Figure 12 Richard Long’s A Line Made by Walking (Long, 1967)
01 :: 02 A Methodology for the iUser

With the advent of nanotechnology and the convergence between microelectronics and biological processes and materials, the boundaries between human life and machine life are blurred, so that networks extend their interaction from our inner self to the whole realm of human activity, transcending barriers of time and space.


Technological enablers are repurposing physical space in cities all over the globe. As Mark Weiser observed over two decades ago, “the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it” (Weiser, 1991). The enabling services which have developed since Weiser’s remarks are indeed invisible and come in many forms: wireless web infrastructure (IEEE 802.11), mobile telephony (3G & 4G), global positioning data (GPS) and short wave transmitters (RFID). While the devices to plug into these services are becoming more ergonomic and more dextrous, and are steadily reducing in size, weight and power consumption. As the economies of scale shrink so does the time required to negotiate the networked environment and to source and gather content. Affordability and connectivity enhance the iUser’s ability to fulfil their function in the feedback loop and to provide the mechanisms for external agents to access these private spaces like never before.

*Collect the WWWorld: The Artist As Archivist in the Internet Age* was a curated exhibition I attended at the 319 Scholes gallery in Brooklyn, New York in 2012 which featured “appropriated and manipulated images, data, animated gifs, video, clip art, and blogs to create screen projections, net art, prints, and installations.” Leila Christine Nadir, in her review of exhibition on [Furtherfield.org](http://Furtherfield.org), wrote at the time: “The boundaries between the indoors and outdoors, between the private and the public, have been broken down by digital technologies. As data slips into our most intimate spaces, the way rain and wind once ripped through primitive shelters like caves and huts, we return to ‘a rather basic form of humanity’ – an uncanny ‘21st century version of ancient cultures and traditions.’ Sorting through an ‘erratic, uneven mess’ of information, human beings are once again hunters and
gatherers” (Nadir, 2012). The tension for the artist then – and the iUser as viewer and participant – is between how one can interact openly and productively in such a setting and how they can avoid succumbing to the data mining activities of the seemingly innocuous social networking agendas of corporations and commercial advertisers that make that interaction possible.

Mainstream media of course, still dominates this new networked habitat as the pre-eminent cultural agent. The machinations of its market structure and exploitation of technology are strategically linked to the network’s multifarious channels. Search engines, social media software, news portals, game servers and even personal email accounts are just some of the network stepping-off points which enable content providers and cultural marketeers to intersect with the iUser. The venues which make up a large percentage of the web’s traffic: Facebook, Twitter, iTunes, Instagram, Google, YouTube and Windows Live, all have strong relationships with content publishers and distributors. The proximity therefore of commercial content to the social enterprise of the network has fostered a more intimate relationship with its audience than ever before. The iUser is exploited by the facade of personalisation these services offer and the symbolic nature of the icons and logos which either enable their interaction or facilitate their consumption therefore placing the iUser at the very centre of the commercial agenda of corporate myth making.

For instance, if we were to trace the progression of the visual image as a signifier for a commercial product, a designation of place, or decree of ownership there has been a steady move away from abstract symbols to a more visually sophisticated form of machine language code. The representation of what this code denotes now relies on complex visual iconography – a far more explicit articulation of the code’s commercial identity. While essentially these images serve a similar function the information they represent has evolved along with the design of the code. The first image of the Newcastle Waters cattle branding (see Figure 13) functions to designate the ownership of the cattle and has a limited functionality apart from identifying stock numbers and quelling squabbles over ownership of stock and feeding pastures. The dominate code with
regard to the tracking and quantifying of commercial product remains the barcode (see Figure 15). However, rather than being merely sighted and registered the code contains information which can identify an item through a minutiae of details (size, style, volume, model, colour etc.) expressed as symbolic and numeric information then used in spread sheets and tracking systems by manufacturers, suppliers and retailers. However, the image, to the untrained human eye is fairly derivative (unless one was familiar with the relevant product codes the numerical values along the base of the code) and has no meaning or intrinsic value. The evolution of this means of information exchange is the QR Code (see Figure 16) a system developed in Japan to track and identify products in manufacturing facilities. Similar to the function of the barcode, the image is designed to be read by a machine, but rather than an infrared laser beam its most complex iteration requires the lens of a mobile phone or tablet to decode the information as a digital image. The design of the IBM QR code (see Figure 17) is a further evolution of the system which now includes visual signifiers embedded into the design including corporate logos and photographic imagery.

The code as a digital object has become a part of the wider lexicon of visual language and signification. This creates a certain aesthetic and poetic value and can be viewed as a commodity in and of itself as the code is captured, recorded and stored on a device. The potential for the image file to be catalogued in the user’s media archive, to be shared and even reconstituted in another instance is then made possible. The end game of this evolution is a blended outcome which points to an almost infinite set of values rather than being wedded to just one proprietary system. Corporate data suddenly becomes dynamic, interpretative, loaded. While it still communicates important commercial information – perhaps something as banal as a tracking number – the data itself comes ready branded with layers of visual and cultural signification and therefore now operates as a culturally coded digital object.

However, what also separates the QR Code from previous iterations of symbolic identification is its hybrid functionality as a piece of information technology. While in most instances the code can be used to point the user’s device to a product on a retail shopping website it may also function to engage the user with the narrative of a product, brand or company. The Adidas QR Code points the user to a viral marketing site for their Celebrate Originality campaign (180LA, 2008) (see Figure 19) which enables the user to participate in the brand’s identity by uploading their own image and tag line to a website signifying their endorsement of the brand and thereby participating in the brand’s promotional narrative.  

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10 While the majority of QR Codes in public spaces act as links to advertorial content or commercial enterprises the use of the technology has many diverse applications and can provide an entry point to a variety of content and more obscure cultural product. This methodology was employed for this thesis’ accompanying creative component, Dark Euphoria: UnClassified Media, in which QR codes were circulated in a variety of Australian
The use of photographic imagery, while still largely symbolic, is important in this context as the images themselves while perhaps purely aesthetic in their design functionality inevitably have their own rhizomatic structure representative of a wider cultural significance. The use of the image of Earth in the IBM QR Code is not only a powerful and evocative construct but is indicative of a wider signification of network technology and its close relationship to ecology and environmentalism. The long tail of what that image represents as a symbolic emblem of networked computer interaction has its beginnings in the mid-1960s. NASA’s *Earthrise* image (see Figure 18) hanging precariously in space was the galvanising image for the environmental movement and helped to spark a narrative of the image of the blue planet not merely as an object but as a cultural icon. While inspiring David Bowie, “Here I am sitting in a tin can far above the world, planet Earth is blue and there’s nothing I can do” (Bowie, 1969) it prompted Stuart Brand to utilise a similar image on the cover of his *Whole Earth Catalogue* (see Figure 22). Brand had started a campaign back in 1966 to encourage the

and American cities to point curious flâneurs to the project’s website and supplementary theoretical content. The QR Code was also employed within the exhibition itself on each work’s didactic to give smart phone and tablet users the opportunity to read the artist statement and view the evolution of the art work online. For more examples of the creative and commercial uses of QR codes see the 2010 Cannes Golden Medal winner for advertising *Hidden Sounds* for Zoo Records an alternative music store in Hong Kong. More information on Zoo Records inventive use of the QR Code medium and the successful engagement with indie music fans can be found here. To bring the discussion of code branding full circle visit the *Plurellie Productions* YouTube channel here.
authorities to publish an image of the earth from space as he believed the image to be a galvanising concept. Knowing what a powerful effect this would have on society’s perception of the earth and themselves was clear:

...those riveting Earth photos reframed everything. For the first time humanity saw itself from outside. The visible features from space were living blue ocean, living green–brown continents, dazzling polar ice and a busy atmosphere, all set like a delicate jewel in vast immensities of hard–vacuum space. Humanity’s habitat looked tiny, fragile and rare. Suddenly humans had a planet to tend to (Brand, 2007).

The Earthrise photograph is iconic; perhaps the original image. As a visual motif, as song lyric, as appropriation on a magazine cover, it is an instructive example of an image with inherent meaning and value and an enduring narrative construct which can be powerful enough to change the manner in which a society sees itself and in many ways the human perception of reality.¹¹ It should also be noted that the publication of this image, the Bowie song and the first editions of the Whole Earth Catalog preceded the Apollo 11 moon landing and the first testing of the APARNET by only a matter of months. This suggests that the interplay between network technology and cultural production was already well in train by 1969. From this point forward the visual motif of the Earth as a symbolic object grew exponentially, and like all feverish visual appropriations of the 1970s – the “I Love New York” logo, Star Wars figurines and side burns, Planet Earth was everywhere. The original power of the image has been reduced – literally – through its reproduction and reconstitution as a digital object in the new century. From the humble gasp of cosmic awe only fifty years previously a range of applications which have exploited the

¹¹ See Fred Turner’s account of this period, From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network and the Rise of Digital Utopianism, (Turner, 2006) and interviews with Brand and John Brockman in the documentary Das Net (Dammbeck, 2003) (see video links on Page 215). Also, for an account of the intersection of cybernetics and systems theory within the 1960’s Avant Gardé movement, see Pamaela Lee’s account, Chronophobia (P. M. Lee, 2004) and Jack Burnham’s Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of This Century (Burnham, 1968a).
image have instead engendered an ironic reversal, stripping the image of its potency. Planet Earth as digital icon has devolved from ecological end-game to an ergonomic interface, a mere pathway between virtual worlds.

In a similar manner in which Virilio cites the “reductionism” of society’s perception of science as a “techno-science” (Virilio & Lotringer, 2005) by peddling products rather than knowledge in a similar manner in which Microsoft peddles lifestyles rather than operating systems, this inverted narrative of the Earth has reduced the primacy of the most ancient and solid articulation of the real into a virtual digital object. From an environmental icon (“icon” in the classical sense) (Figure 18), to an object of artistic dreaming, to a symbol of economic globalisation, to a digital asset for the navigation of software (Figure 25) and finally to a graphical icon (see Figures 24 & 26) for the access and dismissal of network services the Earth image has taken on a dramatic reduction of scope and meaning. This presents an elegant metaphor of a systemic lowering of the panoramic horizon, or as Virilio refers to it, the transition to an “introverted narrative” (Virilio, 2007). For Virilio this act of reducing significance, of nullifying meaning, acts as a “relief” mechanism from the trauma of the image loop would otherwise engender. For Fredric Jameson it’s something more profound – a mechanical substitute. In a discussion of Walter Benjamin, Jameson writes that while Freud’s consciousness may facilitate the “defence of the organism against shocks from the external environment” Benjamin’s viewpoint of history through technological apparatus means that Freud’s mechanism becomes an externalised non-personal reduction:

Modern society, perhaps on account of the increasing number of shocks of all kinds to which the organism is now subjected, these defence mechanism are no longer personal ones: a whole series of mechanical substitutes intervenes between consciousness and its objects, shielding us perhaps, yet at the same time depriving us of any way of assimilating what happens to us or of transforming our sensations into any genuine personal experience (Jameson, 1971).
While this may provide relief from the emotional gravity of an event it also has the capacity to render evocative digital objects into meaningless one dimensional code. The ability to hold the earth in the palm of one's hand, swipe it off the screen or spin the globe with a flick of the mouse wheel has rendered the earth a mere assemblage of pixels at nothing more than a bit depth of either 1 or 0.

I see two belief systems that the art of our time may already be grappling with. One is simply the imagery of “information,” and the idea of the world being newly robbed of its spacetime materiality by a truly global, truly totalizing apparatus of virtualization. The world in the hands of the symbol-managers, if you wish to put a pessimistic spin on it; or the world laid open to the digital multitude, the great global community of hybrids and particulars, if you wish to buy into the utopia proposed lately by Antonio Negri. This is belief system one. You will see that it is, among other things, a belief about a new form of knowledge – a new means of materialization and dematerialization of labor. And at the center of the belief system is an image of knowledge visualized, taking place in screen space, and being altered in its very structure by that new placing and mobilizing, that new system of appearances. This leads straight to belief number two. It is simply the belief that some kind of threshold is being passed, or maybe has been passed, from a bygone world where the Word was the ultimate structure of knowing to one ruled by the image or the shifting visual array (Clark, 2000).

In the fractured culture of the new millennium where the values of the Cyber City are increasingly fluid, the translation of the analogue to the digital has altered our perception of the value and the tactility of not only cultural product but the fabric of the lived experience. The movie clip, the music sample, the image text, the logo and the vector have a fatalistic sameness. As does the YouTube diary, the status update, the check-in and the selfie. This not just a life digitised but information to be shared commercial products to be monetised and fresh content to be consumed. For the iUser – and more specifically the media artist – these digitised objects represent an opportunity to be remix to manipulate and to be share. And so with reduction of the blue planet to a 128x128 pixel icon there exists a payoff. Once the solidity of the real has been digitised – reduced, copied and vaporised – at the same instant it has become useful, malleable, and reproducible.

In this reflexive space the traditional modes of engagement have been superseded by more involved, interactive and participatory states of consumption. Every participant has the potential to become a node in the network flow of information; every participant has the potential to hold the world in the palm of their hand. Their relationship to their content is a trigger to move beyond the role of passive consumer to that of active user and thereby engaging with dynamic modes of
interaction – archival storage, feedback and paradoxically re-distribution. And as I investigate in further detail below, media artists and cultural participants have learnt to engage with a range of software and media technologies to participate in this dialogue of intersecting image streams. As Jack Burnham wrote of the early avant-garde in the 1960s, “they assume a span of problems more natural to architects, urban planners, civil engineers, electronic technicians, and cultural anthropologists. This is not as pretentious as some critics have insisted. It is a legitimate extension of McLuhan’s remark about Pop Art when he said that it was an announcement that the entire environment was ready to become a work of art” (Burnham, 1968b).

![Figure 28](image)

**Figure 28** Evan Roth’s *Internet Cache Self Portrait, July 17, 2012* (Roth, 2012), Lambda print face mounted on acrylic, dibond backing, 187cmsx125cm.

Indeed, work like that shown at the 319 Scholes gallery in Brooklyn and on websites such as Furtherfield and Hyperallergic at one time or another feature work which draws on range of multimedia skills and content which has been scraped, sliced and captured mid-stream from the network. Evan Roth’s *Internet Cache Self Portrait, July 17, 2012* (see Figure 28) is an explicit example

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12 The frustration of content publishers has been the vulnerability of the mechanisms of delivery which they see as an open invitation for the exploitation of their rights. The relationship between the music industry and their audience during this period of change serves as an illustrative example of how dramatically cultural consumption was influenced by digital technology and network culture. On the one hand this change revealed how content delivery can be liberated by the consumer’s negotiation of a new paradigm of access while on the other hand it was demonstrative of how publishers, distributors and vendors grossly mismanaged that change. This is dealt with in far more detail than is needed here by Jaron Lanier in *I Am Not a Gadget* (Lanier, 2011), Caleb Kelly in *Cracked Media* (C. Kelly, 2009) and Clay Shirky’s blog post which draws some startling parables between the evolution of the MP3 and MOOC courses, *Napster, Udacity, and the Academy* (Shirky, 2012).
of the archive being activated and repurposed as visual collage in a physical gallery space. My own work *Scream 2.0* (Goodwin, 2011) follows a similar approach, the resulting image a digital mosaic construction made up entirely from 649 profile images from my friend list on Facebook. Both works represent a technique of accumulation and repatriation – a genre of user generated media arts practice – employing sophisticated software to organise and/or manipulate a database of existing content to construct a representation of the artist’s personal network identity. Yet *Scream 2.0* is also a reflection of the appropriation of identity by social media corporations and their sponsors in which an individual’s visual image – and the identity of their family and friends are filtered into the image stream of online advertising in an unregulated commercial validation of their products and services. Just as companies and public organisations increasingly use the web as a database for unsolicited personal content the images *Scream 2.0* repurposes have been taken from the many – without permission yet with the parameters of access that Facebook’s privacy settings allow – reconstituting them into a whole as a technological extension of the collective social contract. However, while this image exploits a supposedly private archive of Facebook profile pictures the purpose of the work is to contextualise an animated response to the overwhelming nature of the network stream. It is a reflection, a reaction, the gothic high-tech trauma exposed. It is about and of the network and it signals an anxiety that network content engenders through the accumulative power inherent in visual collage techniques such as this. One could imagine, this image as a counterpoint to so
many of the catastrophes both real and imagined that the dark euphoric moment has presented at the millennial gates and beyond. There are many visual images that would fulfil that role, none more so than the montage *Grand Finale* (Fahnestock, 2010) produced by McLean Fahnestock. A visual assemblage of all 134 space shuttle mission launches between 1981 and 2010 *Grand Finale* is the counterpoint to *Scream 2.0*. I first witnessed this work at the Los Angeles Science Museum that now houses the Space Shuttle Endeavour after it was decommissioned in 2010. In the context of its display in the museum Fahnestock’s video is a celebratory work of human ingenuity and an exquisite document of our innate wonder of human exploration – and conquering – of the skies. A Futurist document to be sure. However, upon viewing the work one realises that one shuttle didn’t make it into earth’s orbit. NASA’s 25th shuttle mission flight STS-51-L, the Challenger mission of 1986, is included in the mix and provides a dark gothic counterpoint to the rest of the imagery that is so triumphant both in their majestic visuals and their nostalgic procedural tone. But when the other 133 shuttles have successfully escaped the earth’s atmosphere and continue on their flight path up into the heavens, we realise that one square video frame remains, the remnants of one vehicle’s flight cabin spirals back towards the earth amidst a trail of billowing white smoke behind it. This not only constitutes a literal return to Earth but the reduction of the gaze from the stars to the impact zone below. *Scream 2.0* is watching.

![Figure #](still-frame-from-mclean-fahnestocks-grand-finale-fahnestock-2010)

**Figure #** Still frame from McLean Fahnestock’s *Grand Finale* (Fahnestock, 2010)

Much of the history associated with User Generated Content (UGC) in its purist form can be traced to the mid-1990s when net-art, website construction, cyber poetry, text and image posts
were the product of users with self-taught skills in basic coding and the rough edged tools of early open source software. These users were content creators who for the most part toiled away without any prior IT knowledge managing to manipulate and construct new media art without a template, without an uploader, without a Quick Guide, but solely with the assistance of the network itself. Oliia Liliana and Dragan Espenschied in their text, *The Digital Folklore Reader*, argue forcefully for the recognition of the iUser as cultural generator. Indeed much of the language used to define *innovation* and *cleverness* in online environments - “intelligence on the edge of the network, many-to-many communication, open source” - point back to this recent history of network cultural development and UGC (Lialina, Espenschied, & Buerger, 2009).

These techno-linguistic principles have similar connotations in the physical infrastructure of the Cyber City. The evolution of transmedia events flow directly from these early networked roots, these include many practices we still recognise, such as viral memes, technical blogs, software tutorials, localised news podcasts, indie games, video remix, streaming music, graphic novels and indie film trailers. All of these digital objects have outlets in the Cyber City enclave and many have been skilfully re-imagined and re-purposed by corporate marketing teams to author widescreen techno-futurist dreamscapes. As Peter Lunenfeld observed in the melding of the architectural and informational space in contemporary urban environments, we can observe the commercial extension of social media and UGC in a heightened media presence in the domestic space. Lunenfeld maps this evolution from its agrarian origins to the “telematic” living/working environment of the contemporary domestic home:

Most recently, the growth of telematic technologies has made possible, at least for some, the rebirth of the home as a site of production. The home was integrated with the farm for millennia, and was both the shelter and the workplace. In the industrial era, the home was at first either refuge from or flop to recover in after the toil of the day. Later, after the introduction of broadcast media, the home became more and more the centre of entertainment and consumption... Interestingly, for the telecommuting classes and home office workers, domestic architecture returns to its agrarian past: contemporary living spaces are being designed as both work and living spaces (Lunenfeld, 2000, p. 103).

In the ten years since Lunenfeld made this observation the domestic space has evolved to be a site of commercial transaction and layered media consumption and repatriation - domestic-leisure-work-consumer node. Meanwhile cinema is compositing a much more Dystopian mixed media narrative that is also finding fulfilment in the urban and domestic space via cinematic proxy - think *Bladerunner* (Ridley Scott, 1982), *AI* (Spielberg, 2001a), *Code 46* (Winterbottom, 2003) and *Her* (Jonze, 2013) – media saturated futures not unlike our present. These two conditions – the personal
media space and the corporate entertainment space are our own creation. As Maurizio Lazzarato has observed, we have allowed “the world to happen” in this way, we have defined the city as such and the iUser as its key protagonist has morphed into the seductive hyper reflexive shell (Lazzarato, 2003). This may well be the seed of the anxiety which underpins the gothic high-tech – the relationship between the technology, the space and the Cyber City’s many connotations. Our response to it, our documentation of it and our contribution to its signification are all very much a part of an evolving media omnipresence. While the metaphysics of the space denotes something far more mysterious – the undeterminable height, the lengthening shadows, the tunnels of wind, the perpetual vulnerability, the obscured horizon – the _endlessness_ of it all.

For the researcher in this space, the iUser’s interaction with media content and its many representations should not be solely perceived as engagement with technology as commodity but rather as Lialina, Espenschied, and Buerger have observed contributing to a dynamic living text. As Wendy Hui Kyong Chun has also identified: “[Software’s] ghostly interfaces embody—conceptually, metaphorically, virtually—a way to navigate our increasingly complex world,” (Chun, 2011). The aforementioned skill set of dexterity and creativity of the iUser then must be seen as the social media counterpoint to Virilio’s “lounge lizard” revealing themselves instead to be active participants in cultural exchange and the production of meaning. In this instance, the iUser is not a statistic, a data set, a demographic, an audience share, or click-count, but a representation of a greater whole–our very own personal namesake–through which the neo-gothic narrative is to be channelled.

Similarly the media artist who seeks to understand the dominant condition of the time should be equally comfortable in this space as observer, thief, creator and node. The aesthetics of computation, of communication, of speed and of virtuality need descriptors—signposts perhaps. Through new modes of media arts practice and experiments in visual communication design that people are developing a new aesthetic language via machine-like visions of the world. The interface, and therefore the computer, is coupled to this fantasy – as a tool and as a gateway – in its attempt to wrestle something real and tangible away from the Cyber City’s lengthening shadows. “In its unseeable, untouchable, and effectively unknowable nature, the computer represents the lens we need in order to think about the enormous and incomprehensible forces of social, economic, and political power that govern our lives” (Gollan, 2012).

As Katherine Hayles writes in her critique of Donna Harraway’s _Cyborg Manifesto_: “The characteristic dynamic of this formation is the penetration of computational processes not only into every aspect of biological, social, economic and political realms but also into the construction of reality itself, where ‘reality’ should be understood, as Haraway says in a different context, as ‘made’ but not necessarily ‘made up’” (Hayles, 2006). For Virilio this offers “relief” from the trauma of the
real while empowering the observer to become active participant, but similarly it can engender lethargy, anxiety and fear. For as Slavoj Žižek observes, “the Real which returns has the status of a(another) semblance: precisely because it is real, that is, an account of its traumatic/excessive character, we are unable to integrate it into (what we experience as) our reality, and are therefore compelled to experience it as a nightmarish apparition” (Žižek’s emphasis) (Žižek, 2002).

And so we return to Benjamin’s angel of history, wings unfurling and stretched Christ-like against the prevailing shockwaves of a century of incomprehensible horror and destruction. Amidst the crushing weight of evidence, unable to look around, but for a crooked neck bent incongruously towards the accumulating image streams below, the dark euphoria takes hold. The uncertainty begins.

///// The following chapter will examine the origins of this gothic temperament in the work of the Italian Futurists and their studies in synaesthesia and simultaneism. I will compare this to contemporary media artists Chris Cunningham, Aphex Twin and Amon Tobin whose work attempts to synthesise audio and video. I will relate this back to my own practice in the exploration of machine interruption and glitch art in one of my own works, Glytchalism. The advent of electricity and the commercial allure of electrification and the illuminated cityscape will also be explored to demonstrate Modernism’s fascination with artificial light and luminescence. Thomas Edison’s use of the moving image camera to first capture and then market the romance of electrification will be discussed as one of the first instances of the cinematic image being employed as a tool of techno-futurist propaganda.