

# Designing the future:

## Fables from the mobile telecoms industry

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### Prologue

For a manufacturer of mobile devices (mobile phones, camera phones and the rest) the future is a matter of design: what can be made? What will be made? What will sell? The future is made into a product, an artefact. It is designed into being, condensing the multitude of necessary marketing and engineering compromises, negotiated over what may have been years of development. But which futures are being made possible by the industry?

What follows are two pieces of writing based upon a four month ethnography at the design studio of a major mobile telecoms handset manufacturer. They also draw upon my experiences working as a handset designer inside the industry during the 1990s. These writings express my desire to interfere<sup>1</sup> in the futures of the mobile telecoms industry—to make differences, rather than to just analyse and critique its practices. Many quotations and artefacts are taken directly from my ethnographic record, however, the events, locations, people and processes have been partly fictionalised<sup>2</sup>, both to protect the anonymity of the company, but also to emphasise that the future is always fluid, transient—there are always other possibilities. Here, then, are two of them: two possible companies in two very different places, making two possible products and two possible futures.

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1. As a project of 'interference' this writing draws upon Donna Haraway's notion of 'diffraction', a generative approach to interactions and differences, in contrast to the endless 'reflection' of critique (Haraway 1991). It is also, perhaps, a response to her question: "What if the study and crafting of fiction and fact happened *explicitly*, instead of covertly, in the same room, and in all the rooms?" (Haraway 1997: 110)

2. Bruno Latour suggests the genre of 'scientifiction' for such narratives that are partly fictional, partly ethnographic. See his story of the Aramis transport system (Latour 1996).

## Ethnography of 'M-Phone' near London

I sat before a blank, red desk divider, feeling thin and exhausted. The incessant roar of the air-conditioning, photocopiers and monitors was steadily draining me away. The line of distant windows, a turquoise sheen against the sky, produced a kind of lifeless illumination that even the overhead spots failed to stir. This was a design studio and the ambient lighting was eminently well-suited for computer monitors, but I was not alone in longing for the white edge of a brilliant sun—one colour specialist had confided in me that she could only compare colour swatches (and do her job) by leaving the building.

A head appeared above the divider, smiling broadly (yet always with a slight sense of irony). It was Brian, the senior design manager and my indispensable company liaison; a man of geometric shirts and tireless enthusiasm.

"Ready?" He asked.

"Absolutely."

Brian had agreed to take me through their future design strategy at eleven (it was now half-past one). With my permitted ethnographic toolkit in hand, a pencil and decomposing notebook, I headed with Brian for the meeting room on the far side of the studio.

It was a move from spines of skeletal cable dripping from the ceiling, into a putrid mass of grey and yellow wires, seething over the chairs, over the floor, and down the walls. Those network and power cables seemed to fulfil a need for everyone to be always oozing into the creature at their centre—the company. A 'meeting' usually meant a queasy pulse of rhythmic interruptions and negotiations with other parts of the corporate body, rather than with those present. Brian was now generously offering his time to pass on what he could of the face-to-face aspects of a closed senior management meeting. As he walked in, however, his mobile phone chirruped. He left. He re-appeared, smiled, and his phone rang again. People constantly faded in and out of existence in the studio, as the pulse of the company made them ebb and flow around the world. Finally, he put down his phone, stepped up to the projector screen and began, rapidly, to pound through a hundred or so PowerPoint slides from a recent presentation.

"Okay, this one's from our consumer research group. Basically, the social trends for technology over the next five years or so are all about Storytelling, Sharing and Re-experiencing". The three words flashed up as a tag-line on a chart filled with a complex blur of graphics. "That's what it's all about for us. How do we help people tell, share and re-experience their lives?"

He hit the button to go to the next slide. "Physical contexts will continue to blur for consumers" he read, and shrugged. "Pretty self-explanatory, that one."

Thump. Next slide. "New communities formed." Again, he had nothing to add and began to pick up pace, blurring the next slides together, stopping periodically at a particular phrase or idea.

It was all fairly standard fare (and no doubt lost in the blur were more subtle nuances) but, from my own years in the industry, I recognised the moves: the mobile telecoms industry was (still) not in the business of Plain Old Telephony, but in the more refined and wholesome business of building relationships and communities. I sensed in this a technologically deterministic argument, as though the presence of a mobile telecoms network simply created new social relations, and thus more network traffic (more phone calls, more messages, and more business for the industry).

We cycled through several more slides, until Brian finally stopped in a flurry of graphics. We were done. My hand ached from taking notes on what I would never be allowed to keep, for the slides were too politically sensitive for me to have a copy. I had recorded what was regarded as the strategic direction for the company, so now the question was: how might that strategy become a device; how might the presentation and politics become embedded in a product?

It was time to move on for, as I write this account, I am fusing fragments of my ethnography, the many times and many places, into a narrative; a fable, accountable only to some material and historical fragments, but accountable none the less. The meeting with Brian, a senior design manager, was one fragment, a chance conversation with an industrial designer will be another.

As Brian faded into another phone call, I hurried out into the main studio and around the red, standard-issue desk pods to reach the industrial design area. As I approached his desk, Andy, who had been loitering on a sofa in the library, suddenly leaped to my side, friendly (as always) yet faintly suspicious (as always).

We exchanged pleasantries as I scanned his desk for inspirational flotsam: an embossed Japanese drinks can rested on a pile of papers by his monitor, and a small legion of Manga toy figures remained on permanent guard. I was particularly taken, however, with a delicate white-frosted glass bowl and some polished quartzite pebbles resting inside. I took one of the pebbles into my palm (see Figure 1), and quizzed Andy on its significance. He said he was interested in the texture of the bowl and stones for a recent camera phone design. I asked for more about the project, and he wove me this little tale, stroking his black goatee beard as he spoke:

"Senior management creates a set of priorities, the strategic requirements for the project: make it big and make it small. So it goes down to middle management, the heads of design and mechanical, who tell us to make it big and make it small. And we scratch our heads and try, and come back to middle management and say: well, we can make

it big and make it big, or we can make it small and make it small. Middle management tells senior management, who go: no, we really need it big *and* small. So middle management say: okay, we'll tell them to try harder. So, we go off and the cycle repeats until senior management shout at us. And then they tell us: oh, but now we want it thin, that's the new priority."

*Figure 1: This quartzite stone was collected from the desk of a designer at my ethnographic site.*



It was a great tale, told with fervour, and I thanked him, although it did leave me wondering what the translation between this tale of design practice, and Brian's tale of management strategy might be. Was there even a translation at all? As I pondered this, Andy asked me if I wanted to see the latest model of the camera phone, which had just arrived. And, of course, I did. He pulled open a drawer and extracted a small hard, black case, placing it carefully on the desk top. Lifting the lid, he revealed two glistening white camera phone models, held tightly in grey foam.

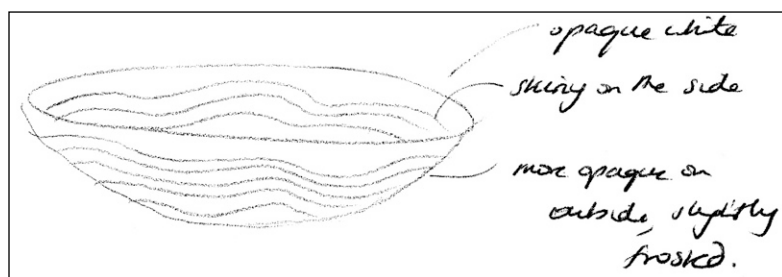
"These were about five thousand each. I think they're the most expensive models we've ever had made."

He picked one up, brushed his fingers over the frosted white front. I knew it was made of wood, sprayed to look like metal and plastic; knew from my own design experiences how it would feel slightly warm. Yet it was seductive. I looked back at the white bowl and trans-

lucent stones, sensed something of their luminescence in the soft white form of the models. As the smooth quartz pebble in my hand led my fingers to rub, almost absently, at a nagging imperfection, the bevelled edges and detailing of the models also demanded to be touched. But I was cautioned not to handle, or even breath on, their surfaces. The question of touch was a serious managerial decision. Focus group testing of new designs with consumers often only involved a plain block model and some illustrations (providing results that were both upheld and quietly derided, depending on the moment). These expensive, fully detailed models were reserved for impressing senior management and important customers who, I was constantly reminded, were the network operators, not the consumer.

Still fascinated by the models, I quickly sketched the white frosted bowl on Andy's desk (see Figure 2), thanked him again, and moved away; slunk back into my own temporary desk space and its baleful hum, the soft quartzite pebble, still held absently in my palm.

*Figure 2: A field sketch of an opaque glass bowl, found on the desk of a designer at my ethnographic site.*



### Ethnography of 'Sand14' on Isles of Orkney

"Oh, hullo there."

I looked up as Anne's bright self, in broad smile and red fleece, crept into the little room. Since arriving in a torrential downpour early this morning, I had taken to the odd central hearth to watch the black peat burn amber, and warm my feet over breakfast. I was in the Isles of Orkney, off the North East coast of Scotland, beyond John O'Groats. It was a treeless, wild place of broiling seas, wide low skies, and prehistory.

"We'd thought you might have been speared this morning by the rain. Absolute stair rods!"

I grinned. It was impossible not to grin when Anne spoke, her effervescence was infectious.

Sheepishly, I tugged at the ends of my trousers, still slightly

sodden. "I think I was only out in it for thirty seconds, but it just blew under my umbrella."

"Och, umbrellas!" Anne waved her hand at the preposterous notion. "This is Orkney. It rains sideways here, you know. You'll need a riot shield not an umbrella!"

We laughed, as a rows of Orcadians armed with dripping riot shields marched through my imagination.

"Richard's suggested we all head off to the mill for coffee, did you want join us?"

Great, a meeting, an opportunity to see how the company functioned in practice. "Yeah, definitely." I scabbled beneath the wooden chair for my rucksack, its pockets laden with recording devices, and a little reluctantly rose from the fire-warmed seat. It was a tradition at Sand<sup>14</sup> that the fire was kept burning on the premises, so I threw another briquette on the hearth and left the strange little 'house'—holding the smell of peat in my lungs for as long as possible. The little stone building, just two rooms, one-up and one-down, formed the axis of a bright, ultra-modern domed interior<sup>3</sup>. Anne and I circulated south, past plants, spot lights, pin boards, and the other usual and less usual detritus of company life, leaving the dome of the main work area, to slip around and out into the foyer.

A small group had already gathered in the front of the building. Richard, the professorial managing director, was hopping with nervous energy from one foot to the other, and gabbling at high speed to Simon, who was calmly making notes and sketches. George(ina) was draped elegantly over the worn black sofa, ignoring all and staring out of the front doors, straight down the path to the towering monoliths in the field beyond. As Anne and I stepped into view, however, she leaped to her feet, and with business-like efficiency had us all out of the door, down the path, and inside the company 'bus' (a battered Land Rover with spare parts rolling on the floor) in moments.

As we drove the wet mile down the road to the café we passed into another world. Sand<sup>14</sup> was inside one of the greatest prehistoric monument complexes in the world; a part of a five thousand year-old architectural project. In the field opposite the grass and slate dome of the company building were three, seven metre high monoliths, once part of a stone circle. As we drove East, we passed the dark entrance to the mound of a passage grave, a blur of a Neolithic village, another standing stone and, almost in a circle on the far hills all around us, beyond the rain soaked mist, were more standing stones, ever present on the edge of the horizon.

Once we had settled into the old mill café Richard held court as

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3. For more information on the architectural principles involved in the construction of the Sand<sup>14</sup> premises see Richards 1996.

usual, his strangely balding satchel overflowing onto the table. He leaned in, furtively, over his tea; black eyebrows bouncing up and down as he spoke.

"I have to say, I was a bit surprised at their sketches", he began, and I rapidly recollected that he had just been to visit a design consultancy in London. "I rather thought the illustration of the 4G phone I saw looked like a prop from a Nineteen Fifties B-movie."

"It's the whole retro thing." Commented George, sounding both bored and frustrated. "Silver and white, flashing lights, bulbous curves. It's just so totally uninspired. It doesn't engage at all with the world, it just fantasises about styles from the past. I hate it."

But Richard rolled on regardless, fingers weaving the air as though incanting a spell. "Well, I then wandered into the British Library. And I didn't realise, but some of Tim Ingold's recent work on multi-sensory communication talks about the importance of the 'lived experience' as opposed to the reification of the senses<sup>4</sup>. I think this is crucial for us. What we are doing is transforming, or rather translating<sup>5</sup>, an experience of the world, not of the individual senses. It's the transformation, rather than the transmission, which is central. Our work is really about how to transform an experience, through silicon and radio, into something else."

"And into something no less magical..." murmured Anne.

"But we have been really focused on haptics and force feedback, recently." Simon, the interface designer, looked worried.

"Ah, don't worry, this is definitely not a redirection. I think we just need to keep it absolutely clear in our minds that we are not, we are *not*," he emphasised, "designing a multi-sensory communications device, as a kind of evolution of voice and camera phones. That would be quite wrong. What we are doing is generative. We are trying to translate a bit of the world into something else, which will hopefully be something a little extraordinary." He gave a sudden, quick, grin. "I guess it's more like painting."

"I don't think it's anything of the sort, Richard." Said George, piqued. "Okay, I accept it might be like photography, which is a quite bizarre translation of the world into a flat, timeless rectangle with a single point of perspective<sup>6</sup>. But it's not art. Storytelling maybe, but it's not painting."

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4. See Ingold 2000: 243-287.

5. In a Sociology of Translation (also known as Actor-Network Theory) the notion of 'translation' includes the sense that things do not remain unaltered when they move; rather, the practice of changing the relations in which some 'thing' is embedded necessarily changes it (see Law and Hassard 1999).

6. David Hockney explores this transformation of the world by the photograph in his own artistic practice. See his discussions in Hockney and Joyce 2002.

The conversation bounced back and forth between the three of them for a while, with the two anthropologists, Anne and I sharing a quiet space between it all.

Finally George, who as both artist and businesswoman always insisted on the salient details, asked Richard how he might pitch the design concept to the mobile telecoms industry.

Richard winked conspiratorially to the rest of us around the table as he flipped over one of the pieces of paper, scattered in front of him. On it, in thick pencil scrawl, were the words: Storytelling, Sharing, Re-experiencing.

George read the words, and then laughed. "Brilliant. Yes, they'll love that."

When we returned to the 'house' (no one actually referred to the company premises as an office) I caught up with Simon, eager to understand how this latest move might impact his interface designs. We walked around the arc of flagstone corridor into the central domed atrium—always a blaze of sandstone, spotlights, and glass. He had set up a couple of tables and a floor of paperwork in front of the glass wall, with the mist and loch beyond. I scanned his desk: lots of paper and pens, an old CD player and chewed up headphones.

There was one of the white-frosted glass bowls on his chair (see Figure 2), still full of hot chocolate, the remnants of a French-style breakfast—they were always used for drinking chocolate here, but I wasn't sure why. There was also a large laptop, closed and leaning against the window, with a polished quartzite pebble resting on its clasp (see Figure 1). I picked up the pebble and asked Simon if it was important.

"Feel it", he replied.

I pressed the stone between my thumb and forefinger, and rubbed its surface, trying to sense something unexpected. I felt the coldness, the smoothness, but also a slight crease in the surface, a fracture, which drew my thumb.

"You feel the crease?"

I nodded.

"Well that's what I'm really interested in. The imperfection draws your fingers, doesn't it? But it's the colour, the translucency of the polished stone, that draws your attention."

"How does that lead to a mobile device?" I asked, alert.

He rummaged on his desk, pulled aside a few maps, and revealed a strange, glistening black object, shaped like a rounded and elegantly sculpted letter 'T'. It was not entirely black, in its depths were pale arteries of white. Nor was it completely smooth, it was etched with some grid pattern at the top. Simon held the maps back, and invited me to grasp the object. The shaft fitted easily down between my fingers and the handle snuggled comfortably into my palm. It was like holding



some kind of designer bottle opener. The silken surface felt like sun-warmed marble, heavy, but gorgeous to touch. Instinctively I squeezed it, and felt the give of two pressure pads beneath my knuckles. A light appeared at one end, projecting down onto the floor. Then, extraordinary waves of what felt like cool water began to lap up and down my fingers. It was delicious. I realised there was a smudge of blue in the light on the carpet, put my other palm into the beam to bring it into focus. It was a picture of someone's hand dangling in lapping water, and I heard a slightly distorted voice from the object whisper: "Can you feel that?"

I could.

I didn't know what to say, almost dropped the device, and gave it back to Simon. "That's..." I gave up.

Simon grinned. "Isn't it just!"

## Epilogue

Those were two ethnographic accounts of my research. Both accountable to a set of materials, artefacts and words I recorded during my four months at a mobile telecoms design studio. Both partly fictional, neither 'true'. Nor could there ever be a 'true' account, there are only fragments of an archive: dislocated notes and decaying artefacts, all stitched together through a kind of 'poetic archaeology'<sup>7</sup>. In the words of Marilyn Strathern, there are only ever parts, which are not part of any whole<sup>8</sup>. All that there is of my four months are my memories (always partial), my notes (always historical), and a collection of finds (always archaeological). In the space between my experiences of those moments and the archaeology of my records, there is the possibility for multiple accounts, and multiple stories, to be told<sup>9</sup>. As I followed and recorded a mobile telecoms company, I also made the possibility for other companies. So, the future gets made as a matter of size at M-Phone, and as a matter of experience at Sand14. The future is made in the mists and monoliths on the Isles of Orkney at Sand14, and in the pulsing networks and roar of air-conditioning near London at

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7. 'Poetic archaeology' is a more sensuous approach to creating archaeological accounts from fragments of evidence, proposed and discussed by Michael Shanks (1992).

8. See Strathern 1992: 90-115.

9. In 'multiple' I am invoking Annemarie Mol's work on 'multiplicity' in medical anthropology. In her example she suggests that the multiple medical practices involved in diagnosing arthrosclerosis (x-rays and blood tests, for example) produce multiple versions of the disease; there are "more than one and less than many" arthroscleroses (Mol 2002).

M-Phone. Different places and different practices make different mobile telecoms products—and different mobile telecoms futures.

This is a small excavation of the futures of part of the mobile telecoms industry; a construction of the possibilities made by some fragments of evidence. This, then, is a practice of Future Archaeology.

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