Initially visitors enjoy observing the self on the screen but audiences quickly start to interact with the environment and other participants. Immersed in play they lose a sense of the self (Callois, 2011) and enter a virtual third space where possibilities for creativity and direction of play are limitless. The self becomes an avatar where the audience can inhabit “the other” thereby exploring alternative realities through ludic play, promoting tolerance and empathy and developing collective memory.

Keywords: interactivity, participation, agency, play

Introduction

The Internet has transformed the way that we communicate, offering a global network that has transformed our lives from work to leisure. Roy Ascott proposes that the internet brings a new age of collective consciousness which has impacted significantly on the way that we see ourselves and our position in the world. From this perspective we are no longer a fixed self, set in time in a single location, but we inhabit transient and multiple identities across borders, time and space, reaching mass audiences at a touch and operating as part of a global community. Through the twenty-first century Ascott has identified

. . . a gradual rejection of the dialectic of being, and it's mystification [Nietzsche], in favour of a yea saying, life affirmative recognition of the primacy of becoming. (Ascott, 1999, p. 70)

In this way Ascott heralds a new age in terms of our sense of self, which is no longer fixed. Digital culture offers a temporal, nonlinear experience, with an expectation of individual navigation and personal choice. Interactivity is implicit in the interface of the computer or tablet (Manovich, 2005) and so invites action. We can publish our own content and post our own image on Facebook and the cultural phenomenon of the “selfie” has impacted language and culture. The image that we create of ourselves may blur fact and fiction; we are projecting an ideal self, a constantly reinvented, best self. We post images of our avatar self in all sorts of scenarios, from the banal to the dangerous and to the exotic. The potential for fakery is documented in Amalia Elman's series of Instagram “selfies” entitled “Excellences and Perfections” exhibited at the Tate (Elman, 2016). Elma wanted to highlight that “femininity is a construction . . . that the joke was admitting how much work goes into being a woman and how being a woman is not a natural thing” (Bates, 2015). From this perspective the blurring of fact and fiction happens in real as well as in our social media. Thus, research from beauty haven found that 57% of women edited their photos before uploading to social media (Nobel, 2015). The appetite for retouching our self-image is also implicit in the proposals by the Chinese manufacturer Huawei of a new smart phone with facial beauty support software (Day, 2013).

It is now more socially acceptable to demonstrate our status through where we have been than through what we own. This element of choice alongside the development of social media has led to the growth of an experience economy, illustrated by our spending habits. According to the UK Office for National Statistics (ONS) the average household weekly spending on clothes and food has fallen since 2010 while spending on recreation and culture has risen (Usborne, 2017). In February 2017 Mark Zuckerberg, CEO of Facebook published a manifesto to counter charges of “fake news” against the company, arising from the American Presidential election, in which he portrayed his brand as a global community, promoting positivity and a new globalization, a community which is supportive, safe, informed, civically engaged and inclusive (Zuckerberg, 2017). This was in response to accusations that Facebook created an echo chamber effect where people seek like-minded others and socially similar groups, sharing information and rhetoric, which may or may not be based on true events but rely on the actions of consumers to pass on. This viral form of publishing arguably relies on a chain of consumers to proactively work for free to elicit content. Co-creation is being harnessed by big business and taps into the creative resource and fresh insights of users through social networking with content provided by millions of users (Petavy, 2013). Yochai Benkler (2006) proposes that co-production offers huge potential for the next stage of human development. However, it could be argued that this represents exploitation of the public where companies are making money from the creativity of an army of unpaid workers. This highlights the importance of intention

and reception of the artist or designer and the potential for impact, as well as the potential advantage for the audience.

The Every-Day

This shift towards the audience as participant is reflected in art and the advances of technology from the 20th Century have been the catalyst for a transition, in identified areas of practice, from an individualist elitist art establishment which promoted the concept of artist as genius, to an inclusive, collective culture of participation. Through the industrial to post-industrial cities and the corresponding shifts in the political landscape, the onset of two world wars and revolution, shifts in approaches to society and the public are reflected in art practice and are visible through the dynamic interplay between artist and audience. Clare Bishop identifies a synergy between the move towards participation and the wide-ranging social and political views over the Twentieth Century from the nationalist ideology promoted by Fascism, supported by the Futurists, to the Dada rejection of the establishment and opposition to war and to communist ideals of collectivism and organised action (Bishop, 2012). Artists increasingly turned towards the audience as participant, taking divergent positions on audience participation. The Futurists aimed to shock audiences into mass action with a nationalist pro-military ethos and Dada as a rejection of the establishment, but both explored the idea of cause and effect through their audiences.

From the beginning of the 20th century, the turn towards the street as venue for art in part could be seen as a response to the fast development of the metropolis, extending the experience of the crowd as part of the every-day as well as the notion of the stranger. George Simmel identified that for the first time it had become socially acceptable for people in public to sit in close proximity, without speaking and avoiding eye contact (Simmel, 1903). Art events such as the Dada visit to the Churchyard of Saint Julien-le-Pauvre may have had a socialising effect, drawing people together as well as representing a provocation. The aim was to subvert the form of the guide; Dadaists saw this event as a nonsensical visit to a meaningless place. Breton read a manifesto out loud, and Georges Ribemont-Dessaignes read randomly from a dictionary. At the end of the event the audience were given envelopes with images, objects, photos, phrases and risqué images to take away. The focus on the every-day, and the idea of participation and environment are interlinked and represented a rejection of the elitist establishment and art institutions. In the 1960s there was a rejection of consumerism and this is reflected in the embrace of the every-day through art movements such as Happenings defined by Allan Kaprow as: “[. . .] environment-like, non theatrical exhibitions that turned to the public in an increased degree” (Shanken & Stiles, 2011). The Situationists engaged the interested public with actions such as the “Dérive” (Debord, 1956), which was a series of prolonged actions taking place in the cityscape, such as an unplanned walk, and aimed to develop extended focus and mindfulness, a rejection of the homogenizing effect of modernism and an embracing of collective action.



Figure 1. Tristan Tzara reading to the crowd at St. Julien le Pauvre church, Paris, 1921.

Cause and Effect

Public participation has been aligned to more sinister interventions of collective action. A slogan of the Nuremberg Rally was “no spectators, only actors” evoking the importance of the activation of the audience to populist ideology, stirring up the passions and prejudices of the public. Leon Trotsky argued that the Futurist use of rhetoric to empower the crowd and influencing nationalist thought was very much in line with the fascist uprising in the early twentieth century:

[. . .] did not Italian Fascism come into power by ‘revolutionary’ methods, by bringing into action the masses, the mobs and the millions, and by tempering and arming them? It is not an accident, it is not a misunderstanding, that Italian Futurism has merged into the torrent of Fascism; it is entirely in accord with the law of cause and effect. (Trotsky, L. 1924)

The Futurists explored cause and effect in order to shock and disgust their audiences, captured in their manifesto “Slap in the Face of Public Taste”, they abhorred “the filthy stigmas of your “common sense” and “good taste” (Burlinuk, Kruchenykh, Mayakovsky, & Khlebnikov, 1913).

The Dadaists wanted to provoke their audiences. Tzara recollected an experience at the Salle Gaveau in May 1920, by which he was delighted:

For the first time in our lives we were assaulted, not only with eggs cabbages and pennies but even with beef steaks. It was a great success, the public were

extremely Dadaist. We had already said that true Dadaists were against Dada.
(Tzara, 1920)

For the Dada artist, a true Dadaist would reject the confrontational actions of Dada, but audiences came to enjoy the action, wanting repeat performances. Breton rejected this, noting that the public had “acquired a taste for our performances.” “A successful man or one who is simply no longer attacked is a dead man” (Breton, 1921). Dada artists were conflicted by the collusion of the audience and by definition had a perception of an ideal reaction from participants, which did not necessarily conform to reality. This dynamic between audience and artist is significant in participatory art and Claire Bishop identifies the contradictions of participatory art as between intention and reception, agency and manipulation. A continuum can be identified of the intended role of the audience and artist and the opportunities for levels of engagement, authorship and freedom, passivity and empowerment (Bishop, 2012).

Audience Interaction

Sonka Dinkla identifies a dynamic relationship between artist and participant, the levels of prescribed action expected by the artist and the opportunities for free public contribution.

Participation is located along a fragile border between emancipatory art and manipulation. The decisive act in judging the situation is how active the unprepared viewer becomes within a certain framework of action and without specific instructions. (Dinkla, 1996, p. 283)

All art could be seen as participatory in terms of the existence of a relationship between artist and viewer. John Dewey in his lectures at Harvard (1932) proposed that the work of art is an experience, not passively observed but experienced subjectively. Duchamp emphasised the interplay between viewer and artist: “The creative act is not performed by the artist alone; the spectator brings the work in contact with the external world...and thus his contribution to the creative act.” (Duchamp in Kepes, G. 1960) And finally, Roland Barthes declared that our construction of meaning is dependent on a duality between reader and writer.

We know that to restore writing to its future, we must reverse its myth: the birth of the reader must be ransomed by the death of the author. (Barthes, 1967)

In this way texts are constructed through a network work of knowledge and understanding. Into this discussion emerges a discourse around the role of the audience and expectation of artist as to their role, either as passive spectators or engaged and active participants and the continuum that this creates. These ideas hang on the concept of action and inaction, spectatorship and the spectacle the passive and producer as well as in consumerism and this is inherent in Debord's concept of the “spectacle” where the mode of cultural production of images renders the audience as passive observers rather than active participants. Walter Benjamin made a distinction between passivity and action promoting the opportunity to turn consumers into producers, and spectators into collaborators.

What matters, therefore, is the exemplary character of production, which is able first to induce other producers to produce, and second to put an improved apparatus at their disposal. And this apparatus is better the more consumers it is able to turn into producers – that is readers or spectators into collaborators
(Benjamin, 1978)

Before the digital revolution, Brecht identified similar concerns with the radio industry suggesting “Let the listener speak as well as hear...bring him into a relationship instead of isolating him” (Brecht, B. 1986). When Nam June Paik presented his “Good Morning Mr. Orwell” for New Year in 1984, shown on large screens beamed by satellite across four cities from America to France, he proposed that the liberating quality of video lay in interactivity and in the potential to bridge enormous cultural gaps, “so that it can represent the spirit of democracy not dictatorship” (Paik, 1984).

Many forms of interactivity, however, offer nothing more than a series of options provided by the artist “disguised by the physical function of the interface” (Daniel, 2011, p. 74). This computer interface offers nothing more than “strictly controlled routes through a closed set of prescribed material” (Kelly, 1997). Media theorist have provided different definitions of interactivity; Margot Lovejoy, identifies the “monologic” (point and click) and the “dialogic” approach which is an “open” interactive system” (Lovejoy, 2011, p. 14). Roy Ascott identifies a focus in interactive art on “whole systems, that is systems in which a viewer plays an active part in an artwork’s definition and evolution” (Ascott, 1999, p. 67). Ascott proposes that the removal of the “second observer” or “phantom audience” is a necessary precursor to the truly “whole system”, so all participants are fully active in the outcomes and the potential for spectacle is removed, in order to achieve “an open ended evolution of meanings and the closure of an autonomous frame of consciousness”. (Ascott, 1999, p. 70) This aligns with the International Situationist approach in the 1960s where the Amsterdam IS Derive (1960) was not advertised and included only a tight circle of invited IS participants.

Stiles and Shanken emphasise the importance of real engagement of the audience and identify “agency” as an important factor in interactive systems. Meaning and intention as well as effective communication to an audience are important. They argue that artworks “must activate semiotic signification that is literally full of meaning” (Stiles & Shanken, 2011, p. 35), so that meaning and the terms of engagement are implicitly understood and audiences can interact without instruction to contribute in a meaningful and creative way, with “agency”. Douglas Browning defines agency as, “The concept of the agent is required in order to allow for the possibility of freedom, communication, comprehension and mystery. “Culture in general . . . rests upon . . . agency” (Browning, 1964). Agency is the underlying principal in open interactive artworks as well as participatory art in terms of enabling meaningful engagement and to achieve co-production by audiences and artists. It is a symbiotic relationship where the artist provides the stage and environment from which audiences can co-create:

Agency involves the freedom to create, change, and influence institutions and events, or act as a proxy on behalf of someone else. In both cases agency is measured by the ability and the responsibility to have a meaningful effect in a real-world, inter-subjective social conscience. (Stiles, K., Shanken, 2011, p36)

The relationship of audience and artist and resulting ethical responsibility attached to that relationship is particularly important if through the digital we “interactively make use of global network connectivity”. (Lovejoy, M. 2011, p14) Roy Ascott proposes that this global connectivity transforms our relationship to the world and to ourselves. Roy Ascott proposes that the Internet offers a network to facilitate a distributed consciousness and potential collective consciousness.

The new telematics adventure in art, currently played out in the Net but swiftly migrating to the ‘smart’ environments of ubiquitous computing, has brought

questions of distributed mind and shared consciousness to the definition of a new aesthetic. This Technoetic Aesthetic recognises that technology plus mind, technoetics, not only enables us to explore consciousness in new ways but may lead to distinctly new forms of art, new qualities of mind and new constructions of reality. (Ascott, 1999, p. 66)

Ascott promotes technology as providing opportunity to redefine the self, to escape the confines of our bodies to explore alternative ways of being, a migration towards a distributed body, transforming the human experience and our very sense of self, identifying the potential for technology to promote and enhance a shared experience unbound by time and borders. Ascott highlights the importance of interactivity and active engagement with the public co-creating artworks through a “shared consciousness” rather than a focus on the passive engagement of the spectacle. He warns against focus on process over content through special effects and impressive programming but instead asks us to concentrate on whole systems where viewers take an active role, offering the individual an opportunity to engage in a “larger field of consciousness” (Ascott, 1999, pp. 66–67).

Ascott highlights the potential of technology to transform the human experience, to explore the potential for “a non-linear identity” (Ascott, 1999, p. 69). His text identifies consciousness as a key focus in the future development of tech-noetic art and identifies a “double gaze”, a duality in existence between the real and the virtual, through which we are able to interact with artworks, which explore how we engage with each other and our sense of being. He proposes that this virtual existence offers opportunities for multiplicity of being, physically as well as in time and space. This could be transformative as individuals but also as public audiences, operating on a global market stage, potentially impact on the way that humans engage. Ascott’s presentation of the Internet as a manifestation of group consciousness suggests that net-art works offer the opportunity to tap into a worldwide group consciousness, potentially to explore the collective unconscious. Lovejoy also identifies opportunity for digital media to make use of the global network to engage the public, across boundaries, offering empowerment and democratisation, emphasising the potential for digital media and the Internet to connect people for a more egalitarian future.

As a many-to-many dynamic communication system, the Internet embodies a certain access to democratic exchange. Net art exists within the public sphere and is potentially available to anyone, anytime, anywhere-provided that one has access to the network. Mailing lists, blogs, and other forms of networked communication (from mobile phones to other hand-held communication devices) have become a form of agency. Activists are making use of connectivity as a form of political participation. (Lovejoy, 2011, p. 25)

Currently, huge corporations dominate social media including Facebook, Instagram and Twitter. They are reliant on images and film clips or with limited use of characters, with options to “like” and share and this does not lend it’s self to in-depth debate. Further, the tendency for people to be in like-minded networked groups has been blamed for creating echo chambers of “fake news” on social media resulting in a divisive identification of “the other”, creating a starkly contrasting effect to the utopian image as proposed by Ascott and Lovejoy.

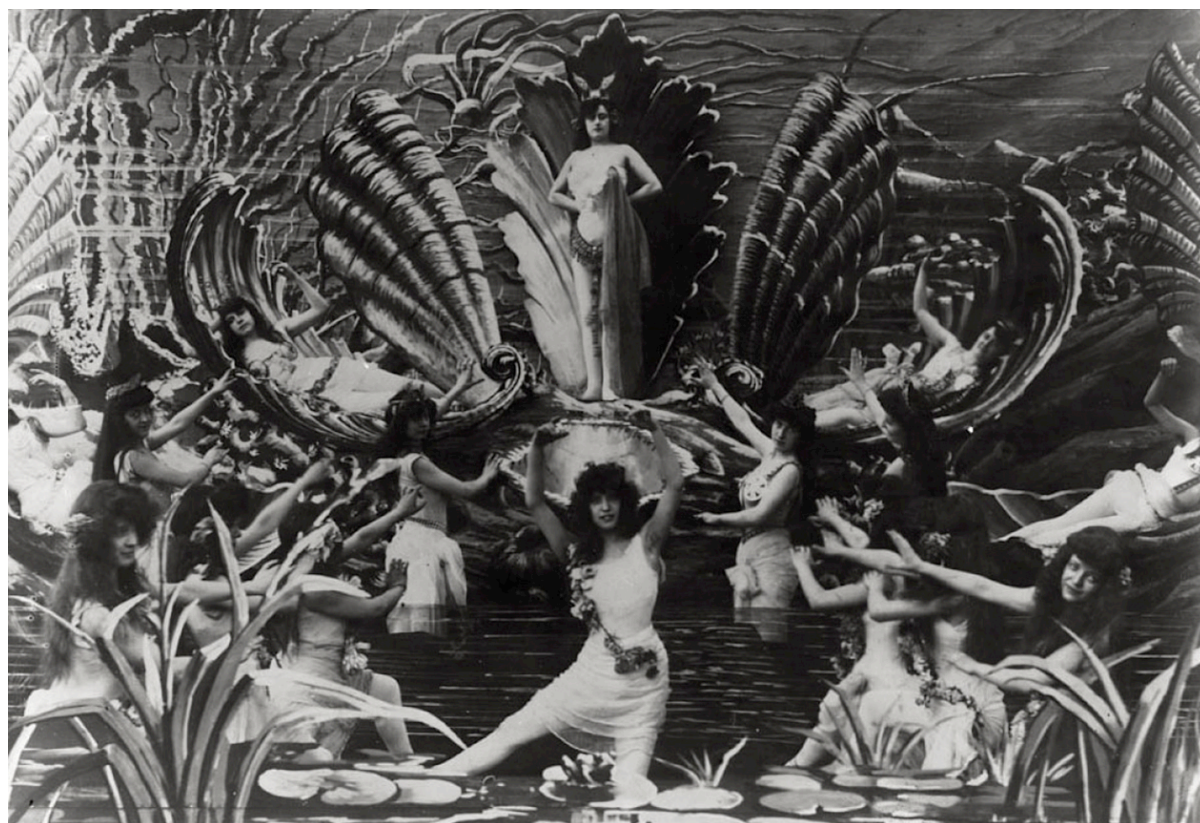


Figure 2. Georges Méliès, Neptune and Amphitrite, 1899.

The form of the “selfie” where the subject smiles out at the audience is reminiscent of early film such as Georges Méliès early sci-fi fantasy films where no attempt was made at suspending disbelief as the actors smiled out at the camera, sometimes waving or shrugging. Tom Gunning identifies the era up to 1906 as a “Cinema of Attractions” (Gunning, 1986) where film represented an opportunity to show off techniques and made no attempt to immerse the audience. Similarly it may be that currently we are in the early stage of social media development and the prevalence of the “selfie” is an early “horseless carriage paradigm” (McLuhan, 1964) and that the potential of the form has not been fully realised. In this way early cinema relied on sets similar to those used on the stage, despite the opportunity for enhanced realism posed by location filming.

The first reaction of the public when entering the frame in “Peoples Screen” is to take a “selfie”, particularly the participants in Guangzhou. Comparable to the actors in the George Méliès films, they smile at themselves on camera. However, the audience soon starts to interact with the environment and other participants, moving away from the initial attraction of identification of self to the body as avatar, towards using the body as a playful interactive tool, where participants immersed in play, lost a sense of the self and immersed in a virtuality playful other space (Caillois, 1958). It is this loss of self, which offers the truly liberating opportunity for audiences as it offers potential for exploration of other identities or alter egos, exploring the potential for ludic play and phantasmagoria (Sutton-Smith, 1985) but also for nonsense as an opportunity to explore “the other”, or the opposite, in order to rationalise ethics and values (Stewart, 1989). This approach could help us realise the potential proposed by Roy Ascot for exploration of a new way of coming into being. The “selfie” on the other hand often reiterates

an idealised image of the self, potentially aligned to the notion of the spectacle (Debord, G. 1967) and presented by traditional media forms promoting the cult of celebrity.

Peoples Screen



Figure 3. Visitors take selfies as they enter the screen in Guangzhou, in “Peoples Screen” by Paul Sermon and Charlotte Gould for the Guangzhou International Light Festival in 2015.

In the following, I am going to explore the potential for new forms of social networks in relation to an installation that I developed in collaboration with Paul Sermon for large urban screens, “Peoples Screen” (Sermon & Gould, 2015). This was a site-specific work commissioned by Public Art Lab Berlin, linking audiences in Guangzhou’s new Flower Garden Square, China and Northbridge Piazza in Perth, Australia. The site of the large urban public screen is an important factor of the work. Akin to the Situationists or Happenings who wanted to bring the every-day into their work, it is important that the installation is situated in a public square, attracting unusual participants for artworks and people as they pass through as part of their everyday life. “Peoples Screen” drew in significantly large crowds in China as it was commissioned by the “Guangzhou Light Festival”. In Perth the public screen was curated for cultural engagement, on a screen usually used for public screening rather than interactive artworks. These environmental factors had a significant impact on the way that audiences engaged. In Guangzhou the 25,000 visitors queued up to play on “Peoples Screen”, the volume of visitors limited the time within the installation to one minute only so people experienced less opportunity to interact in Guangzhou. In Perth people watched the screen on beanbags and the curators introduced them in the installation against the artist’s request, which encouraged a laidback approach.

Through previous research into interactive installations for urban screens a framework was developed to measure open interactive systems based on Hans Scheuerl's "Criteria for Games" (1964), which include "closeness of the game", "ambivalence" (movement between rule and chance) to "freedom of choice", "virtuality" (separate from life and the self), to "infinite" with no preconceived ending. Each of these criteria could be applied to open interactive systems.



Figure 4. Participants hop across cable cars in "Peoples Screen" by Paul Sermon and Charlotte Gould for the Guangzhou International Light Festival in 2015.

In terms of the first criteria of "closeness of the game", the only rules constitute the frame of the installation, which in effect is the defined area of green. There are ethical considerations beyond this, such as behaviour of the audience while in the frame; however, there were no untoward incidents in "Peoples Screen". The artists' interface could be seen as another aspect of the rules in that it can influence behaviour however there is freedom throughout the piece to improvise and there is a very strong element of chance at play. The narrative that ensues represents interplay between artist and audience and, on another level, visitors with remote participants. One of the curators of the screen decided to add dinosaur animations, which were very unexpected and represented a step further than anticipated by the artists. In this case the curators over stepped their role as the point of interaction was on the green screen stage rather than in the operations room and operated outside the rules of engagement, particularly as the characters potentially infringed copyright. Again this brings ethical issues into play. In this way "ambivalence", movement between rule and chance, is facilitated, bringing another element of chance as the audience respond to each other's interactions. The virtuality created by the remote participants breaks down barriers of social norms, so in another way this facilitates a new set of rules of engagement. People will gesture as if to touch in a way that they would not in physical space, for example two women clapping hands together across remote space.

Orientation within the screen is mirrored, so it is a challenge to appear to touch hands, which adds to the fun of the interactions.

“Peoples Screen” is a site-specific work so it includes elements of the physical surroundings in the cities in which it takes place, Guangzhou and Perth. The aim of this is to link the audience with the physical surrounding of the site of the big screen. The image of self, as well as recognisable elements of the environment help to give the audience a sense of connection to the screen. Patrick Allen supports this through his research he found that the presence of the body on big screen works engages users with the screen and acts as a portal between the virtual and real space. (Allen, 2008)

Within the frame the participant has “freedom of choice” to improvise, visitors are free to bring props and to respond to each other as they wish. The freedom of body movement allows for the audience to move exactly as they wish within ethical boundaries. Beyond this people often explore the ludic. Children are attuned to creative and unselfconscious play. Initially, adults are a little reticent, but once within the frame they start to play with both the mirror image of self and then with the other visitors on screen. As participants watch others interacting, this builds confidence but also leads to some echoing of previous behaviours, for example formation dancing or appearing to swim in the sea. Initially often playing with a known other, friends and family with whom they are visiting; people soon start to play with strangers, very often engaging in activities which would be unlikely in an every day urban space such as playing hopscotch, dancing, or jumping across obstacles. In this way participants become analogous to a character in a computer game. This brings us to the next criteria of “Virtuality” separate from real life and the self.

In keeping with Susan Stewart’s theory of nonsense play the exploration of the other, the criteria of “Virtuality” or separateness from real life, enables the audience to explore the ludic world by defining the ridiculous and the comedic, we can identify our values and resolve issues. Investigating opposites can help us to define our values and make sense of the world. This element of ludic play means that logic does not impact on narrative, or direction of travel, the possibilities are endless and are not restricted. The audience have control over their physical contribution so while the starting point was triggered by the animations produced by the artists, the individual narratives can go in any direction.

Brian Sutton Smith reiterates the importance of ludic play through “phantasmagorical play”. He identifies potential health and problem solving benefits inherent in outlandish imaginary play. Sutton Smith defined play as having an “extrinsic” cultural value. He defined rhetoric within accounts of play: play as progress, play as fate (or chance), play as identity, play as power, play as the imaginary (creativity and innovation), the rhetoric of the self (fun, relaxation and escape) and the rhetoric of play as frivolous, the protest of the trickster or fool as intervention. (Sutton Smith, 1997) Actions within Peoples Screen could potentially fall into the majority of these categories, although I did not observe instances of asserting power, although it could be possible through play within the installation for an adult for example to engage in interaction which demonstrated their power over a child. The actions observed from the line out video were very levelling; children and adults, strangers, relatives and friends interacted on a level footing.

Sutton Smith highlighted the need for flexibility in the modern world, promoted by play, which enhances the “potential variability” of the brain. He proposed that play could enhance culture,

civilization as well as human survival, also offers opportunity for exploration of self. Winnicott supports this idea that play can help us to make sense of the self in relation to the external world through “transitional phenomena”, the interchange between the inner reality of individuals and the shared external reality (Winnicott, 1971).



Figure 5. Visitors recline on bean bags in Perth in “Peoples Screen” by Paul Sermon and Charlotte Gould for the Guangzhou International Light Festival in 2015.

Silverstone explored the relation between the real and the fantastical through the concept of “tissue boundary” and the viewer as active participant in the creation of meaning:

Play enables the exploration of that tissue boundary between fantasy and reality, between the real and the imagined between the self and the other. In play we have license to explore ourselves and our society, in play we investigate culture but we also create it. (Silverstone, 1999)

Winnicott identifies a notion of the third space which links child and adult play. He characterises play as liberating and creative, where the whole personality can be experienced offering the potential for self-discovery. (Winnicott, 1971, p. 54) For Winnicott, play is essential to psychic health, and internal and external representation is at the core of personality and culture. From this position, play enhances creativity, as well as offering opportunities for identification of the self and community, so while ludic play represents “Virtuality” as distinct from real life, it conversely offers huge opportunity to resolve very real issues potentially contributing to health and wellbeing as a diversion from stress, through creative exploration, and problem solving. This could have a wider impact on the community by creating connections, resolving issues and problem solving.



Figure 6. Participants appear to walk the plank in “Peoples Screen” by Paul Sermon and Charlotte Gould for the Guangzhou International Light Festival in 2015.

There was no restriction on where the narrative ended, and this represents the criteria of “infinite”. Very often the narratives integrated playful dance, step or jump sequences. The Guangzhou tower had rotating cable cars from which the participants could hop from one to another, or could float by on a lantern. There were many sequences where remote participants hopped past and back and forth in a repetitive dance formations with each other often ending in laughter. Each narrative was distinct and the closing sequences ended in a wide variety of ways due to the breadth of influences from other participants, the range of stimuli in the environment and the props that others would introduce. Sometimes Guangzhou audiences would interact with the beanbags jumping from one to another or with the audience in Perth, who were often recumbent on the beanbags. People at times exchanged articles of clothing such as hats and other props, using exaggerated gestures, in keeping with the silent movies, as there was no sound. This added to the humour as people signalled, in a universal language, to communicate with each other and exaggerated their movements in a comical way often acting out recognisable slapstick sequences such as appearing to slip on a banana skin or wobbling on a high beam across a ravine. The audiences often started to copy each other’s interactions, engaging with elements within the scenes in similar ways, such as walking down the steps into the bunker. The picnic scene proved to be a universally recognised space for interaction, as people appeared to share food and drink with each other. This worked well particularly because participants in Perth were often sitting on beanbags. The computer game reference with hedges from which participants could jump apparently to different platforms, prompted a more active form of engagement. This use of readable situations triggers certain types of activity and avoids the need for instruction from the artist but is instinctive as the interface relies on visual symbolism to communicate to audiences. From this initial starting point the audience would start to adlib and to explore other possibilities, including unexpected actions and unique

interventions. Stiles and Shanken identify “agency” as an important factor in interactive systems, meaning and intention as well as effective communication to an audience is important to avoid the need for instruction. They argue that artworks “. . . must activate semiotic signification that is literally full of meaning” (Stiles & Shanken, 2011, p. 35).

Through this project we researched opportunities for public engagement using networked urban screens, joining two remote locations across two continents looking at how this can change the way that we interact in public space. Kristine Stiles and Ed Shanken propose that a key factor in interactive works is that they offer “agency” which involves freedom to make choices and to be creative in order to make a difference (Stiles & Shanken, 2011, p32). Peoples Screen was successful in offering an open form of interaction and an alternative to our biggest social networking platforms. Whilst the initial instinct and drive for people entering the frame was to photograph themselves on screen, they soon immersed themselves within the action, so that they forgot themselves, lost their inhibition and played with others in a public urban space on screen. Through analysis of the lineout video and audience interactions, it appears that it is the loss of self through immersion in play that is liberating. Potentially this opportunity for play in the urban environment can offer health benefits, bringing us together and supporting an opportunity to engage and share in social space in a different way. This embodies the liberating opportunities that Roy Ascott proposes that the Internet offers, of multiple identities, unbound in borders, time and space, an opportunity to evolve from the fixed intransient “dialect of being” or self and to progress towards the flexible, utopian “primacy of becoming” multiple and transient self (Ascot, 1999, p. 70).

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Is Video-art Becoming a Form of Popular Art? The case of Apple TV's Aerial Screen Savers

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Abstract:

In 2015 Apple unveiled its fourth generation Apple TV and presented a new screen saver with it, consisting of a collection of videos shot all over the world. A set of stunning slow-motion short videos depict aerial footage of some of the most famous skylines and landscapes from around the globe. This article looks at the question of whether these aerial videos represent a form of video art. If the answer is yes, then video art, which for more than half a century was struggling to find its place in popular culture (outside of high-brow contemporary art museums and galleries) is making an almost unnoticed entrance into millions of households, becoming a focal point in the endless number of living rooms. Given the adoption of larger LCD TV screens and the growing popularity of the Apple TV platform, aerial screen savers are becoming an art form that is dominating numerous interior spaces. Are we on the verge of the birth of a new kind of popular art?

Keywords: video art, screen savers, Apple TV, digital art

Introduction

In this article I will endeavour to demonstrate why and how Apple TV technology and its new feature – aerial screen savers – may be changing the rules of the art world and also disrupting the way people use their home TV screens for interior decoration purposes. I believe that this is an almost unnoticed change in both technological and artistic paradigms, bringing about a wider adoption and mass popularization of “new” media art (i.e. artworks that are created and exhibited with new digital media technologies – video, computers, Internet, etc.). These artworks are generally referred to as “new media art”, “electronic art”, or “digital art” (Wardrip-Fruin & Montfort, 2003; Catricalà, 2015).

My main hypothesis is that Apple TV represents a milestone in the development of a new form of popular art – video art as mass art. The Generation X and Generation Y consumers who were raised on TV and video content, primarily delivered in digital form (Prensky, 2013; Woodman, 2015), are more likely to better digest art images in motion rather than in a static form, and Apple TV with its aerial landscapes signifies a step in the direction of further development of mass art in a form of digital media, which is currently in the early phase of its development.

Screen Savers as an Art Form

Before proceeding to the question of whether Apple TV screen saver can be considered a form of art, the notion that screen savers can be works of art at all needs to be examined. That brings us to the discussion of what is and what is not art. In order to ascertain this, some basic concepts of art need to be revisited – namely, the way I will understand visual “art” in this paper. Visual art here will be understood as a visual object or experience consciously created through an expression of skill or imagination. “The term art encompasses diverse media such as painting, sculpture, printmaking, drawing, decorative arts, photography, and installation” (Encyclopædia Britannica).

It has been often said that art has no utilitarian value, it does not contribute to the material objective environment of human life. Traditionally it is thought that artifacts produced for the homeliest utilitarian purposes have formal properties but are not artworks. (Stanford Encyclopedia of Philosophy, 2012).

However, this statement may need to be examined more critically. Art has had a great number of different functions throughout its history, making its purpose difficult to abstract to or quantify as any single concept. This does not imply that the purpose of art is “vague”, but that it has had many unique and different reasons for being created. The different purposes of art may be grouped according to those that are non-motivated, and those that are motivated (Lévi-Strauss, 1968).

The non-motivated purposes of art are those that are integral to being human, transcend the individual, or do not fulfill a specific external purpose. In this sense, art, as creativity, is something humans are compelled to engage in by their very nature (i.e., no other species creates art), and is therefore beyond utility. Motivated purposes of art refer to intentional, conscious actions on the part of the artists or creator. These may be to bring about political change, to comment on an aspect of society, to convey a specific emotion or mood, to address personal psychology, to illustrate another discipline, to (with commercial arts) sell a product, or simply as a form of communication (Lévi-Strauss, 1968). Besides, art, at its simplest, can be indeed

seen a form of communication. As most forms of communication have an intent or goal directed toward another individual, this is a motivated purpose. Illustrative arts, such as scientific illustration, are a form of art as communication. However, the content need not be scientific. Emotions, moods and feelings are also communicated through art. “Art is a set of artefacts or images with symbolic meanings as a means of communication” (Mithen, 1999).

Thus, purely utilitarian artefacts can also be works of art – as long as they satisfy certain criteria (of “conveying a specific emotion or mood” for example) and are directed towards another person. From this perspective, screen savers are an example of this phenomenon. Apart from serving as a means to protect screens from burning, they also serve as a form of expression. Besides, they fulfill another important function of art which it is necessary to mention here – entertainment. Art may seek to bring about a particular emotion or mood, for the purpose of relaxing or entertaining the viewer – and screen savers can and do do just that.

Screen-saver programs were originally developed to extend the life of computer monitors. If the same picture is repeatedly repainted, the light-emitting phosphors on the inside of a cathode ray tube can burn out, leaving shadowy on-screen artifacts (Mirapaulnov, 2000). The first actual screen-saver software was published in a 1983 issue of *Softalk*, a magazine devoted to the culture taking shape around home computers. *Softalk* then delivered coverage on programming, gaming, trade, and more. Readers of the issue in question would have turned to a page graced with a headline in a cataclysmic font – SAVE YOUR MONITOR SCREEN! – and an article with the same exclamatory tone: “At this very moment your video monitor or IBM Monochrome Display may be in danger!” Less exciting was the screen-saver code itself; after three minutes, the screen simply went black (Hatfield, 2017).

In later years two of the most popular screen savers were introduced for those who preferred Windows products – a brick maze but also the multicolored “three-dimensional” pipes, which repeatedly constructed and deconstructed in a manner that verged on Escherian imagery (Hatfield, 2017)). As choices expanded, they became “a way to splash a little colour inside a beige plastic frame” (Mirapaulnov, 2000).

Screen savers were created to protect monitors by constantly changing their images, but advances in display technology made screens less susceptible to “phosphor burn”. Today, computers now have optimised screen protection with a sleep mode. However, the disappearance of screen savers’ utilitarian function also signified their extinction from everyday usage, and some commentators associated this trend with a cultural shift:

The utilitarian function of the screen saver is dying out, which makes it even more interesting to transform into a venue for art ... What we abandoned with the death of screen savers—themselves testifiers of disuse—was a culture that could accept walking away from life onscreen (Hatfield, 2017).

The screen saver has evolved into a medium for public art, not unlike “the mural on an abandoned building's wall” (Hatfield, 2017). Visually mesmerizing, intellectually engaging, and nearly decommodified, the best screen savers achieve the virtues of multiple art movements:

They even make a damning statement: the faintest human touch breaks their spell. Websites like Screen Saver Gallery circumvent institutional gatekeepers by encouraging users to download a new artwork in the form of a screen saver each

month. I enjoy downloading these screen savers despite their poetic futility: today, any laptop that runs a screen saver is burning more energy than it's saving. (Hatfield, 2017)

This status of the screen saver as works of art was recognised when the Het Nieuwe Instituut in Rotterdam in 2017 staged an entire exhibition devoted to retro screen savers, entitled “Sleep Mode.” The exhibition, curated by the artist Rafaël Rozendaal, incorporated a range of screen savers from After Dark, Apple, and Microsoft. Divorced from their natural habitat – the small screens of office cubicles and home offices – and projected onto large gallery walls, screen savers lose their smallness, but acquire a new dimension of immersive experience. Of course, another aspect of having been exhibited in a gallery space is an act of status assignment: an art institution by the very act of exhibiting screen savers in its space thus recognises the status of screen savers as works of art, or at least acknowledges their potential of conveying conceptual meanings which are beyond their purely utilitarian meanings.

Apple TV aerial screen savers are a different type from those old computer screensavers. From the very beginning, Apple TV screen savers have no utilitarian purpose, they fulfill exclusively decorative, aesthetic functions – these slow-motion short videos depict aerial footage of some of the most famous skylines and landscapes around the world. And as such they constitute an original phenomenon – screen savers that at the same time are objects of video art, which makes them artworks in both form and function.

Video Art Defined and Distinguished

Video art is an art form which relies on moving pictures in a visual or audio-visual medium. Video art came into existence during the late 1960s and early 1970s as new consumer video technology became available outside corporate broadcasting. Video art can take many forms: recordings that are broadcast; installations viewed in galleries or museums; works streamed online, distributed as video tapes, or DVDs; and performances which may incorporate one or more television sets, video monitors, and projections, displaying “live” or recorded images and sounds (Hartney, 2011).

Video art is named after the original analog video tape, which was most commonly used recording technology in the form's early years. With the advent of digital recording equipment, many artists began to explore digital technology as a new way of expression.

The first of them was an American artist of Korean origin – Nam June Paik – who took a camera and proclaimed that “the cathode ray tube will replace the canvas . . . artists will work with capacitors, resistors, and semiconductors as they work today with brushes, violins and junk” (Paik, 1965). He worked with and in a variety of media and is considered to be the founder of video art.

Many of the prominent early video artists were those involved with concurrent movements in conceptual art, performance, and experimental film. These include Vito Acconci, Valie Export, John Baldessari, Peter Campus, Doris Totten Chase, Maureen Connor, Norman Cowie, Dimitri Devyatkin, Frank Gillette, Dan Graham, Joan Jonas, Bruce Nauman, Bill Viola, Shigeo Kubota, Martha Rosler, William Wegman, Gary Hill, and many others. There were also those such as Steina and Woody Vasulka who were interested in the formal qualities of video and employed video synthesizers to create abstract works.

One of the key differences between video art and theatrical cinema is that video art does not necessarily rely on many of the conventions that define theatrical cinema. Video art may not employ the use of actors, may contain no dialogue, may have no discernible narrative or plot, or adhere to any of the other conventions that generally define motion pictures as entertainment. This distinction also distinguishes video art from cinema's subcategories where those definitions may become muddy (avant-garde cinema, short films, or experimental films, etc.). Perhaps the simplest, most straightforward defining distinction in this respect would then be to say that (perhaps) cinema's ultimate goal is to entertain, whereas video art's intentions are more varied, be they to simply explore the boundaries of the medium itself or to rigorously attack the viewer's expectations of video as shaped by conventional cinema (Rush, 1999). Video art can be considered an extension of painting, a transformation of a static painting into a moving image.

Prior to the introduction of consumer video equipment, moving image production was only available non-commercially via 8mm film and 16mm film. After the Portapak's introduction and its subsequent update every few years, many artists began exploring this new technology.

The development of high-speed electronic components and circuits, the cathode ray tube, the video camera, and inexpensive video tape recorders enabled the development of video art. The development of small but powerful computers allowed systems to be developed which can give the video artist a new dimension of control over the video image:

Contemporary video art can be just about anything: abstract, literary, sculptural, painterly. It can be indistinguishable from experimental film, costume drama, hand animation, documentary, and everything else on YouTube. (Hartley, 2011)

In art galleries and museums, the diversity of the medium is evident in the large number of different screening apparatuses, which is usually determined by a gallery's relative resources. There are multiple ways to install a work of video art:

There are handheld DVD players, clunky TV sets with thick frames around the screens, tiny naked monitors mounted on the walls and sprouting wires, and the glowing eye of a projector focused on a screen in the middle of the room . . . flat screens are the preferred but by no means only display devices. There's a giant projection in a pitch black room, movie-style; a screen dangling in midair over a balcony; wall projections; and a large, complex built structure that acts as a wooden proscenium for three screens with a roped-off area of visible 'backstage'. (Graves, 2008)

In contrast to TV or motion pictures, which have traditionally relied on reaching mass audiences via mass media, video art utilised screens, monitors and projectors at unique happenings, demonstrating conceptual works and unique footage in special exhibition spaces. Some critics say (Isaev, 2002) that by the end of the 1990s video art had reached a kind of overproduction crisis with video art works getting too much exposure in international art fairs, converting them into “a series of movie theatres or an amusement park” (Isaev, 2002).

The State of Video Art

Despite a relatively simple definition and a rather understandable phenomenological status, video art is still often perceived as something eccentric and exotic – interesting, but not always

accessible and rather unusual. The general public is not used to appreciating non-static art-works – screens with constantly moving images. Being a part of the exposition and the sense of interactivity that video art usually evokes are still new to many spectators. For an unprepared audience, the language of museum video art is often too sophisticated and far from easily understandable (this notion is probably applicable to most contemporary conceptual art; however, until recently video art did not exist in any other form besides conceptual). An average spectator who is used to “consume” art as a simple pleasing and easy on the eye experience finds conceptual video art difficult to comprehend. Conceptual video art is widely regarded as a “complicated” art form that requires much contextual understanding and a certain amount of effort on behalf of the viewer, to find a meaning while non-conceptual (or popular) video art is rarely to be found, it did not seem to exist in a popular or mass form until recently.

I believe that there were two main limitations that slowed down the development and popularization of video art as a form of art: The first one is content related – although these art works definitely have their dedicated following and their connoisseurs go to museums and galleries to engage in some kind of an aesthetic experience, for mass audiences conceptual video art remained beyond comprehension (Manasseh 2009).

The second limitation is related to the problem of presentation which was traditionally limited to museum and gallery spaces. It is an art form that could not be displayed elsewhere and usually was purchased exclusively by museums and collectors. This kind of niche demand created a certain circularity – because only “high-brow” customers were in the market for video art objects, video artists responded by creating “high-brow” work. There was basically very little if any market for video art works outside professional institutions, artists oriented exclusively to target museums and galleries.

Online video art is extremely scarce, which is surprising given that this is especially a time-based media which is difficult to consume within the gallery, where time is limited. Arguably, the internet is the ultimate distribution model for this kind of audiovisual content, be it reality television or high art. Currently, many regular television programming can be found via on-demand services, but very little video art can be accessed in such a way. Mahoney (2001) suggests that there are various reasons why this is the case, and they are, namely, the dealers, the curators and the artists – in that order.

In the same way that the record industry is not keen to release its artists' work for free online, so the commercial art-world is reluctant to let its artists stream their video art online. Back in 1998, commercial galleries were cautious about allowing any reproductions of their artists' material in a digital format, but in general their fears have now subsided and thus for instance, almost all paintings and sculptures in the Tate Collection are now illustrated online as well. This was before broadband was widely available, and for several years accessibility commitments meant that even the audio and video pieces in the collection continued to be represented with a still digital image. Now, more households have broadband than narrowband internet services and it is increasingly viable to stream not just video clips, but entire films online. However, art dealers are still rather reluctant to release video art works online. Because the artwork is easily reproducible without any loss of quality or originality (which makes any digital and media art very different from other art forms), there are obvious concerns about copyright and the survival of the very business model on which galleries rely. While contemporary art museums may actually be willing to upload video artworks and make them available for free, galleries are in the business of selling these works, hence their reluctance for online exposure.

Museums and museum curators are also partly responsible for the limited availability of quality online video art works. Part of that could be a concern that people will prefer to watch these works from the comfort of their own homes and will no longer visit contemporary art museums, whose collections nowadays to a large extent are video art works. They would also argue (and perhaps rightly so) that streaming a work of video art on a computer screen does not produce the same impression as viewing it in a gallery or museum space, projected on a big screen or a wall, with professional equipment and the setting that is inductive to understanding the content of the work.

Artists are also partly responsible for the lack of available video art online (to be true, some amateur works can be found on YouTube, but institutionalized artists' works can be hardly found online). The motive of the artists are close to the ones of the curators and are to do mostly with copyright issues. Sometimes it is the fear that the piece will be copied for free and thus will not be sellable anymore (artist need to make a living too), sometimes it is a part of the contract of gallery-signed artists that clearly limits online distribution.

The direct outcome of these circumstances is that artists exclusively work with gallery and museum spaces in mind – their work until recently had no chance to be exhibited or viewed elsewhere. But creating with an aim for a museum exhibition obviously creates a whole new set of constraints on both the artist and the artwork. If a spectator cannot see an artwork anywhere else but in a museum or a gallery, if it cannot be “taken home” and “utilised in consumption” (used for some purposes, be it decoration or something else), reaching mass markets becomes close to impossible.

And yet, video art concentrated in museum and gallery spaces remains the provenance of curators and connoisseurs, with an almost total lack of a more approachable mass or democratic version of it. Such situation is unique since all other art forms that I can think of do have both an “elite” and “mass” content. Why the elitism of video art remains an exception is a question begging for an answer.

However, it does not have to be like this. The very idea of an art work that contains some moving images has nothing complicated to it. On the contrary, it is rather entertaining and attractive in its simplicity. The road to mass audiences should not be a difficult one – so, what exactly stops video art from reaching these mass audiences? My first guess is that until recently there existed no media to provide all the necessary conditions for storing and exhibiting video art objects in private spaces with the necessary convenience and sense of purpose. The reason for that is that the components of video art do not represent a single object. The content carrier (video) and the means of presentation (screen) are not parts of inseparable artistic object. Unlike, for instance, a painting, where a canvas is at the same time content, component, and means of presentation.

Although today a video art carrier is usually a video file that can be launched on a wide range of devices from a TV set to a computer monitor or a video-projector, none of these devices would completely meet the requirement for presenting objects of video art. The main reason for this is the users' behavioral patterns of content consumption associated with these devices.

Video art appreciation is different from watching a film or staring at a computer screen. Video art is similar to a painting, but a moving one. If video art is to make a leap from conceptual to decorative, it would need to remove the high involvement requirement and not expect viewers to pay full attention to whatever is happening on the screen. Like a painting in a living room,

it is something that “is there”, but does not require a total focus on it. Video art used for decoration would allow viewers to take their eyes away from the screen and return to it later, without any significant loss. To achieve this, the perception should not be overloaded with content - it should be mostly long frames with rather slow development.

Another requirement for adequate entrance into everyday life is convenience of interaction. Basically, it should be something that does not require a user to take too many actions – like loading a DVD into a player. Adequate presentation of a video art object should become a seamless extension of a user’s interior space experience. Of course, video has long been used for decorative purposes. One could argue that some bars or restaurants have TV screens showing Fashion TV or some other background video of purely decorative nature (a sequence of fashion models without any narrative). However, despite its visual appeal, Fashion TV and similar channels never developed their content for purely decorative purposes.

Apple TV Screen Savers – Decorative Video Art

A qualitative development towards bringing video art to the masses required a mass availability of devices that would create a seamless experience of presenting a video art object on a relatively large high definition screen without requiring any additional actions from the user. This device became available in 2015 when Apple unveiled its fourth-generation Apple TV.

Apple TV connected to a flat TV screen creates what in my opinion is a perfect device that converts a TV screen into a canvas for presenting video art works whenever the screen is not used for other forms of video entertainment. When idle, Apple TV launches its screen saver that consists of a collection of videos taken all over the world (see for example, Figures 1 & 2). A set of stunning slow-motion short videos depict aerial footage of some of the most famous skylines and landscapes around the world. I suggest that a consequence of mass usage of Apple TV and aerial screen savers leads to dramatic changes in interior design and in how people use TV screens for changing the atmosphere in their spaces using video images.

A flat screen, usually located in a central, focal point of a room and a screen saver with a high definition slow motion video becomes a very “moving picture”, available for consumption by mass users – and not just an art connoisseur. What is more, Apple perhaps never considered their screen saver as an object of video art. And yet I believe it is exactly that – video art brought to the masses, transforming a previously elite art form into a popular mass art form which is used as an element of interior decoration by millions of people all over the world.



Figure 1. Apple TV screen saver, 2017.

The mass availability and popularity of Apple TV that by default settings launches aerial video screen saver radically changed millions of interior spaces, creating a totally new atmosphere and developing a new mode of screen usage (Apple does not reveal exact sales figures, but some analysts give estimates of 24 million in 2016 only – see Hughes, 2015). Apple TV screen savers launching on idle devices (or while playing music) become a new form of an interior space element that, as I believe, can be referred to as the first example of decorative mass video art.

Being a form of decorative mass art, it meets some requirements that differentiate it from conceptual museum pieces. First of all, to be suitable for decorative purposes, it had to be technically professional in its execution. Unlike conceptual video artworks exhibited in museums, where content dominated over form and the quality of the image was mostly secondary to the conceptual idea, video art that people are exposed to in their living rooms on a daily basis is subject to different expectations. The image must be professionally filmed and of satisfactory technical quality (focus, exposure, composition, etc.). These tasks were rarely important to video artists of the past, but Apple created their aerial screen saver with an extremely high level of technical sophistication. A beautifully shot landscape becomes an easily understandable artwork itself.

A second important feature of decorative video art instantly applied by Apple in its aerial screen saver is its overall non-conceptuality. Previous works of video art, as noted above, were predominantly works of conceptual art. But the decorative function basically implies that form should dominate content. Video objects displayed at home should first of all create a certain atmosphere and only then, perhaps, transmit an idea.

Third, the video image itself had to meet certain requirements to fulfill its decorative function. These requirements included (1) a lack of narrative (by that I mean the absence of story-telling with a beginning, development, culmination and ending – which would mean that the image will not require a user to focus on it); (2) a lack of sound (decorative object should not be making any sound, video art used for decoration should not interfere with other activities, like

making a phone call or listening to music); (3) chronothopy (the unity of space and time, which is provided by shooting one long frame to create uninterrupted non-discretional video sequence).



Figure 2. Apple TV screen saver, 2017.

It is impossible to consume an Apple TV screen saver in an instant. It cannot be fast-forwarded or rewound. The genre, its own kind of endurance art, shuns immediacy. Fugitives from time, aerial screen savers are both immediate and endless. Their ouroboric nature is perhaps why they tend to evoke disenchantment. One does not watch them intentionally, and yet, like other forms of art, aerial screen savers depict human desires. Visual perfection of landscapes is linked to the escapism which is so central to the medium's imagery – the same way the earliest screen savers with their images played this role of escapism in bureaucracies where corporate disgust or indifference likely reigned, Apple aerial screen saver bring cities' skylines, perfect sunsets and exotic destinations home. There is a difference, however. Computer screen saver would materialize when users are away. Apple TV screen savers usually materialize when users use Apple TV for listening to music or as a silent visual backdrop, thus realizing purely decorative and entertaining purposes of video art.

Conclusion

What Apple TV did then was to give video art a new meaning by converting it into an interior object and giving it a decorative purpose together with an entertaining function. Besides, it made video art attractive to and approachable by a mass audience.

If we assume that this is just the beginning, then video art as a mass art form may start to develop further. There are multiple reasons for that. First, interior design is becoming a mass trend, with more and more home owners paying a lot of attention to creating intentional environmental spaces. The industry focused on home design and interior objects shows stable growth. Second, there is a growing interest in high technology products that can satisfy existing needs in new ways – Apple is a prime example of a company that uses this trend.

Currently Apple does not allow users to use their own videos as screen savers, thus limiting the choice to videos created by Apple. If there were a way to use third party screen savers, would it open a door for a market of video-art screen savers as a mass art form? Are we on the verge of the birth of a new kind of popular art that perhaps could become a multibillion industry surpassed perhaps only by the music recording industry?

That can be possible if screen savers that people run on their Apple TV devices are added by users. Then an industry of producing screen savers for different tastes is likely to flourish, given that for many households a big TV screen is a centerpiece of the living room and what exactly is displayed on it when no-one is watching anything in particular becomes an important issue. A black turned-off TV screen would look almost strange – why is it black, when it could be working to create an atmosphere, exhibit some video art in screen saver mode? And if the choice of screen saver is available to the owner – then why not reveal his/her taste, just like one's music collection does? There is nothing strange about considering such TV Screen savers art especially when today even lowly computer screen savers are considered an art form in their own right.

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