

‘... some roads you shouldn’t go down ... because maps used to say “there be dragons here”.
Now they don’t. But that doesn’t mean the dragons aren’t there.’

“Lorne Malvo”, Fargo (season 1)

Look with all your eyes

Author: Nuno Sacramento

Cartographic silences

On a family visit to the subtropical gardens of Inverewe in the West of Scotland — yes, you read the words tropical and Scotland in the same sentence — my young son was given a map which showed the countries of origin of the many plants and tree species brought to the estate in the nineteenth century. On leaving, I mentioned to my wife how strange it was for these subtropical gardens not to have palm trees. There were many, she replied, of different kinds and sizes. The fact that I hadn’t seen a single palm tree attests to my undivided concentration on my son’s map; the map-maker’s omission changed our first-hand experience of the gardens.



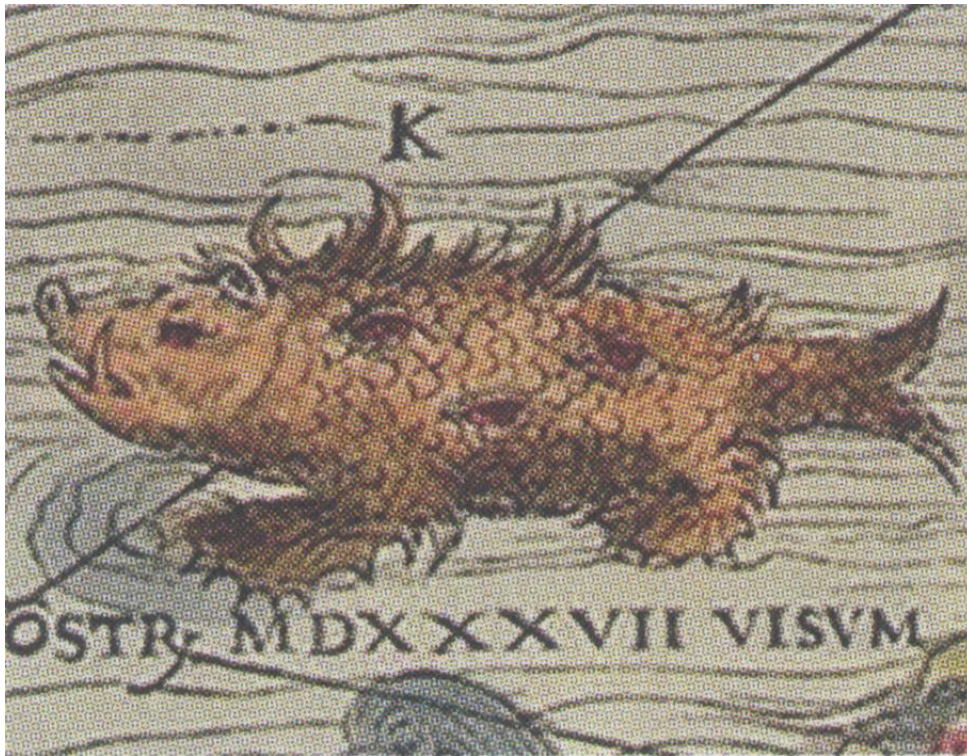
‘Global Garden Kid’s Trail’ Map of Inverewe gardens.

If maps precede reality in this way, what does our reliance on them mean for those aspects they routinely omit? Historical maps are known for their depictions of dragons and other likely characters of mariners' tales, yet such creatures are entirely absent in the maps of today. What does the loss of the fantastical mean for our everyday experience?

Hannah Arendt in *The Human Condition* writes that 'Nothing can remain immense if it can be measured.' The effective shrinkage of the planet 'comes about through the surveying capacity of the human mind, whose use of numbers, symbols, and models can condense and scale earthly physical distance down to the size of the human body's natural sense and understanding.' (Arendt, 1998, p.251) Maps tame the immense world through mathematics, making it human scale.

This drive to chart the vastness of the earth into submission is the subject of the short story *On Exactitude in Science* by Jorge Luis Borges, in which a map of an empire as large as the empire itself is created (Borges, 1999, p.325). Scaled 1:1, the chart precludes the indispensable tools of the map-maker: *in-clusion* and *ex-clusion*. Ironically, considering the monumental extent of the map it describes, Borges' text itself is but one brief paragraph. In contrast — and outside the realms perceived as fiction — the UK's orange cover Ordnance Survey Explorer maps depict the terrain at a scale of 1:25,000, meaning that 1 centimetre is equal to 250 metres on the ground. To fit 250 metres into 1 centimetre, the cartographer must excel at *ex-cluding*. These exclusions are manifold and range from the physical — say the appearance of, rather than purely existence of, architecture — to the personal — responses, memories, emotions. The risk is that we conflate what is included in the map with our perception of reality itself. If this transition is seamless, the map becomes naturalized as 'reality'.

By contrast, the first maps were highly fantastical: they described routes and imaginary beasts compiled from both first-hand accounts and mythical descriptions. The 1539 *Carta Marina* published in Sweden by Olaus Magnus is exemplary; it contains fanciful depictions of marine biology such as the rockas (a mythical giant ray), sea worm, polypus (giant lobster), sea pig and balena (two-spouted reptile) amongst creatures more commonly known to science, like orcas.



Fantastical creature from *Carta Marina*, by Olaus Magnus, 1539.

Other historical maps, like the 1542 *Tenochtitlan Codex Mendoza*, combine representations of time and space. The codex shows a cactus growing out of a rock in the centre of a blue square with a diagonal cross through it, which represents the rivers in México-Tenochtlán (now Mexico City). Evenly distributed between the geometric rivers there are depictions of plants and people showing daily Aztec life. The map provides a history of Aztec rulers and their conquests, prioritising perception of place over geography.



A page of the *Codex Mendoza*, attributed to Francisco Gualpuyogualcal, 1542.

The ‘progress’ of map making, fuelled by the increasing accuracy of surveying tools and techniques, as well as the desire to quantify the world, pushed the dragons and other imaginary creatures to the periphery of the map, eventually doing away with all the flourishes deemed ‘decorative’ and ‘non-scientific’. As maps got simplified, more ‘accurate’, and biased towards infrastructure and physical geography, they simultaneously lost detail as well as many interesting artistic and fantastical qualities.

The turn to ‘objective’ quantification underpinning the ‘real’ re-classifies all that is non-quantifiable as minor, as insignificant, as ‘subjective’. And when the quality of maps is assessed solely in quantitative terms, like scientific accuracy and mathematical precision, the logical conclusion is that we have reached the pinnacle of cartographic achievement. If — as it is claimed by the US government — modern Global Positioning Systems and satellites have a precision of four metres, we are very close to reaching Borges’ proposition. For cartography as we know it, there is nowhere to go from here. Maps are reality itself.

But here is the great fallacy, the deception, the deceit, the trick, the artifice at play: the idea that if we use scientific surveying instruments and methods, the result is an objective representation of the

world. No it is not! On the contrary, cartography is contingent on many factors, including the temporal and the perspectival; one only needs to compare maps of contested territories to see considerable differences based on political standpoints. The ubiquitous Google Maps has attracted controversy over its refusal to label Palestine as such, and for presenting Crimea as Russian territory to Russian audiences yet as occupied territory to others. Even scientific methods are used to create fictions, from the manipulation of data by vested interests to the Oulipian use of mathematical constraints in the production of creative writing. The quantifiable is only as objective as those who deploy it.

In *The Practice of Everyday Life*, Michel de Certeau describes the history of cartography over the last 500 years as the slow dissociation of the once ubiquitous combination of ‘tours’ and ‘maps’ in everyday stories. ‘Tours’ refer to actions, movements and operations while ‘maps’ refer to tableaux, to seeing.

For de Certeau the emergence of the scientific method from the fifteenth to the nineteenth centuries was at odds with the proliferation of narrative figures in maps — ships, animals, monsters, characters of all kinds — which underlined the actions and operations of travelling, discovery, politics, story-telling, religion and administration. The figures he refers to are fragments of stories, rather than mere illustrations, and highlight the reasons why the map was produced.

Sailing ship = marine expedition = representation of coastline

Then the map-tableau, dominated by seeing, won over action and imagination, colonised its space, and eliminated the pictorial figurations that led to its creation in the first place. For de Certeau, ‘The map, a totalising stage on which the elements of diverse origin are brought together to form the tableau of a “state” of geographical knowledge, pushes away into its prehistory or into its posterity, as if into the wings, the operations of which it is the result or the necessary condition. It remains alone in the stage. The tour describers have disappeared.’ (Certeau, 2011, p.121)

Appropriation of cartography by its users however, which is the basis of this essay, leads to the reappearance of actions, operations, and everyday stories in maps — the return of de Certeau’s lost ‘tour describers’.

Hidden by what we see

Late last year, American artist Brett Bloom and I published a pocketbook on deep mapping — the understanding of a place through inhabiting its multiple overlapping and contradictory stories. During the inevitably hectic period in the lead up to the publication deadline, and with the text finalised, I decided to remove an introductory quote. I was compelled by the sentence, but had, when asked, failed to explain it in plain English to a group of students. It is attributed to René Magritte, the Belgian Surrealist painter, in relation to his famous 1964 painting *The Son of Man* (*Le fils de l'homme*), in which the face of a man in a bowler hat is obscured by a floating green apple. Upon closer look, the man's left eye is visible, staring back at us from behind the apple. The quote reads:

'Everything we see hides another thing, we always want to see what is hidden by what we see. There is an interest in that which is hidden and which the visible does not show us. This interest can take the form of a quite intense feeling, a sort of conflict, one might say, between the visible that is hidden and the visible that is present.' (Torczyner, 1977, p.172)

When Magritte talks about '*a sort of conflict, one might say, between the visible that is hidden and the visible that is present*' he is proposing an unresolved paradox, a conflict inherent in seeing rather than a dichotomy between seeing and not seeing.



The Son of Man (Le fils de l'homme), René Magritte, 1964.

Magritte's statement has a direct correlation to the visual instance of *in-* and *ex-*clusion in cartography. The world is exhaustingly full of intricacies, details and contradictions, therefore in order to navigate through it more efficiently we do not allow ourselves to register all the minutiae. As with the palm trees at Inverewe, what we see is that which is included in maps. Conversely, what is excluded from maps is that which is hidden by what we see.

The fact we do not see certain things is not due to a lack of vision, a deficit in perception or defective eyesight, but a characteristic of seeing itself. It is seeing through trained habit, through interest, a selective seeing in which the world appears as we are willing to see it. This is seeing from maps.

Deep Mapping in action. Visualising the silences

Eight years ago, having moved jobs from Lisbon to Aberdeenshire in Scotland, I got into researching the surrounding landscape. I hoped that if I knew the stories and the secrets of the landscape, I could, as a foreigner, belong to that landscape. I set out to study the history, the infrastructure, the Doric dialect, the stories, and I drove and walked around, talked to people, did a lot of listening and note taking, and positioned my body in that landscape.

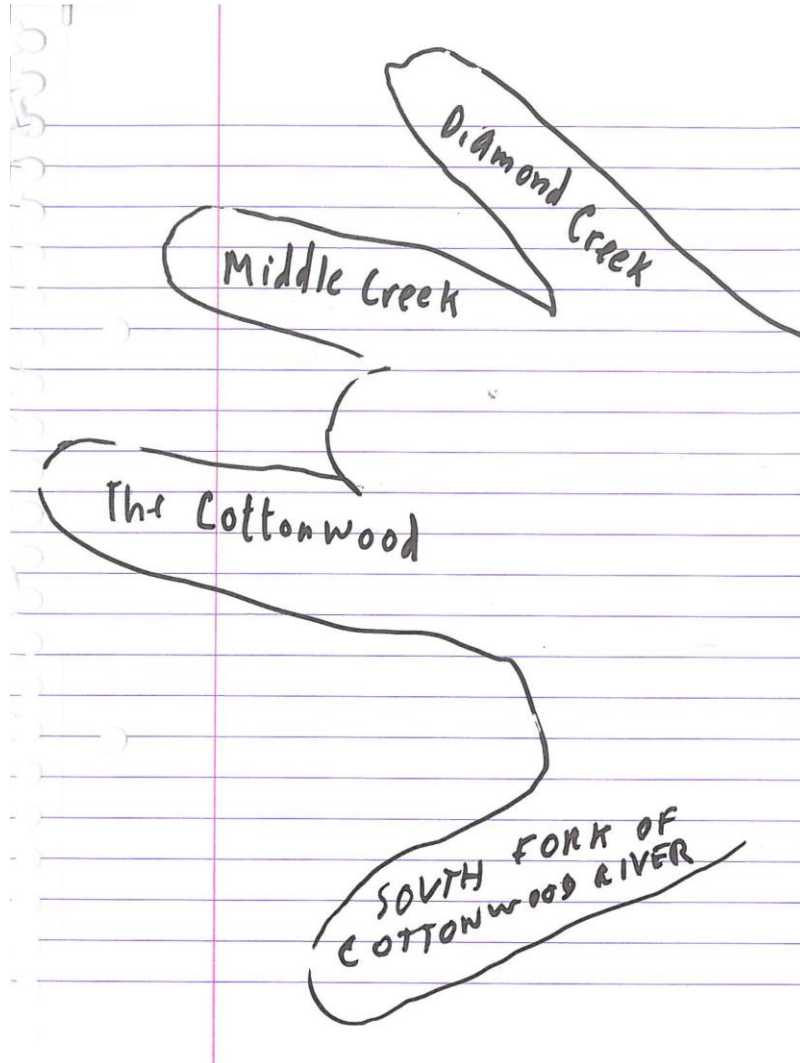
After composing some of this research into an essay, I was told that it resembled a deep map, as in the book of William Least Heat-Moon's *PrairieErth: (A Deep Map)*.

This book — beautifully structured, thoroughly researched, impeccably written — goes well beyond the genre of travel writing. It includes history, botany, hearsay, infrastructure, geography, feminism, travel, anthropology, memoir, dreamworlds, journalism, gossip, autobiography and natural history. The book took a decade to research and write. Its author covered much of the 774 square miles of Chase County, Kansas, and talked to nearly, if not all, of its 3,013 inhabitants.

For most outsiders, Heat-Moon writes, the prairie is considered barren, desolate and monotonous. So to be able to write over 600 pages of engrossing facts and fictions about it is remarkable. In his words, 'I'm not here to explore vacuousness at the heart of America. I'm only here in search of what is here, here in the middle of the Flint Hills of Kansas. I'm in quest of the land and what informs it' (Least Heat-Moon, 1999, p.10). In a landscape of apparent emptiness and near nothingness, Heat-Moon is able to find intricate detail. All he has to do is to dig deeper.

Starting from the vantage point of Roniger Hill, and as if on top of a giant map of the United States of America, he surveys the landscape before immersing himself in it. No aerial photograph, no mapping app, just a large printout of twenty-five U.S. Geological Survey maps covering the whole county, an inch and a half to the mile, showing the detail of the houses and barns, and covering his carpet, seven feet by six feet. He walks on the map, referencing the grid the archaeologists lay over every excavation and using this co-opted grid of arbitrary quadrangles to excavate information himself. In the initial chapter the geological map mutates into a hand-drawn map of Chase County showing motorways and smaller roads, rivers and creeks, railways and settlements, and in subsequent chapters hand-drawn details of the quadrangles precede the text. Heat-Moon goes around the map, through back roads, to collect stories. He presents chance encounters, local history, ancestry and quotes from other authors — a multitude of different voices speak through his text.

PrairyErth starts with the map. Not a folded map, or a mobile phone screen, but a map one can walk across. The writer's body — but also habits, emotions, thoughts — become the measure against which the map's reach is defined. The page of the book becomes a mapping surface, and its narrative re-dimensions the maps in relation to the bodies that inhabit them.



My drawing of Least Heat Moon's description of waterways in relation to the fingers of one hand.

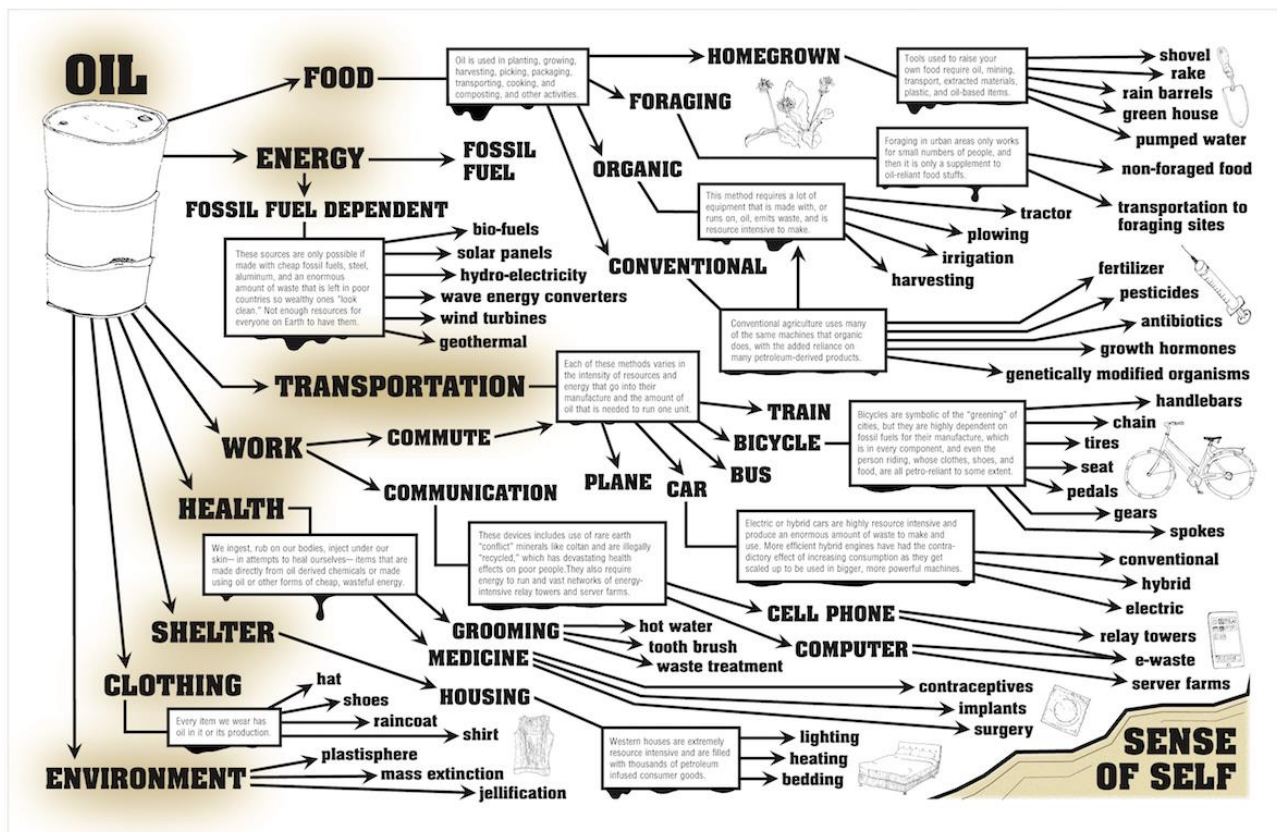
Heat-Moon demonstrated that there is a close relationship between the body, the action, the narrative and the map. The map is a map of practice, where driving, walking, talking, listening and researching activates the tableau-grid initially devised through scientific measurement, mathematics and geometry.

This awareness of body-action-narrative as intrinsic to mapping is key to CAMP BREAKDOWN, a project by Brett Bloom that I curated at Scottish Sculpture Workshop in June 2015. Bloom

borrowed the concept of the deep map in order to craft shared immersive experiences that, in his own words, tested the possibilities of ‘de-industrializing our sense of self while practicing post-oil subjectivities’. He wanted people to experience a given place in ways dramatically different from the frenetic petroleum-based space / time nexus of capitalism, and to tune themselves in to a slowed down modality of attention and listening. He created a deep map that people could enter and collectively inhabit through directly embodied learning processes that explored deep listening, animistic knowledge, land reform, soil spirituality, hutting, rewilding and sauna whisking. As Bloom describes it:

A Deep Map of a place includes many things: direct perceptions of that place; its inhabitants’ memories; embodied understandings as place enters you in numerous ways that are emotional, psychological, physical, spiritual, and transcendental; geological formations; more-than-human actors like animals, plants, microbes, and landscapes; historical developments from different eras; weather patterns; agricultural uses; modern infrastructure; bioregional processes; contradictory ideological ratiocinations; and more. A Deep Mapping of a place potentially has no limits to complexity as long as it is meaningful and you have — or a group has — the ability to hold an awareness of the varying ways of understanding.

(Bloom, 2017, p.59)



Deep mapping's radical celebration of complexity reawakens the fantasies, histories and narratives that modern cartographic tools have hidden in service of a perceived objective truth. Whether through the intentional and physical deep mapping at CAMP BREAKDOWN or the uploading of user content to online maps and location tagging on social media, the pre-modern tours and maps de Certeau described are reconverging.

Conclusion

'Freed from the tyranny of the eye (the map never was a vision of reality), the map can be returned to... the *hand* (that makes it)... the *mind* (that reasons with it)... the *mouth* (that speaks with it). Freed from a pretence of objectivity that reduced it to the passivity of observation, the map can be restored to the instrumentality of the body as a whole. Freed from being a thing to... *look at*, it can become something... *you make*.' (Wood, 1992, p.183)

Maps are things we look at, but deep maps are things we make. We park aside the idea of objectivity, and open up our bias. While maps are about things we know (the earth is round, the world is divided into continents, which are then divided into countries), deep maps are a combination of a particular landscape with our first-hand experiences and our subjectivities.

Deep maps, such as the ones proposed by Heat-Moon, Bloom and myself, focus on particular landscapes and are idiosyncratic, attentive to the environment, plurivocal, multivalent, interdisciplinary, and slow. They are investigations of how the terrain was shaped by glaciers, how the land was and is used, what clandestine activities happen there, what stories exist and what ones have stopped being told, what new ones emerge, but also what creatures live there, and what ones no longer do, what birds and plants exist, where amateur birdwatchers meet, where the dogging takes place, what skies can be seen from there, and whether water floods the place, what imaginary creatures exist, what folklore and tales, and what might happen when extreme weather events start affecting it.

Deep maps will never take you from A to B, as the crow flies. They will always take you on a detour... to places you do not necessarily want to go. The dragons are best left alone, you might think. They are dangerous unknowns and safer to avoid.

However the greater threat of dragons is not what has long been excluded, but the serious risk to the stability of what we are used to being included. This new era of the subjective enables us to share and discover previously unheard stories, yet at the same time it ushers maps into the post-fact world. When something as stolidly dependable as a map is shown to be less a trusted guide than dissimulation by omission, then we may realise we know less than we thought. Perhaps dragons outnumber people.

Deep mapping is not only about making visible the things we do not see, but about coming face-to-face with the things we do not want to see.¹

References

Arendt, Hannah, (1998), 'The Vita Activa and the Modern Age', in: *The Human Condition* (2nd edn), University of Chicago Press: Chicago.

Bloom, Brett, (2017), *Deep Mapping*, Breakdown Break Down Press: Aburn.

Borges, Jorge Luis, (1999), 'On Exactitude in Science', in: *Collected Fictions*, trans. Andrew Hurley, Allen Lane Penguin Press: London.

Certeau, de, Michel, (2011), 'Spatial Stories' in *The Practice of Everyday Life* trans. Steven F Rendall, University of California Press: Berkeley.

Elgrably, Jordan, (1984, Spring), 'The Art of Fiction / No. 78', in: *The Paris Review*, Issue 91.

Least Heat-Moon, William, (1999), 'Crossings: On Roniger Hill' in *PrairieEarth: A Deep Map*, Mariner Books: Boston.

¹ 'When you're writing, you're trying to find out something which you don't know. The whole language of writing for me is finding out what you don't want to know, what you don't want to find out. But something forces you to anyway.' James Baldwin, interviewed by Jordan Elgrably (Elgrably, 1984).

Torczyner, (1977), *Magritte: Ideas and Images*, trans. Richard Millen, Harry N. Abrams: New York.

Wood, Denis, (1992), 'The Interest the Map Serves Can Be Yours', in: *Power of Maps*, Guilford Press: New York.