# ENCOUNTERING THE BODY IN ART, ONLINE: VAINS (VISUAL ART INTERROGATION AND NAVIGATION SYSTEM) THE ABJECTION APPLICATION AND THE NEURAL ART NAVIGATION TOOL

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VAINS is a curatorial art platform, focusing on repository, search and content recommendation tools adjusted to art content online. It is dedicated to repositioning the body in HCI and deploying thr embodied and situated nature of human users as core resources. curatorial methodologies and ways in which digital art is reshaping curatorial practice are discussed. Experimentation with Abjection Application and Neural Art Navigation tool described
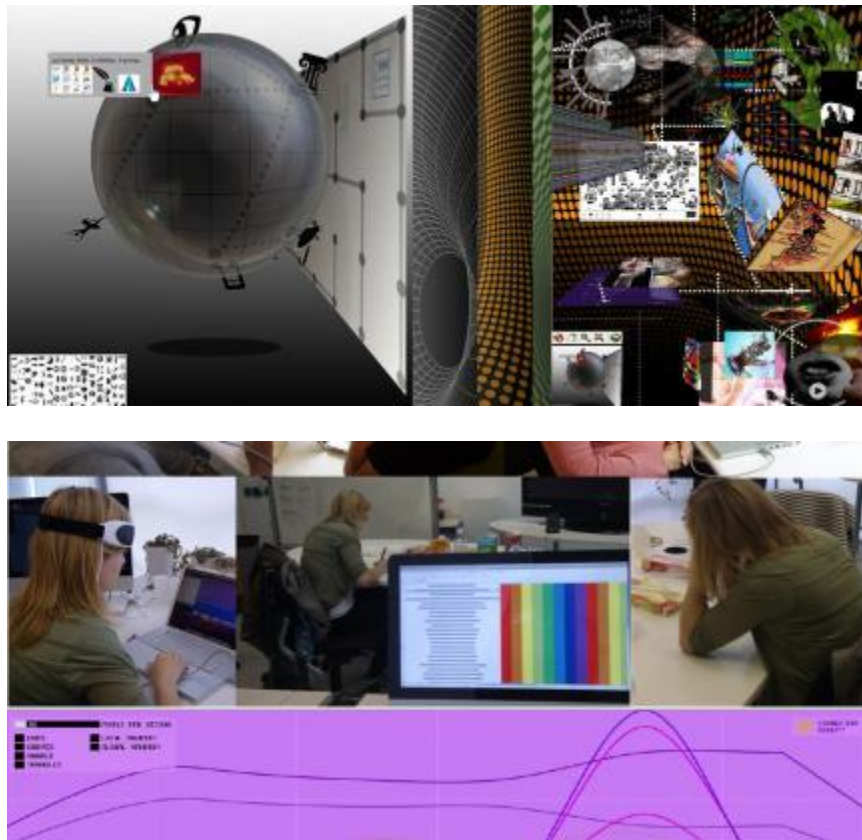
Project Outline

VAINS is an interdisciplinary work in progress. It aims to be an interactive website which offers repository, search and content recommendation tools tailored to viewing digital art in an online environment. The website is composed of different function areas: an archive that can be accessed through cre-

ative search tools; curated spaces, corresponding with the idea of exhibition halls; a research / education centre and a social network. Each of these areas would like to offer users different services, resonating the main principles of the ICOM Code of Ethics for Museums[1]. VAINS Archive draws upon the database of the Computer Fine Arts Collection, courtesy of artist and collector Doron Golan[2], but also aspires to expand its database dynamically by encouraging user generated content, combined with curatorial initiatives.

During the past 18 months we have been developing some of the VAINS tools, placing special emphasis on experimenting with search engines. This paper will outline two of the latest tools created for VAINS: "The Abjection Application" and the "Neural Art Navigation Tool", while positioning these within the context of our methodology.

Background and Methodologies

Artistic practice is becoming increasingly embedded with digital media such as mobile devices and the Internet. This embedding is complex as the technology is both a medium and a dynamic agent in the structure, dissemination and reception of artworks. As such these artistic practices introduce new challenges to curatorial practice which have already been acknowledged by prominent figures in digital media.[3] These writers address a lack in suitable and innovative means for filtering and navigating online art content while referring to the fragmentation and anachronism of many online art contexts. In practice, online art remains, generally speaking, inaccessible to the wide public.

 Accessibility in our view is both the ability to reach content, and the ability to offer tools for a flexible understanding of the content retrieved. In engaging with art works, accessibility might also mean supporting or enhancing an "Aesthetic Experience" [4].

Traditional curatorial practice uses established means such as exhibitions in order to create a context that highlights a possible narrative for interpretation. Viewers, relatively trained in reading exhibitions, intuitively understand "context" on the linear, physical level they offer. These display and classification mechanisms are based on a relative stability of accepted hierarchies between viewers and object-based art works.

Implicit in Western thinking[5] about the image is its role in preserving and encapsulating the past. In Computer Fine Art, programmes, which present themselves as images, actively record, accumulate data, and change according to the viewer's interaction with them. The presented image therefore becomes a platform for a relationship – blurring the safe boundaries between viewer and the image - subject and object. In this sense it disrupts orthodox hierarchies between viewers and artworks. Such artworks, therefore, naturally question the curatorial agency and its approach to representing and preserving art works which are centred on process. The theoretical contour which is usually formed by traditional curatorial means is blurred.

To cope with this, and reconstruct the familiar experience, we found that online interfaces fall into two main categories, either they adopt the familiar economics of "transparent" [6] text-based design[7], or they imitate and re-produce the experience of the art encounter offline[8].

We are interested in asking what an art encounter might mean in a fluid, online environment and how the context within which, and with which, these art works are created, can be brought to the viewer. VAINS would like to offer a metaphorical architecture, where walls are in essence, the programmes that lie beneath the interface, that filter through which content is retrieved. Curatorial practice in this context is not about the selection and classification of artworks, rather it is about exposing the means through which those are selected, and the filters with which classification and categorization are performed.

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Central to enhancing a meaningful art encounter is the relation to sensual and bodily experiences. In this sense, our methodology has been supported by close readings of enactivist and situated theories of cognition, in particular readings of Alva Noë[9], Maturana and Varela[10] and Lucy Suchman[11].

These writers validate the proposition that human beings are entangled corporeally with their technologies and with complex, relational and temporally bound systems of agency. Although many of online art works are commenting on tensions between the absence and presence of the body in digital or "virtual" worlds, curatorial platforms online seem to neglect (theoretically and technically) questions of bodily or sensual experience in the encounter with art works online. Hence, a core methodological commitment embedded in this project is the confrontation or re-framing of the body in the experience of viewing art online. This is supported by an examination and challenge to the *a priori* separation that is assumed between computers, humans and the ready-made separations that are projected between subjects and objects (including viewers and artworks).

To clarify the relationship of VAINS to these ideas we would like to frame them within a historical context in which computation has been dominated by top-down, disembodied and propositionally based structures. Enactvism offered a radical break from this construction, emphasizing the way that organisms and human minds interact with their environments. The methodologies represented by enactivism and situated cognition offer the possibility of constructing an alternative form of digitally curated space, one that deploys embodied subjectivity and situatedness as valid and valuable resources in the generation of new creative insights in the field of online arts.

This reframing is an opportunity to integrate the body into new epistemologies and methodological approaches. As Grosz[12] states, eschewing disembodied, computational models of cognition represents an opportunity to '*displace the centrality of the mind, the psyche, interior or consciousness (and even the unconscious) in conceptions of the subject through a reconfiguration of the body*'. But, in reconfiguring the body we might also seize an opportunity to reconfigure the inter-subjective and technological boundaries between bodies and computers; viewers and images.

In reintroducing the body in art encounter online, we found that negotiating the centrality of text and language in designing online interface might go beyond breaking the façade of the historical narrative embedded in online interface design. Recent Neurological research into attention divide, suggests, as Claudia Roda[13] explains in her comprehensive introduction to this subject, that: "*the processing codes dimension predicts that analogue/spatial processes use a different set of resources that categorical/symbolic (e.g linguistic) processes.*" Therefore in creating an immersive visual experience, we are interested in experimenting with platforms that avoid the use of language based navigation.

We would also suggest that a key obstacle in building a flexible context to art works is the predictability, which is currently embedded in the way browsers and search engines are programmed. Keywords are not only filters used by the programme to retrieve the content desired, they are also the filters through which the viewer is interpreting and builds a relation to the content retrieved. It therefore becomes meaningful to avoid predictive means of retrieving content, so that boundaries of interpretation could be stretched beyond the limitations of these.

The *Abjection* Application

One of the first tools we have offered VAINS visitors is a mobile application called *Abjection*. The application encourages users to investigate the bodily traces they have left within their digital equipment while viewing artworks. The identification of such visceral traces may be seen as an interrogation of the notion of the immateriality of our interaction with digital technology, and, perhaps even a challenge to the notion of a stable virtuality.

More significantly still, and in keeping with Julia Kristeva's[14] framing of abjection, it is offered by VAINS as a challenge to the stability and sovereignty of the self in relation to the image and to the technologies that enable both its creation and its conception.

In addition to the visceral and bodily traces left by users of digital technology, we also invite visitors to consider the many other traces of themselves that they (often unwittingly) leave behind. Bruno Latour[15] has framed these traces as representing a significant erosion of the differences between the private and the public.

Collecting and instrumentalising data from users of web sites, whether covert or consensual, is now part of the materiality and medium specificity of the web. But the traces Bruno Latour writes of are arguably rarely made visible to the users who have left them. VAINS makes these traces part of the materiality and navigational structure of the platform.

The Neural Art Navigation Tool (N.A.N)

The Neural Art Navigator is a physical computation system that deploys EEG to sense the electronic brainwave frequencies of individuals while they are visiting online art sites. The system analyses the patterns of electroencephalographic signals and matches them to suitable art works based on a collaborative filtering algorithm developed over the last two years. The system has been empirically tested and the reactions of users qualitatively observed while they experience a seemingly sub-symbolic, autonomic process of interaction with online art works.

Thus far the architecture of the Neural Navigator has been influenced by an enactive and situated methodology that privileges action over *a priori* goals, and instead seeks an emergent, fluid and constantly changing set of navigational pathways. In pursuing a loosely enactive methodology the EEG based system currently configures itself uniquely to each individual, first observing the flow of their

brainwave activity in order to calibrate the system, then allowing for a period of further observation before forwarding users to artworks that have been curated with consideration of the putative 'states of mind' that might correlate to alpha, beta and gamma waves (etc).

In a recent experiment, 11 users have tested the N.A.N system. The goals for this experimentation were: 1. Evaluate how the system functions; 2. Examine the ability of the system to enhance a different viewing and browsing experience; 3. Test whether an embodied experience has been encouraged through the use of the system; 4. Finding whether the use of this system has enabled a different relationship between the viewer and the artworks, and between the viewers and themselves.

Our results have revealed that the use of the N.A.N tool has increased the occurrence of self-reflective thoughts and bodily awareness in most of the users' experience. Interestingly, it seems that more than anything else, what enabled an elongated encounter with the artworks, as well as a relationship to them, was the appearance of the system as reflecting the user's state of mind, suggesting a subjective interrelation between the viewer and the content.

We have also found that most users, while using the N.A.N tool were considering issues of control and arbitrariness. Many of them testified that they were questioning their control over the technology, as well as their control over their own mood and their own mind. This is significant in our attempt to create both unpredictable means of discovering content online, but even more importantly; it seems the use of the system has enhanced a liminal system of interaction, where users find themselves on the threshold between control and non control; self awareness and immersion in external content. These conclusions have been meaningful to our interest in developing a system which questions relationships between subject and object generally, and specifically in the context of computational and technological environments. It has also been a stepping stone in creating a system that leaves users open to interpretation.

Conclusion

The VAINS practice hinges around the tensions inherent in the construction of subjectivity, singularity and collectivism, but, as many of the writers we have referenced maintain, we cannot easily reach a consensus as to what a subject is or even if such an entity really exists. This ambiguity and fluidity is an instrumental presence within this practice, to quote Barbara Bolt, it is a practice in which *'the materials are not just passive objects to be used instrumentally by the artist, but rather the materials and processes of production have their own intelligence that come into play'*[16]. This becomes a case in point in our deployment of collaborative filtering within the VAINS platform. In VAINS collaborative filtering assumes both non-instrumental and instrumental qualities according to the unpredictable materiality of the dynamic system at play. Non-Instrumentality is described by Low-grade as 'aesthetic, lucid and social qualities'and instrumentality as 'usability' and 'usefulness'.

In the case of VAINS we are producing a system that is open to interpretation on many levels, from the interface itself, to the overarching significance of the entire system.

References and Notes:

1) International Council of Museums sets the minimum standards for museums professional practice.

2) http://www.computerfinearts.com/collection

3) Geoff Cox, Curating Immateriality, Autonomedia, 2006; Beryl Graham & Sarah Cook, Rethinking Curating, MIT Press, London, 2010

4) An Aesthetic Experience reorganizes viewers experience of life; inspired by John Dewey Art as Experience, and Maurice Merleau Ponty writings on art

5) Andre Bzin The Onthology of the Photographic Image; Roland Barthes Camera Lucida for example

6) Transparency, Jay David Bolter in: Windows and Mirrors, MIT Press, London, 2005

7)Examples: http://gallery9.walkerart.org; http://rhizomw.org

8) Examples: Art venues in 2nd Life; http://www.boehmkobayashi.de/tradecenter/index.html

9) Alva Noe, Action in Perception, MIT Press, 2004

10) H Maturana & F Varela, The Tree of Knowledge, Shambala

11) Lucy Suchman, Human-Machine Reconfiguraions, Cambridge Uniiversity Press, 2007

12) Elizabeth Grosz, Volatile Bodies Towards a Corporal Feminism, Bloomington: Indiana Uni. Press, NY, 2011

13) Claudia Roda (ed.), Human Attention on Digital Environments, Cambridge Uni. Press, NY, 2011

14) Julia Kriesteva, Powers of Horror, Cambridge, 1982

15) Bruno Latour, Beware Your Imagination Leaves Traces, Times Higher Literary Supplement (6/4/2007)

16) Barbara Bolt, Art Beyond Representation, London: IB Tauris, 2004