

MAPS OF TIME: EXPLORING THE RHYTHMS OF A MEDIATED WORLD

Michaela French, Cambridge School of Art, Anglia Ruskin University, Cambridge, CB1 1PT, U.K. E-mail: Email: michaela.french@anglia.ac.uk

Alison Gazzard, London Knowledge Lab, Institute of Education, London, WC1N 3QS, U.K. E-mail: a.gazzard@ioe.ac.uk

Abstract

Rhythm is a fundamental part of the human experience of place. Traditional mapping, in its translation to the page, prioritises space over time, frequently removing the cyclical rhythms inherent in the experience of landscape in favour of a more linear approach. In the networked world we are constantly translating energies, marking places, and attempting to create interactions between body, space and time. By slowing down the inscription through real time events of environmental change, the experience of the viewer shifts, relating to the mapped space through a new lens. By exploring the layers of 'real-time' inherent within our daily lives we are able to re-frame the rhythms of the digital experience.

Keywords: map, rhythm, space, time, network, cycle, light

Our daily existence within networked environments is reliant on continuous information and data flow linked to the consistent communication between online systems. Mapping these data flows provides a means for communities to organise and share information and to generate specific languages. Our engagement with seductive high-speed

data worlds leads us to disregard the larger, slower and constant rhythms of global movement that underpin all the layers of our technologically mediated world. It is by discussing artworks that engage with both the networked city on a local scale, and the networked world on a global scale, that this paper begins to show how similar technologies can provide differing examples of the rhythms that these technologies create. Mapping enables clarification and navigation through the complex layers of time, space and the multiple worlds in which contemporary society exists and offers a starting point to this discussion by placing space, time and finally the display of rhythms across the networked world.

Maps reflect communities; they reflect the environment and thinking of those that create them. In order for a community to create and use a map, a shared or common language is necessary; this is a vital part of the mapping process. How the map is displayed, be it with Jerusalem at the centre, or via a pin placed on Google Maps, each map provides a sense of everyday knowledge that becomes translated by those using it into something meaningful. This representation alone only provides one part of the experience for the user. Maps change, ideas change, spaces change, and the printed map very quickly becomes an historic document. Spatial maps can depict a certain moment in time; however they cannot depict time itself, as a constantly changing concept.

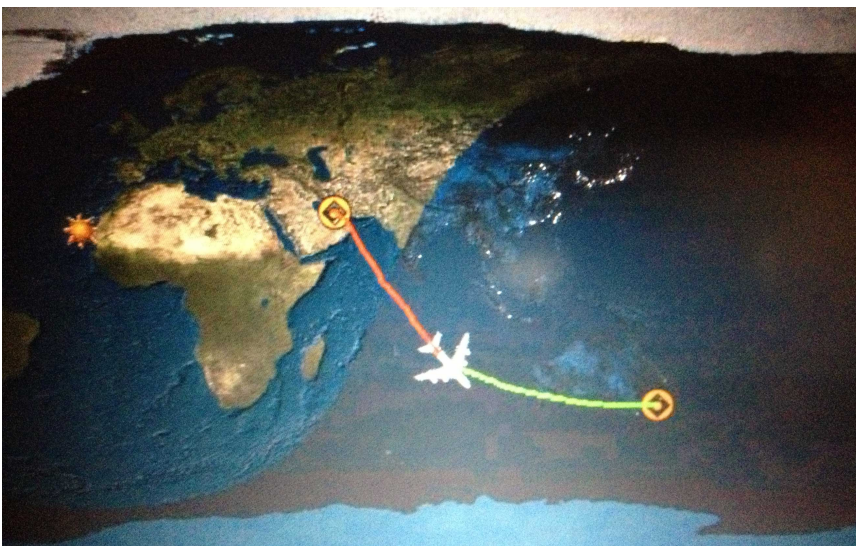
Therefore, in this instance time can be seen as separated from space. In the western world we display time through

clock time, through the turning of hands, the digits changing on the watch face, through calendars, timetables and schedules. In his discussions of *rhythm analysis*, Lefebvre notes, "the circular course of the hands on [traditional clock-faces and watches] is accompanied by a linear tick-tock" [1]. Traditional mapping, in its translation to the page, prioritises space over time. Although Rosenberg and Grafton address the notion of 'time maps' through the work of Eviatar Zerubavel and the attempted theorisation of time-lines, timetables and historical documents, these works face a similar problem of placing time at the heart of the equation, rather than space [2]. However, as with space, these types of times also become fixed, reflect communities, and enable a shared knowledge in order to function. Waiting for the bus in the UK, for example, becomes connected to a timetable that rarely changes, reflecting the order of that community. The recording and documenting of this material moves us towards a clock time, a fixed structure that remains linear in its approach. Lefebvre notes this distinction of linear time, stating that it "would come rather from social practice, therefore from human activity: the monotony of actions and of movements, imposed structures" [3]. The network (as a social practice) retains this fixed structure, yet enables some degree of change dependent on how it is used or manipulated.

Beyond the linear time that we can so often associate ourselves with, we can see another layer of time in the form of cyclical time, which "originate(s) in the cosmic, in nature: days, nights, seasons, the waves and tides of the sea, monthly cycles, etc" [4]. These 'other realities' seemingly beyond our comprehension function continuously to maintain the stability of the earth. The only way we can understand the integration of the linear and the cyclical in our own human perception is through what Lefebvre defines as the 'rhythm', the merging of space and time, and the 'expenditure of energy' that we come to recognise in trying to place the experience. Space and time combined create the rhythms of the everyday.

These rhythms become the human perception of cyclical time. However, when we start to formalise what this means, as we attempt to understand temporal relationships to space, these relationships shift towards a linear time with cyclical tendencies. Mapping both space and time simultaneously often forces this experience towards the linear, yet retains

Fig. 1. *The Lost Day* (Photo © Alison Gazzard and Michaela French)



the cyclical, repetitive rhythms that we start to recognize. It is these maps that are generated by the online network, by the connections between places, spaces and times that we so frequently now encounter in the everyday.

In her discussions of Virilio's work in relation to cyberspace, Chun discusses how "cyberspace has implemented a real time that is eradicating local spaces and times. This global one time threatens "a total loss of the bearings of the individual" and a "loss of control over reason," as the interval between image and subject disappears" [5]. However, instead of an eradication, it can be seen that cyberspace, or at least the network that maintains cyberspace, is instead creating a new layer of space and time, a new rhythm for those who input, explore and observe what is being created online. These rhythms can shift depending on what is being generated, and it is this shift that we are seeking to explore at the heart of this discussion.

Part of this paper was written in a space/time void. At 39000 feet above the earth on a journey from London to Sydney we travelled in the 'lost day'. Time became suspended, as all sense of space was lost in the air, and only momentarily captured again through glimpses at the onboard map. The realisation that space and time cannot, in many ways, be separated began to be highlighted during this experience. In a space that is perpetually daytime, represented by light pouring in through the windows, it is hard to locate oneself, as the natural rhythms of the earth become distorted through space-time travel. This same distortion starts to appear via the network as space and time shift and become updated in different ways.

Through our growing obsession with the network we can start to see differences in rhythms occurring. The network is a spatial/temporal medium connected to the numbered rhythms of download and upload speeds (with speed or velocity being distance over time, and the distance existing as a combination of spaces unknown). We are becoming increasingly aware of mapping ourselves through the representations of our avatars positions slowly pulsing on the smartphone map application. In many hybridised Google Map/Google Earth sites, such as Fourwhere.com, as well as in Christian Marc Schmidt's works *Invisible Cities* and *Pastiche*, space is reconstructed through networked data. This data can be seen to re-frame and re-shape our connections and our identities in our re-

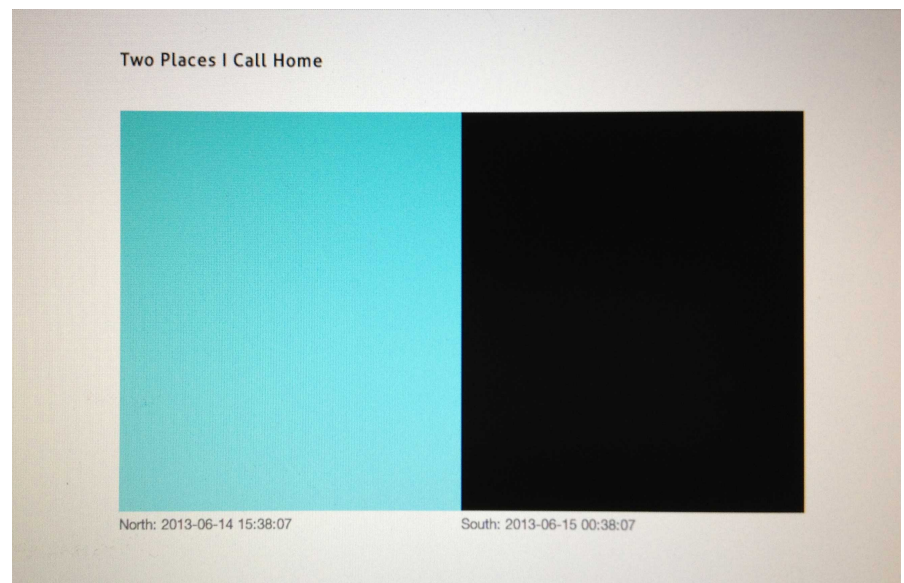


Fig. 2. *Two Places I Call Home* (<http://michaelafrench.com/portfolio/two-places-i-call-home>). (© Michaela French)

sponse to the work. These artifacts rely on a hub of activity, a continued, growing database of connections, all conceived via the network. Gordon and de Souza e Silva define this phenomenon as 'net locality', which "implies a ubiquity of networked information – a cultural approach to the web of information as intimately aligned with the perceptual realities of everyday life. We don't enter the web anymore; it is all around us" [6]. It is this ubiquitous, pervasive nature of online communications that sees us lose our sense of space and time as new rhythms are created. The constant updating of social media feeds creates new communities of shared languages through related followers; imposing locative information from these feeds onto a visual map then creates another shared language of experiences. The rhythms created by these interactions become technologically charged, and change with every update, as the spaces and times of the online world remain in a constant state of flux.

In the networked rhythms of social media feeds and locative data the daily rotation is often lost in favour of a technological rotation that continues across time zones in a linear sequence of updating and temporal shift. As Jones notes in his discussion of natural rhythms, "much ecological, social and economic life has circadian rhythms, driven by the daily rotation of the earth in relationship to the sun" [7]. Night becomes day becomes night, but it can also seem to remain at a constant, much like the 'lost day' of no

man's land as imposed on us by the plane journey. Although Christian Marc Schmidt's *Invisible Cities* piece is being generated in real-time, it does lend itself to a slowness of the city. Similarly, the city is also depicted at the extremes of being distorted and continually shaped by those existing in the technological layer on the streets. The city is no longer in its natural form, and we are forever reminded of the interference that it creates as we struggle to maintain a feedback loop between body and machine, machine and landscape.

For those of us that are technologically connected through computer screens, online access, mobile phone technologies with embedded GPS and location-aware applications, we can see how our relationships with time and space are shifting. These technologies create a desire for a speeding up of our lives, not for a slowing down. The constant buzz of notifications, e-mails, Google location messages, Foursquare check-ins, and Twitter replies adds to the 'always on', 'on demand' culture associated with the increasing ease of access we are believed to want to achieve.

This distortion of time made possible via the network occurs in applications such as Hyperlapse [8]. Here the user is able to time-lapse their own Google Street view journey, in order to preview routes that they might take. The journeys are speeded up or captured in bizarre sequences where we can warp between places (much like space in fictional videogame worlds). The distances in be-

tween become unrecognisable, the time of being in a place becomes fleeting rather than prolonged, and our ability to conceptualise how long people have been there starts to diminish. Jones recognises these moments through the work of Lefebvre, stating, “spaces (such as cities) have multiple types of temporal patterns and rhythms (linear, sequential, cyclical), and this is key to understanding the pulse(s) of life within them” [9]. The networked world exists as a layer within the other rhythms of the city, allowing for constant, updatable interactions in the true notion of cyberspace. It is these same networks that can be used to appreciate the local levels of rhythms occurring more naturally in the landscape.

Streetlight Storm by Katie Paterson is one such work attempting to do this. The piece utilises the network in order to reproduce lighting strikes across the world in a more localised setting, using the lights along Deal Pier in Kent, UK. In many ways this links to Jones’ writing about the rhythms of the tide and the moon, where he states, “Landscapes become timescapes (Adam, 1998) in which intersecting rhythms are key features” [10]. Paterson’s work clearly becomes a timescape, yet by coinciding with the space of Deal Pier, the rhythms are generated, much as they would be in a more localised lighting strike, drawn from live lightning storm sites as far away as the North Pole and North Africa. Cyclical rhythms emerge slowly, as the work emphasises the sporadic nature of the rhythms of worldly light. A return to more natural rhythms starts to take place, yet these can only be appreciated in short, fleeting moments of intensity, and not as a constant reminder of natural processes. However, the work starts to emphasise the real-time capabilities of the network to map something we see throughout our own lives. Here the weather takes the lead, rather than a constant humanised input, as the lights replicate parts of the world around us.

Although not what we would consider to be an everyday ‘map’, Paterson’s work does involve the mapping of data feeds and real-time interactions. The lights act as a new key to a visually mapped experience; one to be interpreted and re-interpreted by those experiencing the piece from different points of view. The on/off nature of the light recreates the rhythms of the natural storm, yet passersby only start to recognise the shared language offered by the mapped sequence as they become more and more

drawn into the experience and their perspectives start to shift to a new, slower way of life. As Gooley notes in his discussion of returning to more natural ways of navigating, “To understand the relationship between nature and direction at its purest and most fundamental level, the modern mind needs to be refreshed and to move away from the conventional ideas and imagery of direction. The natural navigator needs to restore the relationship between direction and the sky to its former loftier status, where direction is not simply found by looking to the sky but actually is what *is* seen in the sky” [11]. In *Streetlight Storm*, the light allows for a directional mapping, not only of the immediate surroundings, aiding boats along the pier, demarcating water and wood, but also a mapping of natural occurrences across the world and bringing them into one place.

In much the same way that Paterson’s work connects with light, *Two Places I Call Home* by Michaela French is a light-based artwork which seeks to redress the loss of connection to cyclical rhythm through a synthesis of nature, art and technology. Instead of focusing on sporadic natural events, French’s artwork maps constant global rhythms through the real-time observation of changes in light. The relatively slow rate of change in the artwork offers an insight into the immensity of global scale and acts as a counterpoint to the fixation with speed we encounter in contemporary networked life.

Two Places I Call Home seeks to collapse the vast distance between two distinct locations on opposite sides of the globe. Real-time measurements of light are collected from two specific locations: one in the northern and one in the southern hemisphere. This light data is translated into a visual form to create a single oscillating artwork which maps cyclical rhythms of global rotation in real-time, as day moves to night on one side of the earth and night moves to day on the other. French’s work is arguably illustrative of Merleau-Ponty’s proposal that it is no longer a “question of speaking of space and light; the question is to make space and light, which are *there*, speak to us” [12]. *Two Places I Call Home* seeks to address this question by enabling a dialogue in which universal light is able to speak to its audience. As the audience observes the changes in light their experience of time slows down, and an increased awareness of the larger constant rhythms of global

change begin to emerge. The complexities, desire, speed and illusion of the linear mediated world fall away as the constancy of the cyclical rhythm comes to light.

French’s piece enables light to be mapped at its own pace and in its own rhythm. This rhythm is the inverse to those of our mediated world, and enables a renewed sense of the value of our connection to the global cycle. Light navigates us back to the core rhythms of life, it peels back the layers of linear time and places us firmly in a grounded experience of the natural world. According to Grandy, “light is a throwback to the first moment of light, ... its indifference to space and time is aboriginal, and, it would seem, timelessly operative” [13]. Through mapping changes in light, *Two Places I Call Home* brings both this timelessness, and also our own integrated relationship with light, to the fore. Grandy goes on to suggest that “light, while informative of the world, is simultaneously constitutive of our own nature ... light informs or shapes our knowing faculties while informing us of the world” [14]. This light-based artwork is intended to increase receptivity to new ways of seeing the familiar and to generate expansion of vision, for in observing light, we observe ourselves. “Light is bound up in truths that transcend space and time, and as light-infused beings, so are we” [15].

Two Places I Call Home acknowledges the value of our mediated, networked world, and brings the universal and the individual together by visually mapping cyclical time within a linear framework. The individual is able to observe changing global rhythms through the common language of the linear network. Moreover, breaking the conventions of this language by connecting the user to cyclical time draws on what Deikman terms “a de-habituating or “de-automatizing” of perceptual sensibilities, which leads to perceptual expansion” [16]. This expansion encourages the individual to re-observe the linear framework of the mediated world within the broader context of a renewed sense of real-world cyclical rhythms. The artwork provides a counterpoint to the habitual, and reveals the extraordinary that lies latent within everyday experience, both mediated and real.

Preliminary responses to *Two Places I Call Home* suggest that the observer’s awareness of cyclical changes in light

in the real-world environment were more pronounced after spending time observing the slow change of light within the mediated environment. By mapping light and cyclical time within the linear framework of the networked environment, *Two Places I Call Home* bridges the space between the technologically mediated experience and the authentic real world experience, and seeks to connect the individual more genuinely within both worlds.

By examining different examples of rhythms as mapped by the networked environment, we can see how similar technologies can present the natural world in various ways. Instead of focusing only on the frequent connections of check-ins and consistently changing location-based data, we can also use the network to move beyond the cluttered layers of our technologically mediated world, and instead evoke a renewed sense of connection to place and experience by revealing the slowness of the underlying rhythms of global change.

References and Notes

1. Henri Lefebvre, *rhythmanalysis* (London, U.K.: Continuum, 2004)
2. Daniel Rosenberg and Anthony Grafton, *Cartographies of Time* (New York, U.S.A: Princeton Architectural Press, 2010)
3. Henri Lefebvre, *rhythmanalysis* (London, U.K.: Continuum, 2004)
4. Henri Lefebvre, *rhythmanalysis* (London, U.K.: Continuum, 2004)
5. Wendy Hui Kyong Chun, 'The Enduring Ephemeral, or The Future is a Memory', in Erkki Huhtamo and Jussi Parikka (eds.), *Media Archaeology: approaches, applications, and implications* (Berkeley, U.S.A: University of California Press, 2011)
6. Eric Gordon and Adriana de Souza e Silva, *Net Locality: why location matters in a networked world* (London, U.K.: Wiley-Blackwell, 2011)
7. Owain Jones, 'The Breath of the Moon': The Rhythmic and Affective Time-spaces of UK Tides', in Tim Endesor (ed.), *Geographies of Rhythm* (London, U.K: Ashgate, 2010)
8. <http://www.teehanlax.com/labs/hyperlapse/>
9. Owain Jones, 'The Breath of the Moon: The Rhythmic and Affective Time-spaces of UK Tides', in Tim Endesor (ed.), *Geographies of Rhythm* (London, U.K: Ashgate, 2010)
10. Owain Jones, 'The Breath of the Moon: The Rhythmic and Affective Time-spaces of UK Tides', in Tim Endesor (ed.), *Geographies of Rhythm* (London, U.K: Ashgate, 2010)
11. Tristan Gooley, *The Natural Navigator* (London, U.K: Virgin Books, 2010)
12. Maurice Merleau-Ponty (1964). *The Primacy of Perception* (Chicago, U.S.A: Northwestern University Press, 1964)
13. David Grandy, *The Speed of Light: Constancy and Cosmos* (Indiana, U.S.A: Indiana University Press. 2009)
14. David Grandy, *The Speed of Light: Constancy and Cosmos* (Indiana, U.S.A: Indiana University Press. 2009)
15. David Grandy, *The Speed of Light: Constancy and Cosmos* (Indiana, U.S.A: Indiana University Press. 2009)
16. Arthur Deikman, 'De-automatization & Mystical Experience', in Charles. T. Tart (ed.), *Altered States of Consciousness* (New York, USA: Harper Collins, 1990)