'For a new Mnemosyne: Art, Experience, and Technology', unpublished paper delivered at ICDMT, Bremen, November 4th 2016

Abstract:

This paper will outline the key elements of an ongoing research project. The main focus of the project is to explore the application of new technology to the study of key works of modernism, whilst simultaneously arguing that modernism can itself offer fresh perspectives on contemporary digital art. I am interested in the way key works of modernism present the artwork as both an object to be experienced and as a structured theory of knowledge. This tension can be seen most obviously in such canonical works as Ezra Pound's Cantos (1917-1969) where his aesthetic of the 'luminous fragment' is set against the poem's larger, Dantescan, vision of history. A similar balance is to be found in Aby Warburg's Mnemosyne Atlas (1924-1929), ostensibly a work of historical scholarship tracing the evolution of visual tropes ('pathosformel') from Classical to Renaissance art, but also a work that has significant affinities with modernist aesthetics in its deployment and recombination of visual fragments.

For a new Mnemosyne: Art, Experience, and Technology

My aim today is sketch the origins of a developing research project. The main focus of which is to explore the application of new technology to the study of key works of modernism, whilst simultaneously arguing that modernism, and its critical penumbra, can itself offer fresh perspectives on contemporary digital art - it's this aspect that I will focus on here.

I am concerned specifically with how modernism presents the artwork as both an object to be experienced and as a structured theory of knowledge.

This tension can be seen most obviously in such canonical works as Ezra Pound's Cantos (1917-1969) where his ideogrammic aesthetic of the 'luminous fragment' is set against the poem's larger, Dantescan, vision of history. This is outlined by Pound in a letter written to his father in 1927, about a decade into his work on the poem and three years before the first volume, a Draft of XXX Cantos, would be published.

A similar balance is to be found in Aby Warburg's Mnemosyne Atlas (1924-1929), ostensibly a work of historical scholarship tracing the evolution of so-called 'emotive formulas' (pathosformel) from Classical to Renaissance art, but also a work that has significant affinities with modernist aesthetics in its deployment and recombination of visual fragments.

More recently, the French filmmaker Jean-Luc Godard's Histoire(s) du cinema (1988-1998), which I would describe as a late-modernist work, is both an account of film history and a radical video-based reworking of the aesthetics of montage. Finally, Chris Marker's Immemory (1998), an early experiment in digital art, deploys a Proustian model of involuntary memory to explore connections between film, history, and autobiography.

In each case a tension arises between the ordering of experience into a narrative (however loosely defined) and the presentation of the work as a broader theorisation of knowledge.

In some ways, this could be conceptualised as a tension between epistemology and phenomenology; of the artwork as an object to be experienced, or as a tool through which the world is understood. To take a linguistic analogy, it is the artwork seen as either a noun or a verb.

Numerous examples exist of digital art using data-modelling techniques to create visual and aural representations, but these have largely eschewed theorisations of how structure and experience are correlated. Modernism would seem then to offer a series of methodologies that have the potential to present new ways of approaching digital art. I intend to investigate the history of this work in greater detail, and to suggest how the legacies of modernism might offer clues to its further development.

At the beginning of 2016, two exhibitions were running concurrently in London, both of which sought to explore the interface between art and technology.

In East London, the Whitechapel Gallery's Electronic Superhighway – its title a reference to the term coined by that pioneer of electronic art, Nam June-Paik – traced the interface between art and the internet in the half-century from 1966 to the present-day.

Rather than adopting a conventional chronology, the exhibition began with contemporary work and worked backwards to the earliest examples. Along the way, visitors could explore works that ranged from Lynn Hershman Leeson's interactive videos which distorted the codes of 1980s daytime soap-operas, to the Instagram myth-making of Amalia Ulman, and experience the various ways in which artists have used the practice and the promise of the internet to explore visions veering from the utopian to the banal - and occasionally the banally utopian.

Across this span of time, two factors stood out: first, the old cliché, that nothing dates as quickly as an earlier vision of the future still holds sway: 8-bit madeleines conjuring up a dial-up rush of nostalgia; evolutionary dead-ends like CD-I momentarily brought back to life. And second the tension between distraction and contemplation (which characterised for Walter Benjamin the

experience of the first spectators of modernity) seems equally to apply their contemporary descendants.

On the one hand, here were works which sought to dazzle the spectator: on entering the exhibition, the first thing one was treated to was the spectacle of Jacolby Satterwhite's video installation, Reifying Desire VI, which transmogrified a queer New York flânerie into a writhing digital polymorphous pornotopia.

Not everything was such fun. Orphaned technologies, briefly reanimated, only served as a reminder of how recalcitrant and clumsy these objects could be. Did they always possess this lumpen inarticulacy, or were they once some acme of contemporaneity? And if so, how will our latest innovations appear to generations yet unborn?

There was much to enjoy, yet an anxiety remained: what am I meant to do with this stuff? What mode of attention do I adopt? Somehow, the majority of the works seemed too removed from traditional visual art to experience as straightforward aesthetic objects or placed into art history (despite occasional affinities with various schools of abstraction or conceptualism), and yet their call to other modes of engagement seemed ill-suited to their environment. This was both physical – how should I sit or stand in relation to this work? – but also mental: what do I draw from this experience? Two hours spent in this state of curiosity proved beguiling, but also oddly exhausting – what had I seen, and had I seen enough of it?

A few miles away, in one of Somerset House's cavernous riverside basements, and across a grand courtyard from the Courtauld Gallery, these anxieties stirred again. Visitors to Big Bang Data were indulged in a state-of-the-art demonstration of how artists are making use of the unimaginable proliferation of data that modern technology generates, and which has come increasingly to follow our every move, and even dictate our behaviours. The remit of the exhibition was, in the words of its curators, to "explore[s] the issues surrounding the datafication of our world through the work of artists, designers, journalists and visionaries. As the data explosion accelerates, we ask if we really understand our relationship with data, and explore the meaning and implications of data for our future."

But how should this datafication be presented, and what is meant by 'understanding' in this context?

In one room, under a domed canopy, Lise Autogena and Josh Portway's Black Shoals, Dark Matter, created a shimmering aquarium-cum-airport of data depicting live financial transactions as they happened. Bathed in a soft-blue glow - perhaps the signature colour of data-driven art - spectators watched the shoaling swarms, slumbering masters of a limpid universe. A seemingly occult world brought briefly into visibility.

In the same room, Julie Freeman's installation We Need Us drew on internet meta-data to create a series of pulsing habitats, from jungle glade to cellular microcosm. Here, data was transformed into pure signifier - sufficient merely to know that this work was created from data rather than knowing what it was intended to represent.

Perhaps the best exemplar of this work, however, was Ryoji Ikeda's installation, data.tron begun in 2007 and reconfigured numerous times since.

The work is characterised by its creator as:

"data.tron is part of the datamatics project, a series of experiments that explore such questions both physically and mathematically. Visitors will experience the vast universe of data in the infinite between 0 and 1."

data.tron is an audiovisual installation in which each single pixel of visual image is strictly calculated by mathematical principle, composed from a combination of pure mathematics and the vast sea of data present in the world. These images are projected onto a large screen, heightening and intensifying the visitor's perception and total immersion within the work.

The version I saw at Somerset House created a wall-sized projection, partially screened off from the gallery, allowing spectators to bathe in isolation in its cascade of data. It was mesmerising, but what was it that mesmerised? Were the images enough on their own - or was the effect of the work in part necessitated by the knowledge that here was data. The normally hidden brought out into the open by the action of the artist?

In much the same way as a nineteenth century romantic painter like Caspar David Friedrich sought to represent the encounter between man and an overwhelming nature, so today's artists appear exist on the edge of a technological sublime; rather than Friedrich's Rider of the Sea of Mist, here we vanish into a virtuality: Hegelian absolute spirit replaced by Kurzweil's singularity.

Technology thus seems to serve a twofold purpose here - it is both the source-code for the representations we experience, and the subject of those representations. The human subject stands, necessarily, apart.

One of the most engaging works was created by the design studio Tekja, whose London Data Streams sought to provide a mobile snapshot through mapping Twitter, Instagram, and TFL data onto a pulsing map of the city. Tekja it should be noted is a design studio whose slogan 'Turning data in knowledge' hints at the logic that underpins much of this work.

In both exhibitions, one overriding impression persisted despite the spectacle: the relationship between art-object (however construed) and the spectator seemed rooted in a surprisingly conventional metaphysics; in some ways compounding Michael Fried's critique of the counterintuitive 'theatricality' of minimal art in his essay 'Art and Objecthood' from the late 1960s.

This would seem, therefore to be the central dilemma of this work: torn between visualising data as pure signal or pure noise places the viewing subject in either a position of god-like mastery or as subservient ape. However, in both views, there is the sense that the work in some way is the data itself, rooting the connection between thing and representation in classical metaphysics. These superficially radical works seem on closer inspection to adopt a surprisingly conservative approach to their understanding of the work of art and its relation to an external reality.

In seeking to challenge this, I want to turn first to the work of the poet and theorist, Veronica Forrest-Thomson, who, writing in the mid-1970s, claimed what she termed 'poetic artifice' as the defining quality of how poetic language may be distinguished from its ordinary usage. Her attitude is perhaps most simply encapsulated in the subtitle of her poem Cordelia: 'a Poem should not mean, but Be' – a line she borrows from the end of Archibald MacLeish's Ars poetica.

Her major contribution to poetic theory came in the posthumously published (and recently reissued) book also called 'Poetic Artifice'. In this work, she argues that traditional approaches to poetic language (both in the poems themselves and in their critical interlocutors) try - erroneously – to naturalise it in relation to the non-poetic world. This ignores, she argues, the degree to which artifice is central to our understanding of how poetry functions linguistically.

She writes:

"Do not forget,', says Wittgenstein, 'that a poem, even though it is composed of the language of information is not used in the language-game of giving information.' It is indeed important to remember this, but simply remembering it is no solution. We must try to describe the language game in which poetic language is used, and here the initial difficulty is the relationship between the language-game of poetry and what Wittgenstein calls the language-game of giving information."

Drawing on an example from TS Eliot she notes that,

"The sentence, 'Pipit sat upright in her chair some distance from where I was sitting' could be used to give information about a state of affairs in the external world: namely, that at a particular time in the past someone named Pipit sat at some distance from the person who is uttering the sentence. But when Eliot begins his poem 'A Cooking Egg' with these lines:

Pipit sate upright in her chair Some distance from where I was sitting;

the function of the sentence, and in particular its relationship to the external world, changes. The statement is altered by its insertion in a poetic context, by its use, shall we say, in this different language-game. It no longer refers to a particular time in the past (it is not simply irrelevant to ask whether the event took place on 3 April 1912 or at some other time: there is no need to suppose such an event at all). Nor need the 'I' be thought of as a particular person. For the purposes of the poem the 'I' is simply a voice."

From this, she concludes from that,

"Every reader of poetry knows that statements are changed by their insertion in a poem, that they no longer mean what they mean in ordinary speech because of the form in which they appear. To state the relationship between poetry and the external world, however – to show precisely how poetic form and poetic context affect the sentences they include and the non-verbal world which the sentences imply - is difficult."

(1978, X)

The analogy I would draw with the data-based works described above follows precisely this argument: composed of data that was initially part of the language-game of giving information, it has now been transformed into a new language-game where this should longer apply.

Many of the examples I have looked at so far are composed in the language of giving information deceive us into assuming that information is what they are still doing: it appears to operate as if we were still playing by the rules of the old game. Can new technology ever be used to do more than merely provide images or models for the datafication of our reality? Modernist poetics, in its focus on both the material conditions under which meaning is generated, and its understanding of the grammar through which meaning derives would seem to make it ideally suited to this search.

The line of Wittgenstein comes, as many people will know, from a series of notes, discovered in a box file after his death, and published with the name he had given them: Zettel. They are a book of disquiet, ranging far and wide in subject matter and were written between 1929 and 1945. This line is also used by Marjorie Perloff as the opening epigraph to her book Wittgenstein's Ladder. In some way, her stance in relation to Wittgenstein's own work mirrors this; as Gareth Farmer notes in his new introduction to Poetic Artifice, she reviewed the book on its first publication - and it appears to have influenced her own Radical Artifice published a decade later.

However, in the Wittgenstein book, she writes:

"As someone trained in literary criticism rather than philosophy, I make no claim to contributing to the ongoing (and enormous) body of writing that seeks to explain the difficult meanings in Wittgenstein's endlessly riddling philosophical writings. Rather, I want to examine the relationship of Wittgenstein's mode of investigation, in all its contradictoriness, its stringent and severe self-revision and critique, its cryptic and aphoristic formulations and epiphanies, to the "ordinary language" poetry so central to our own time. For if, as Wittgenstein posits, "Language is not contiguous to anything else" (LEC1 112), then its most trivial manifestations become interesting."

The context of this particular aphorism is worth noting, although I have not the time today to explore its context in greater detail.

155. A poet's words can pierce us. And that is, of course causally connected with the use they have in our life. And it is also connected with the way in which, conformably to this use, we let our thoughts roam up and down in the familiar surroundings of the words.

156. Is there a difference of meaning that can be explained and another that does not come out in an explanation?

- 157. Soulful expression in music this cannot be recognized by rule. Why can't we imagine that it might be, by other beings?
- 158. If a theme, a phrase, suddenly means something to you, you don't have to be able to explain it. Just this gesture has been made accessible to you.
- 159. But do you speak of understanding music. You understand it, surely, while you hear it! Ought we to say this is an experience which accompanies hearing?
- 160. The way music speaks. Do not forget that a poem, even though it is composed in the language of information, is not used in the language-game of giving information.

I want to conclude today by returning to one of my earliest examples. It has become something of a contemporary commonplace to equate the mnemo-technics of Renaissance occultism with contemporary digital technology: I have outlined elsewhere the apparent affinities between Giulio Camillo's Theatre of Memory and works by Godard and Marker. And in the recently published Mnemosyne: a History of the arts of Memory, François Boutonnet has gone into far greater detail than I the connections between ancient and modern theories of memory - drawing on and developing the seminal work of Frances Yates, and the more recent attempts by Alain-Philippe Michaud and Georges Didi-Huberman to extend Aby Warburg's pioneering iconography into the information age.

Nevertheless, there are affinities worth making with the data-driven art I have discussed. If these were essentially humanist in their conception - the systems designed as prosthetics to augment human - these new models necessarily position themselves as outside of human comprehension, so the only way they can be encountered is as model, as aesthetic. This speaks to a larger dilemma for art in the Information Age - has its role been reduced to mere explainer of scientific truth, or can envisage a new role? In this sense, this boundary between the work of art and the work of scholarship seems an especially fertile one.

Concluding his essay on the frescoes of the Palazzo Schifanoia in Ferrara, Warburg argues that these showed the complex interaction between astrology and a nascent astronomy - but more significantly, the offered him a methodological typos for his approach:

"Until now, a lack of of adequate general evolutionary categories has impeded art history in placing its materials at the disposal of the – still unwritten – "historical psychology of human expression." By adopting either an unduly materialistic or an unduly mystical stance, our young discipline blocks its own panoramic view of history. It gropes toward an evolutionary theory of its own, somewhere between the schematisms of political history and then dogmatic faith in genius. In attempting to elucidate the frescoes of the Palazzo Schifanoia in Ferrara, I hope to have shown how an iconological analysis that can range freely, with no fear or border guards, and can treat the ancient, medieval, and modern worlds as a coherent historical unity – an analysis that can scrutinize the purest and the most utilitarian of arts as equivalent documents of expression – how such a method, by taking pains to illuminate one single obscurity, can cast light on great an evolutionary processes in all their interconnectedness. I have not tried to find a neat solution so much as to present a new problem, which I would formulate as follows: "To what extent can the stylistic shift in the presentation of human beings in Italian art be regarded as part of an international process of dialectical engagement with the surviving imagery of Eastern Mediterranean pagan culture?

Our sense of wonder at the inexplicable fact of supreme artistic achievement can only be enhanced by the awareness that genius is both a gift of grace and a conscious dialectical energy. The grandeur of the new art, as given to us by the genius of Italy, had its roots in the shared determination to strip the humanist heritage of Greece of all its accretions of traditional "practice," whether medieval, Oriental, or Latin. It was with this desire to restore the ancient world that "the good European" began his battle for enlightenment, in that age of internationally migrating images that we – a shade too mystically – call the Age of the Renaissance." (585-6)

It may be too simplistic to map Warburg's art-historical model, composed as it is of a few hundred photographic reproductions with, mistaking a solar-system for a galaxy. Nevertheless, I want to conclude by suggesting that the way Warburg conceives of the mobility of the image might provide us with a model for thinking about visualisations of data that recognises them not as representations or as metaphors, but as something more complex and dynamic .