CHAPTER 40

SPACED AND TIMED IN THE NEW YORK MARATHON

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Introduction

We inhabit a world of near ubiquitous information and communications technology (ICT) presence. Mobile communication networks now have a carrying capacity (bandwidth) to allow user-friendly communication tools (software) to transmit information rich (e.g. text and imagery) messages in real-time, across the globe. As consumers of the bandwidth capacity on offer, we are being presented with many additional means of using this possibility to contact each other. Combined advances in ICT and software functionality produce new types of information (e.g. spatial location) that might be 'valuable' to receive, and thus worthwhile to pay to transmit. Our telephones are no longer just phones, but advanced microcomputers with all the modifiable functionality which that implies (via hosted software applications or 'Apps.'). Mobile devices offer new opportunities to communicate new types of information from new situations to new 'audiences' or 'constituencies'. ICT infrastructures (e.g. cellular networks) allow trans-global communication instantly and relatively cheaply. It is argued that when accompanied by mobile devices running such software, they are creating personal 'coded spaces' (Kitchin and Dodge, 2011) that are significantly modifying how interpersonal contact, or lack of it, may be interpreted. In this essay I detail my experience of one such coded space, the New York City (NYC) Marathon, and discuss some of the implications of communications software infiltration into this and similar situations.

Running the NYC Marathon, 2011

On the 6th of November 2011 I competed in the New York City (NYC) Marathon. Competed might be a bit of an exaggeration. I took part in the event, running as best I could along the 26.2 mile course through five New York boroughs (Staten Island, Brooklyn, Queens, The Bronx and Manhattan). I was accompanied by 47,000-odd other runners and walkers. As with the vast majority of 'competitors' involved, the only competition I had was with the distance and 'the clock'. Completion of the NYC Marathon was a long held desire, on my 'bucket list'. The arbitrary marathon distance of 26.2 miles is talismanic, and for many is the ultimate challenge of their endurance. It truly is an endurance event, and few technological advances have or will diminish the extreme physical effort required to complete the distance. It is therefore likely to remain and even increase in popularity as a motivational tool. When I decided to undertake the challenge in April 2011, it was also intended as

a way to encourage my perseverance with an extended training programme, which it proved to be.

As a physically extreme task however, attempting but failing to complete the marathon is always a distinct possibility, no matter how much training is undertaken. This may happen for many reasons on the day, including injury, illness or just exhaustion. As an amateur athlete, bringing oneself to the starting line in optimal condition is not easy. The incorporation of trans-Atlantic travel and a couple of day's hotel living in the immediate pre-race period is also not an ideal way to prepare! As the strain imposed upon the body is so extreme during the event, the physical well-being of participants is everyone's primary concern. This includes the event organisers and the constituency of spectators concerned about any participant in the event.

This was to be my first marathon attempt in six years, which should really have caused me more concern than it did. My previous attempt in 2005 had made me and my family (in attendance that day) very aware of the difficulties associated with completing the 26.2 mile marathon distance. This time around, I travelled to the event without those spectators. However many people were aware of my participation including family, friends and colleagues who had all kindly donated money to a fundraising effort.

Coded spaces in the Marathon

Coded spaces (Kitchin and Dodge, 2011) are inventions or transductions (Mackenzie, 2003) of our inhabited spaces due to the use of, but not wholly functionally determined by, software information processing. Mass public participation running events, of which the NYC marathon is a long standing and one of the most popular examples, function in their current form with the use of automated 'chip' timing of each participant's progress along the course. Each participant's numbered bib carries an ultra-lightweight machine-readable device which is automatically scanned and logged at designated locations along the route. These 'waypoints' will critically include the start/finish lines, but also in such major events each mile marker and other significant distances e.g. 40k (see Fig 1). These recorded times at each distance are known as 'split times'.

Due to this extensive use of ICT and computer processed code I'd argue that the events themselves are recognisably 'coded spaces'. Without such extensive use of automated surveillance to allow in excess of 45,000 participants to run the NYC marathon in such a streamlined, informed and efficient manner, a 'marathon' could possibly still happen. However it would be a radically transformed and practically unrecognisable version of the same event. Thus it is debatable if the modern 'major' marathon is in fact an example of code/space (Kitchin and Dodge, 2011), invented and defined by the essential formative role of said software.

My personal 'coded space'

Before departing for New York, I had used an internet-based charity fundraising facility to let supporters of my marathon attempt know about the possibility of tracking my progress through the race, if so desired. To this end, just before the beginning of the race, I registered as a 'runner' on a mobile phone App. The App. requested my permission to use the phone's built-in GPS receiver to log my position. The positional signal was then to be relayed via the App.'s communication channel with a data server to anyone with the App. (for a small charge) and knowledge of my bib number, or with access to a web browser (a free service).

Thus, although unconfirmed at the time, I was conscious that an 'audience' might be aware of my location from that time on. I was also unaware if any or in what form (constant or intermittent updates) information was being transmitted or received. I interpreted the App. initiation instructions as indicating that only my split-times (arrival times at each mile marker along the course) were being transmitted to any 'audience' This was indeed true, but not only that. My spatial location was actually being semi-continuously updated on the spectator's version of the App. and the race website. The App. interface was map-based, with my position indicated by an icon which moved gradually along the marathon route. The location update occurred after a short lag, estimated at about <10mins, based on the arrival time of messages following my eventual completion of the event.

Connectivity as a motivational tool

The App. was presumably designed as a means by which course-side spectators could increase their participation in, and enjoyment of, the race. A large proportion of spectators are present to offer support to individuals or groups taking part, as well as supporting all participants and witnessing the spectacle. However in a field of circa 47,000 athletes it is very easy for spectators to miss an individual or group as they pass. With both participant and spectator using the App. however, arrival times at any location can be better estimated and anyone's imminent arrival anticipated.

However, as a runner, the technology also worked unexpectedly as a motivational tool during the event. I became increasingly aware that those monitoring my progress online, whilst not based physically in New York, would also be deriving information from the signal. What I inferred was that they might be interpreting what my position, or progress speed, might imply in terms of my physical well-being. An increase in 'split times' could be read as a signal of problems I was having, such as injury or exhaustion. Thus, achieving each mile marker to alleviate such concern became a new and additional motivation to maintain a constant pace; despite the difficulties I increasingly had to do so! This was over and beyond, and to some degree replaced, the usual motivation of achieving a desired race time; especially when that time became obviously unachievable. Once any ability to run at a desired pace was no longer possible, the motivation to reach the next mile marker in a reasonably good time i.e. consistently became about sending a message via this medium of 'all is well, still moving, thus still OK, healthy and not suffering too much'. It became as much about this as it was to reduce the distance to the finish.

Fortunately, I had done enough training to be able to maintain a reasonable (if not expected) pace, and a post-event analysis of split times (recorded on a pedometer which I also carried) showed a fairly consistent pattern. However at several times I was forced to slow to walking pace, something that I was very conscious might raise alarm in those observing the split times, and so something I worked especially hard to avoid for this reason also. In my pervious marathon attempt in 2005, a lack of sufficient training had led to much greater difficulties. Many of those I was concerned might be monitoring my progress had witnessed these at first hand, and it was a reluctance to evoke those memories that helped motivate me to begin running again, and make the next waypoint.

Despite advising my family and friends of an intention to use the tracking system, during the event I was still unsure who, if anyone was actually monitoring my progress. However the possibility of being 'watched' was enough to provide the motivation to try to perform in the way described (and for those reasons) for an 'audience'. Thus the positional broadcast was a self inflicted 'Big Brother' (which in reality was my little brother!). The technology did work, and an audience was in fact 'watching'. As text messages of congratulations indicated, I found at the finish line that I had been far from the (physically) solo runner, inhabiting the isolated space I was used to running within on the streets of Dublin or along the banks of the Royal Canal.

I had been accompanied by many concerned family and friends, with the technological aid of an 'eye in the sky'. I was later told in a rather poignant statement by my mother that 'your father took every breath with you'. I would argue that the connection between myself and my constituency was transformed, deepened and strengthened by transduction of my (and their spaces) into 'coded spaces' that respectively transmitted and received real-time spatial information.

Human connectivity and telecommunications

New possibilities in human connectivity across space are offered by modern telecommunications. A revolution in technological availability has standardised the inclusion of GPS within handheld personal phones. This allows the streaming of positional data to other devices connected and programmed to listen. As before, all runners in a marathon or travellers around the globe are connected by multiple invisible strands to all corners of the world. Indeed this international aspect to the entry field to the NYC Marathon is something which characterises the event.

However by carrying a GPS enabled phone I was voluntarily implanted with a personal tracking device. I was mapped in an Orwellian 'Big Brother' way, linked by new, stronger, digital, strands to my 'audience'. I had agreed to temporarily become a cyborg, effectively coupled to a device that was augmenting my functionality. My personal connectivity to family and friends took on a new digital reality, invisible bonds turned into a communication stream. Mapping my spatial location effectively fed a virtual CCTV camera. An audience ran with me along the streets and avenues of New York's boroughs, vicariously seeing the city, imagining the streets as I would be seeing them. As I also suspected it might, it also worked effectively as a health status report to those concerned for me. My physical condition was being interpreted from my speed and particularly the difference in times I was taking to complete each mile 'split'.

Postcards from the Edge: Spatial location as a virtual surrogate of well being

Through the marathon App. described here, spectators are now involved in new ways through a detailed awareness of runner location. The software-enabled runners are 'prosumers' (Ritzer and Jurgenson, 2010), using the service provided but also producing content that can be 'sold' on in the form of App. content or as a vehicle for associated advertising. They are motivated by the knowledge that a concerned 'audience' of supporters may be in continuous awareness of progress being made. The signal of spatial location, as transmitted over social networks or eventspecific applications is thus effectively an accelerated, high frequency version of the postcard.

The near real-time postcard is, by its real-time nature, now also enabled or loaded with new interpretative levels. In the marathon, those in the 'audience' concerned with the well-being of a participant now have a way of obtaining pseudo-real-time location updates which may be interpreted as a measure of health status or 'well being'. As the objective in such an event is to maintain a constant pace throughout, deviation away from an established progress rate may signal trouble. For instance, imagine what might be suspected if the information feed ceased entirely? The effective distance of 'concern' (c.f. Gregory and the 'distance of death', pers comm. 2011) between observer and the observed has decreased to the distance from the observer to the screen. The new levels of contact created by the marathon App. are analogous to the intimacy generated by immersive video games, involving the audience vicariously in the efforts of those completing the endurance event.

Similarly, but not generating similar levels of immediate concern perhaps, the intermittent detailing of journeys via updates to social networking

platforms (e.g. Facebook, Twitter) provides similar mechanisms as the marathon App. onto which physical location and by inference, physical status, can be broadcast. It is the act of emitting a spatial signal, if part of an expected series of location updates particularly, that may be transformed into a signal of health, safety and achievement. For some audiences (e.g. family and friends) this the most important information sought, not whether the location of information transmission is actually worth visiting. Problems could be signalled by an unexpected change in location, or a failure to update information after an expected period or journey.

During the marathon, my spatial location was translated by the recipients of this information into a signal which acted as a stimulus for a set of human emotions e.g. concern. However I would also argue more widely that the potential for quasi-continuous information updates may in itself be a cause of concern. In this case, having a desire to know of current 'status' is present solely because it is possible to obtain, not because there is inherent danger or problems expected. For those waiting on news of travelling family or friends, before the widespread penetration of App.enabled status updates, waiting for a postcard or a phone call once a week often at a scheduled time were possibly the only opportunities for such concerns to arise. Thus before the 'personal coded space' era, anxiety over the status of others was not something that could be expressed or assuaged by action, as it can via the network of connectivity provided by modern ICT.

Discussion: The marathon as a performance space

During the marathon, my space comprised my route and the totality of all other environmental variables that assailed me. In addition, I essentially created another coded space, the one I inhabited whilst being tracked by my phone's GPS signal. My space was an event, something I was creating as I moved along; just as the marathon event itself created the (strangely) unique space New York was for that day (cf Doel, 1999). My audience's spaces were also transmuted into coded spaces, for it was web-hosted software that allowed them to 'observe' me during the race. This audience space also became part of my space during the event, as I felt they were 'there'. The space that was my NYC was occupied in some part by them also. My audience were experiencing NYC vicariously, invited onto the streets by my 'performance' (Rose, 1999).

As in combat simulation video games the increasingly accurate rendering of digital landscapes promotes a reduction in the distance between player and game, creating intimacy and an immersion in the virtual reality. The military personnel controlling remotely operated armed drones on today's battlefields achieve an intimacy with the physically very distant that is traumatically real (Gregory, pers comm. 2011). The visibility of targeting in military operations has changed and moved from the blind to the visible across a modified space, due to sensor and communication networks. Similarly, spatial information signals allowed my 'audience' to vicariously share in my experiences, to position themselves closer to me. In their case, separation became shortened somewhat to the distance of the screen onto which my location was appearing. For the subject of voluntary tracking (i.e. the marathon participant) the audience is also an intimate mental companion. Separation from the audience is not metaphysically measurable but comprises an almost haunting ethereal immediacy.

Coded spaces and their modification of space

As exemplified by this example, the world is increasingly populated, and I would ague our experience of it modified, by 'coded spaces' (Kitchin and Dodge, 2011). Cellular telecommunication networks facilitate increasingly diverse formats of digital communication between connected devices. High penetration rates of mass produced 'smartphones' also offer rich data-transfer services to all sections of society relatively cheaply. The variety of communication tools (e.g. SMS and Multimedia messaging, social networking) increase our usage and expectations of the ubiquity and quality of on-demand, rapid communication with other mobile and non-mobile devices e.g. PCs.

Practically all places seem within the reach of a cellular/mobile phone network. The high levels of market penetration by such phones and the almost complete coverage of space by the information transmission network permit the expectation of never falling 'out of contact'. This can now redefine 'wilderness' as a place beyond network reach. According to an off-road vehicle manufacturer's marketing campaign in 2011, finding such a location is the justification for exploring 'off-road'. These spaces are now only found in the most hard to reach, secluded locations. The goal of the 'off-road' exploration is to thus to locate a refuge away from invasive modern communication streams. This, according to the advertisement brings the desired opportunity to peacefully spend time with ones' immediate group (also in the spacious vehicle alongside voluminous camping gear of course!). Only when outside network coverage can peace and tranquillity be assured i.e. without any interruption.

What does this mean in terms human independence and quality of life? Is it of benefit to our 'well-being' to reduce the number of locations outside the possibility of unwanted contact, because of a cellular network? For example, such a world of potentially 'perpetual contact' (Katz and Aakhus, 2002) removes the possibility of 'quiet' time from those of whom constant connectivity is being demanded e.g. travelling employees. The hermit's goal of being deliberately and unalterably 'unreachable' due to geographic isolation is rapidly becoming one that is harder to achieve. It is a concept relegated to a pre-networked world. However, providing a network does not automatically require contact to be availed of; after all, any telephone, 'smart' or not, can be switched off. However for the current generation, connectivity may now exist as an expectation in a world experience that has known nothing else. Constant connectivity does not need to be availed of; but habit will probably dictate that it is. To current and future generations in particular it denies an opportunity to experience places and events independently of others. It possibly precludes opportunities to experience isolation and decision making without recourse to the viewpoint of others, thus forgoing a significant maturation process and part of the long-term reward of travel.

Coding concern

However, over an above these dystopian opinions, I argue that the mere expectation of connectivity and 'contactability' has a meaning that is independent of any actual contact. Critically, the ubiquity of possible contact mechanisms and media also now mean that contact is 'expected'. This then raises the issue of how to interpret periods of non-contact. Is lack of contact a signal in itself, or in some situations interpretable as an indication of distress? This inference will be especially relevant when undertaking a relatively dangerous pursuit e.g. a marathon or when located in an apparently hazardous location.

Major changes in global interpersonal connectivity and its meaning are being facilitated by information and communications technology (ICT) and the software applications being written to make use of the infrastructure and our access to it. My experiences of using GPS during participation in the 2011 New York City (NYC) marathon exemplifies how ICT and its attendant software applications are shrinking the experiential distance between two personally connected groups of event participants (runners and supporters). As a technology the GPS enabled personal device is shortening the distance between an audience and the spectacle (the runner). The distance between 'connected' parties is now no more than the distance to the screen onto which the spatial location information is cast. The distance between runner and spectator is metaphysically reduced, as has been the distance between soldier and target through the use of remotely operated, visually guided armaments (Gregory, 2011). The sense of contact and participation in the journey being undertaken is heightened in the observer. The technology enables a new level of concern to be created. The possibility of receiving more information creates new desires to obtain this information.

It is proposed that contact between the observer and the observed in the form of spatial position updates may be translated into information about physical 'well being'. In a wider context, it is considered that ICT is revolutionising both the means and meaning of contact between migratory individuals and a connected 'audience' or concerned constituency. In any situations where physical well-being might be a cause for concern, use of the traveller's coded space is increasingly a means of assessing their well being.

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