

The White City: A Participatory Sensing Expedition

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The White City forms a guidebook or map towards a participatory sensing expedition through the streets of Rhydyfelin, a suburb of Pontypridd in the South Wales Valleys.

The name is a corruption of Rhyd-y-Velin, or Ford of the Mill. The Mill stood on the east side of the Taav River, opposite the Treforest T.V.R. Station. The Mill was one night burnt to the ground and old people who witnessed the conflagration state that the flames leaped across the river. The place was never rebuilt.

Participatory sensing deploys mobile devices as interactive sensor networks. The mobile handset becomes a sensor node and location-aware data collection instrument to enable grass-roots groups and communities to track and act. For me, it's a method of heightened sensory awareness when walking through environments. On habitual routines, such as catching the bus to work, I found that the more that attention was paid to tiny details in the lived environment, the more the locality became strange. I made notes on my mobile phone, treating it as a mobile writing device, for writing on the move, writing with the thumbs.

Jackdaw pecks grass. Premier carrier. Bin without bag a black metal cage. Squashed brownplastic Blackthorn flaggon inside. Lucy points at the obelisk as I wheel the buggy around it reading the inscription. We sit on rust-rashed green bench. Nicky keyed into paint letters furred brown.

One of his first obelisks appeared in front of Castle House and bore his initials, along with those of his brother Henry, and was dated 1844. Around the base reads, 'I am a model of the only obelisk now standing at Heliopolis on of the scriptures erected by Osortsen – the earliest of Pharaohs.' Price and Crawshay's admiration for ancient Egypt, with its sun worship as with Druidry, was identified here. Other obelisks appeared in Treforest, one of which

That bin's smelling again. Smelling all over the place it is. You can't get away from it. Disgusting.

Dandelion leaves bush through paving. Carling Strongbow Carlsberg Sprite. Coolfresh riversmell. Faint hush-trickle between huff and clang of cars. A screech, look up, heron wings lollop grey behind sycamore leaves, longbeak trailing dangly legs down Taff.

Participatory sensing makes use of ephemeral glue, the mapping and sharing of local knowledge and sensed information through social networks and chance interactions. The White City incorporates these ad-hoc encounters of the tourist into the more grounded relationships of neighbourhood and community. As we go about everyday activities, whenever we wish to add new content we do so using our mobile phones. A book becomes a medial platform open to data aggregation from multiple data streams, local history books, overheard conversations, graffiti.

We moved to the White City in December 2012, a few days before Christmas, when Lucy was six months old. As Hannah picked up the keys from the Sales Office, I waited with the pushchair in the reception area of the show house. On the wall was a blown up photograph of a young couple in a kitchen, wood effect table, loungewear, newspaper, cafetiere, patio doors onto sunlit garden. In the middle of the room was a miniature model, tiny lego houses with stickers on the roofs to show which ones had sold, winding roads of culs-de-sac, little plastic trees. I was fascinated by these images of a lifestyle we were apparently being sold - home as commodity – as if, as Guy Debord said, everything that was directly lived had moved away into a representation. The miniature model would precede the city itself, which was still in construction, the roads unsurfaced, the trees as yet unplanted.

Toast and dogs waft out of fan vent. Sizzle of scrapes from building site. Orange lights rotate. Pigeon whoop. Girder twang. Jackdaws.

Opposite Dyffryn farm and above Mr Churchill's smallholding stood the Round House. Vacated in 1937, the circular design is often said to be a device to stop housewives gossiping to one another on the doorstep, but a more plausible explanation is that Francis had a wager with his brother as to who could build eight houses on the smaller plot of land, and he obviously won this bet by using "high-

White cylinder tower. Remix mortar ltd. Plastic wrapped cubes of concrete. H+H celcon blocks. Cuddy yellow iron scoops. Tank tyres. Puddled dirt dune tundra. Luminous yellow and orange waistcoats white hats peep above crater rim. Reversing bleeps. Clank of metal on rock. Crunch of earth. Stacks of pipes and tubes. A bit of half-built wall.

A gigantic stonehenge type Trilithon served as the entrance to those eight uniquely built houses, each marked with one of the eight points of the compass. The cap-stone had been struck by lightning and lay in halves between the uprights. The courtyard had a tree in its middle which was claimed to assist drainage. The walls of the central core contained all eight chimneys. Spiral staircases supported the four storeys. The completed houses were leased to the Ancient Druids Friendly Society.

Like we don't want to mess him round. But he was like oh i feel terrible now. And I said he said. Well I don't know if I can now. They'd go on their own. But they need them there with them. Yeah supportive.

-rise technology in advance of its time. His opponent's houses still stand on Dyffryn Road, but the Round Houses were demolished in 1938.

Out of the living room window you could see the college where I had been teaching until it closed five months previously. They had just begun to pull it down in order to build further houses. From the living room settee I could look out and see the third storey window of the room where I had been teaching. Our house was built on the site of an old Welsh-language school. They had begun pulling the school down shortly after I started working at the college and from the classroom window I'd watched the new houses springing up. Just after we moved in, I looked at the GPS map on my mobile phone while sitting on the settee in the living room and it still showed the old school building, and there I was, a pulsing blue dot in some classroom or corridor. The heterotopia was beginning to function at full capacity. We had arrived at a slice in time. At night on the living room settee, we'd watch flashlights flicker in the college windows

as hardhatted ghosts floated along the deserted corridors, while phantom pupils of the old Welsh school wandered the corridors of our living room.

The city can be browsed from outside its spatial context through the mapping interface of the book. The specific location to which content relates creates a pocket. Pockets link together to form pocket-sequences called threads. We pick up a thread and follow it through the city, consuming content tagged to locations like graffiti. Thread visualisations overlaid on maps make associations to the city's edges, paths, nodes, landmarks and their relational properties. The architecture of the book develops as a geographically constrained series of systematic data-gathering operations.

But Francis was considered eccentric even at an early age and was something of a worry to his father.

Man in hi-vis vest limps into Spar. Woman at cashpoint in pink fluorescent vest. Grey trousers tan loafers lilac shirt hanging out carrying a rolled up newspaper. Cashpoint doops.

Francis was not alone in his eccentric behaviour. Probably the best known eccentric in Pontypridd was Dr William Price. The celebrated druid and pioneer of cremation spent much of his life in and around Trefforest, and his close friendship with the Crawshays undoubtedly influenced Francis' own commitment to the druidic cult.

Thus prepared we were sent out into the city to follow a series of ambiguous clues. As we travelled through the streets we were invited to engage in various activities that increasingly demanded interaction with our surroundings. One day shortly after moving to the White City we were pushing the buggy around a cul-de-sac when a car stopped and a woman asked for directions to Cypress Street. All streets in the city are named after trees: Cypress, Chestnut, Sycamore, Lime, Holly, Elm, Plane, Oak, Poplar, Ash, Willow, Acacia, Laburnum, Cedar. We tried to indicate with vague hand gestures, sort of up there behind here over there somewhere, but after the lady had driven on, I realised how little sense of direction I had in this place. I remembered that Frederic Jameson had described the alienated city as a space in which we are unable to map either our own positions or the urban totality. We had only moved from one side of town to another but I had lost all orientation. It was like I was walking on a map where all the names had been tippexed out.

One of the principal Druidic emblems of the sacred Galley, loaded with its cargo of embryotic essence, was an egg, commonly called a mundane egg. This was worn by the Archon or Archdruid, suspended from his neck in front. Those who placed the savage

Green fleece grey joggers slowwalks fagmouthed reading Mirror. Cashpoint sucks card with a flick. Flyers and handnotes stuck in grilled window. Oh never. Kings business transfer all enquiries. But uh I had a feeling I had a feeling that uh they hadn't paid me. No mileage anything like.

the face of the deep.” The ancestors of mankind came to the conclusion that there is, beyond the ocean, a mysterious country where the sap itself is manufactured by a divine Chemist (“Meryllt”*)).

* Splitter of Essence.

Mobile experiences in public settings such as city streets create new opportunities for interweaving the past with the present. The White City blurs the boundary, marking presence as part of the living continuity of the city as well as that which has passed out of existence and memory.

We leave annotations in places for others to feel our presence as an asynchronous inhabitation, juxtaposing data about the past conditions of the environment with sensory information gathered from its present. Presence-based authentication based on time spent in a place is enabled by network-attested spacetime context. Familiar strangers a recurring physical proximity of crowded lives.

The next day, I visited the local library to look at some local history books and old ordnance survey maps. I found out that ‘the White City’ was a name once used to describe the area around Lime Street, Holly Street, Elm Street, Plane Street and Oak Street. It is unclear why the area was known by this name. It seemed incongruous to refer to this small post-industrial suburb as a city. My process of reterritorialisation was accompanied by further deterritorialisation, familiarisation just led to greater defamiliarisation, a kind of alienation effect as the everyday was put into contact with its radical other, the present superimposed with the eradicated past. I was not so much rooting myself as losing myself even further amidst the palimpsestic city.

Each of the many houses at the White City still houses some of the first occupiers, whose names, together with some of many other older names include: Watkins at Lime Street; Arnold, Grinter, Price, Jones and Chinnock at Holly Street; Richard, Osman, Davies, Ware, Mitchell and Sparkes at Elm Street; Jones, Arnold, Parsells and Owen at Plane Street; and Tilke, Langdon, Baldwin, Williams and Hooper at Oak Street. Mr Collins, Mr Burt and Mr Maizey are some who have had businesses in Elm Street.

Green chalk on pavement outside Treharne flats. Ellie+Khia. Three women come out of Pinewood Avenue eating hot dogs, paper napkin wrapped. Mouths full laughing: the words 'sausage', 'mustard'. They head up Dynea Road. Sticker in rear window: Amnesia Ibiza.

In Victorian times Dynea was spelt Denia (attractive location) and the area was a favourite spot for picnics and rambles. Up to a hundred people would sit on cross-planks on a boat destined for Dynea to enjoy the views and walks over the wooded hillsides below Mynydd Chantelle l'vz S.V.S 4eva. Laura is a slag. Kylie + Kayley waz ere. Shakanawar Club. Fatboi is a cunt. If you want sex call. Martin is lush + sexy. Callum is a prick. Plant food fucked me up! Scuba. Gazza waz ere lvin mezzy 2k6. Disco nip. Monkeyed! Shagaholics. I hate fat people. KP is a whore. Kurt D is mint. James. Katie. Hannah. Lauren. Jaydi. Daniel. Hayley. Jess. Shane. Mikey. Sophie. Megan. Tamala. Jamie. Demie. Molly. Jade. Shauna. Paige. Jordan. Owen. Leigh. Paul. Toria. Sally. John. Glen. Beth. Connor. Tom. Stefan. Gabby. Mandy. Mitch. Becky. Tyler. Abi. Sean. Liam. Ollie Williams (doubler), Evan Hopkins (shearer), Tom Watkins (roller), Ron Watkins (catcher), Ivor Thomas (furnaceman), Walter and Cliff Watkins. Granville Jones, David Oswal Griffiths, W J Griffiths, Tom Needs and others were with the wheelwrights, cold-roll, black-pickling and white-pickling staff.

Seeing our surroundings as a stage set for a performance or game makes the everyday environment into an aesthetic experience. This kind of defamiliarisation is the opposite of Brecht's alienation effect: not breaking down the illusion of the fictional world but creating the illusion of the real world as a fiction. We begin to question the boundaries of where the poem ends and the everyday world begins.

Mobile communication systems multiply the complexity of situations – text messaging, mobile instant messaging, push-to-talk audio messaging – each lightweight interaction is an opportunity for a problematic event.

Communication systems tend to focus on designs that allow interactions to begin, rather than on facilitating the ability to avoid, pause or escape.

Interactional unresponsiveness can be facilitated through social translucence at the micro level. As a map or guide book, *The White City* doesn't really work.

Train hushes through intermetallic vegetation. Rust skeleton jungles. Crosshatch prismatic. Battered warehouse sky.

I first visited the tunnel when I was about 8. I recall wearing wellies and I could feel the ground. The girders were lethal I give one a kick and it vibrated like hell giving a stange harmonic sound while lumps of rust crashed to the ground.

They pay me 6 shillings a week and keep me for 12 hours. I was at the squeezing machine some time; the key of the roller dropped on my foot and crushed it, which laid me idle several weeks.

If you try to follow this guide you will probably get lost. It is difficult to see how an interface can be usable if the information it conveys is unclear, or if its very purpose is uncertain. Most things have multiple possible meanings. Prevention of undesired inferences often involves deception, even between friends. Participants in social interactions deliberately make their actions indeterminate to increase the likelihood of misunderstanding. Indeterminate situations often work, not because they are factually convincing, but because they leave room – and the ongoing relationship is more important than clarity. Indeterminacy is a relational property.

We go in from the far side. Where the taggers get in. I used to venture this place when I was 10 with my friends. I was small enough to go under the girders (rolling as well). I actually did that blue graffiti on the wall when I was around 12.

I rub the lime from the plates after they have been polished and have done so for six months. The lime gets in my eyes and makes them sore. I work from six in the morning till six and sometimes eight at night. My earnings are 6 shillings 8 pence.

We walk across the cleared ground and through the ruins that remain. Graffitied hearths. Word-foliage cartooning across old stone. Water pours down iron oven. Figures dip the metal plates. The hollow faces. I have never seen it, but local kids today even speak of it. The furnace century. Crackling mills. Cassiterite pains. Rust crashed heads, windery lean.

Like Duchamp's urinal, mobile communication products and services are increasingly treated as if they were open to interpretation, allowing participants to engage in their narrative as a kind of experiment in living. The mobile landscape is changing. Location becomes liquid, its hinges less fixed to coordinates than to human to human relations. Panoptic constructions are blind to the opaque mobility of people on the street tracing these invisible paths of sharing.

That night I had a dream that I had written a book called *The White City*, prompted, I think, by reading the William Burroughs book, *The White Subway*, published by Aloes Books in 1973.

I later described this dream to John Maher as we walked along Holly Street and he referred in a subsequent email communication to 'the imperceptible White City whose restless soul creaks under the bulk of sweaters on washing lines and children's plastic balls and which expands and bulges despite the proliferation of double glazing and junk-full attics and the mournful silences...'

The idea of the 'imperceptible city' chimed for me with Italo Calvino's *Invisible Cities*: 'From there, after six days and seven nights, you arrive at Zobeide, the white city, well exposed to the moon, with streets wound around themselves as in a skein'. When I googled 'the imperceptible city' I found an article called 'Sensory Threads: Perceiving the Imperceptible', which begins, 'As we move through the world in which we live we are surrounded by a myriad of imperceptible phenomena...'

Instead of producing the tome-like book of my dream, I would develop a mobile sensing platform, a participatory sensing expedition to collect data about the imperceptible city. Gathered data would be mapped onto the location in which it was collected, collaging notes from my dérives into photocopies of library books and old maps to produce a guidebook: to publish the notes as a starting point, so that the book and the city might remain imperceptible, still to be found.

Bibliography

Bryan-Kinns, Nick, et al, Sensory Threads: Perceiving the Imperceptible

http://www.eecs.qmul.ac.uk/~nickbk/papers/nbk_ie09.pdf

Benford, S., et al, ‘The Frame of the Game: Blurring the boundary between fiction and reality in mobile experiences’

http://blasttheory.co.uk/bt/documents/The_Frame_of_The_Game.2005.pdf

Akoi, P., and Woodruff, A., ‘Making Space for Stories: Ambiguity in the Design of Personal Communication Systems’

<http://arxiv.org/ftp/cs/papers/0507/0507019.pdf>

Airantzis, D., et al, ‘Participatory Sensing for Urban Communities’

http://proboscis.org.uk/publications/airantzis_urbansense08.pdf