

## **Re-thinking the Conversation: A Geomythological Deep Map**

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### **Abstract**

Deep mapping is a process. It is a process that does not strive to either please or attain authority, it makes no claim on definitive opinion. Rather, deep maps are the structure within which a conversation, or conversations, can flourish between multiple perspectives. Fluid, fragile, flexible, they morph and absorb new inputs, provoking new insights as a by-product rather than as an intentional aim. In this way, the deep map can become a conduit for rethinking geomythological research and representation.

Traditionally, geomythology has been the study of landscape stories through the purview of geoscience with little regard for myth's own voice. Bounded in the epistemic bias of orthodox perspectives storytelling has been dismissed as an inferior feature in the landscape; a source to be critiqued or stood behind as a bridge for public engagement but not as a partner to be afforded equal value.

It is, however, possible to challenge that stance, to suggest that an alternative is possible wherein conservative practices are over-thrown in favour of conceptual deep mapping. For 'the world as it is' in which we live does not stand still, it does not pose for a paper-held cartographical portrait; it is forever in flux. To map a *landscape* is more than geography, it is to facilitate a palimpsest of cultural narrative which struggles to be contained within the rigid parameters of a conventionally academic bracket. This chapter introduces such an approach via a number of evolving projects that layer geo-archaeological fieldwork with art, music, literature and myth. Together they seek to give voice to one stretch of coastline across time, space and disciplines with the aim of not compromising integrity and to re-establish the very foundation upon which normative perspectives reside.

**Keywords** Deep Mapping \* Art'chaeology \* Transmedia \* Geomythology \* Stories

## 1 Introduction

“Understanding a landscape is to decode its deep narrative topography. It is to acknowledge that every act of mapping is to enter into a dialogue with the inscribed voices of the past and to re-inscribe every mapped place for the future.” (Ethington and Toyosawa 2015, p. 97)

But what happens if only some voices are inscribed?

As we have seen in response to refugees and terrorism, when only some voices are heard divisions of silence are created (Godin 2016; Sigona 2014). People drop off the map. A segregation of listening results in assumed hierarchies that do not speak for all inhabitants, limiting understanding. They build walls instead of bridges in our mental route ways; and walls offer an often false sense of stability, constraining the horizon. When the stability of the status quo is questioned thinking falls all too easily into binary mode, resulting in a polarized rhetoric that excludes more than it includes, sheltering beneath familiarity bias. The ‘world as it is’ (Hedges 2011) becomes redrawn as a mythical map, clung to in order to make sense of our conceptual and physical landscapes (and which often renders us oblivious to the obvious, even when it is beneath our very feet – Fig.1). Since format can distract attention away from content and condition value without context, we fall into making judgements based on limited perception whilst attempting to enforce traditional patterns of order upon a shifting tide.

If, instead of attempting to enforce existing parameters, one wishes to take a stance that is outside of the expected territory then a different type of topographical chart may be helpful. Using such a chart takes one out into choppy waters beyond the normative, rocking the categories within which fears have gathered to buoy up a closed worldview. Sometimes this insularity is wilfully maintained, sometimes it arises simply because people do not look beyond their immediate horizon because they do not speak the language there. Rather than learning the language, or applying a translator, they deride its accent and cluster before a vista which is comfortably flat.



Consequently, if you want to get somebody's attention then you may have to step into this parochial hideaway, duck under their (and your own) comfort zone to unravel normativity from inside; become conceptually multi-lingual. For a circumscribed response to difference is more than just politics, it is the insidious limitations grown by cultural emplotment (Ricoeur 1983); a chronic intellectual insecurity, an anxiety towards the unknown. It is a disinclination to engage with an unfamiliar map.

Within academia this disinclination is displayed all too frequently through a fear of other people's big words. One's own big words are perfectly fine but in the foreign land of another department they speak in strange tongues. Few more so than between science and the arts; but also within facets of disciplines themselves, such as between theoretically engaged and non-theoretically engaged archaeologists, where language barriers can sometimes be wielded like shields in battle.

So how may we translate across such self-imposed borders, to rethink the conversation? I am examining this question by utilizing a fusion of geomythology and deep mapping, from the perspective of archaeological narrative. For archaeology has sufficient breadth to straddle these divides, it is part of "the challenge of the environmental humanities as a transdisciplinary matrix" (Heise 2014, paragraph 1), as a constantly evolving assemblage of compound practices. Archaeology is more than a discipline, it is a "cultural disposition" (Shanks and Svabo 2013, p.1) and as such it is able to bend its disposition to consider alternative influences.

Before I get to that though, for the sake of clarity I shall summarise the key terminological background here.

## **1 Mapping Terms and Theory**

For my purposes, stories are defined as a connected series of events, told through various means, not restricted merely to the written word. They may be factual, fictional or a combination of the two. Facts are defined as that which is referential and fiction to be that which isn't (Genette 1991; Cohn 1999). The two blend within my chosen fields into a *transdisciplinary* form of spatial storytelling, where empirical and non-empirical perspectives coalesce. Archaeology lends itself to hosting this type of exploration because it is already inherently multifaceted due to the collaborative nature of its own construction; palynology, palaeontology, vertebrate palaeontology, malacology, entomology, geochemistry, soil micromorphology, bathymetry, sedimentology... and so on and so forth... all work together to produce a conclusion. Not always a harmonious one; but a conclusion nonetheless. Despite this, archaeology is oft considered to be encased in a dualistic camp, referring to two distinct but interconnected practices which are prevalent throughout all of the various facets; the acquisition of tangible data from past actualities (Joyce 2002) and the presentation of their contexts through word and image (Deetz 1988).

It is the marriage between these two that creates attestation, or knowledge, depending upon opinion (and it is here where a permeability of fact and fiction can reside). A constant layering of fragments fuse together into a script, a ladder of production which is ultimately more than just ‘double voiced’ (Bakhtin 1981; 1984). Rather, it is an elasticity of utterances which are inherently open to reproduction, reinterpretation, representation over time. As such it therefore acquires the structure of a ‘narrative’, wherein there is a beginning, a middle and an end (White 1987) through the experience of the audience. For the audience encounters snippets of this unified exchange, bringing to it an act of recognition that reframes mere words and images into being as a story with provisional finality, where a story is thus a series of narrated events (Genette 1988). In this instance, the events are historically situated as past actualities. If we then apply Paul Ricoeur’s notion of narration (1983) then this combination of description (an account, or representation, of X) and prescription (a judgement about X), where X is a past actuality, we have what constitutes an archaeological narrative.

This is not the only manner in which storytelling is integral to the practice of archaeology. From Alan Garner to H.G.Wells, storytellers have an established tradition of using science as a source for inspiration and as a mode by which to engage people with ideas – but the reverse is also true. Just as fiction appropriates science (and history) to lend some alleged credibility to imaginary worlds so archaeology dresses factual worlds in the imaginary, with data decked out in clothes borrowed from folklore, fairy tales and the fantastic. This makes what could otherwise be ‘dry science’ more accessible and engenders a sense of ownership towards the material culture; for people identify with the tales through imagination, they associate their colour with the site and so come to identify with the site by proxy. That identification engenders a personal connection which encourages a protective attitude, therefore utilizing familiar stories becomes a way by which a concept, site or artefact can accrue public engagement. This technique is also employed by journalists, sometimes with one leading people into another before the science shows itself. Thus international articles on climate change are often seen under headings about Atlantis, or Noah, whilst county papers utilise local tales like Cantre’r Gwaelod or Lyonesse. The narrative form becomes a map in which the supposed facts sit as landmarks, with sentences and imagery as direction and the topography a memory of the shape a story can make inside one’s head.

Geomythology approaches this collage in a slightly different way. Predominantly the study of geoscience and myth, it straddles classics, literature, anthropology, archaeology (theory and field), geology, history, philology, philosophy... there are no disciplines whose stones are left unturned in order to find the natural phenomena which may be encoded within a story.

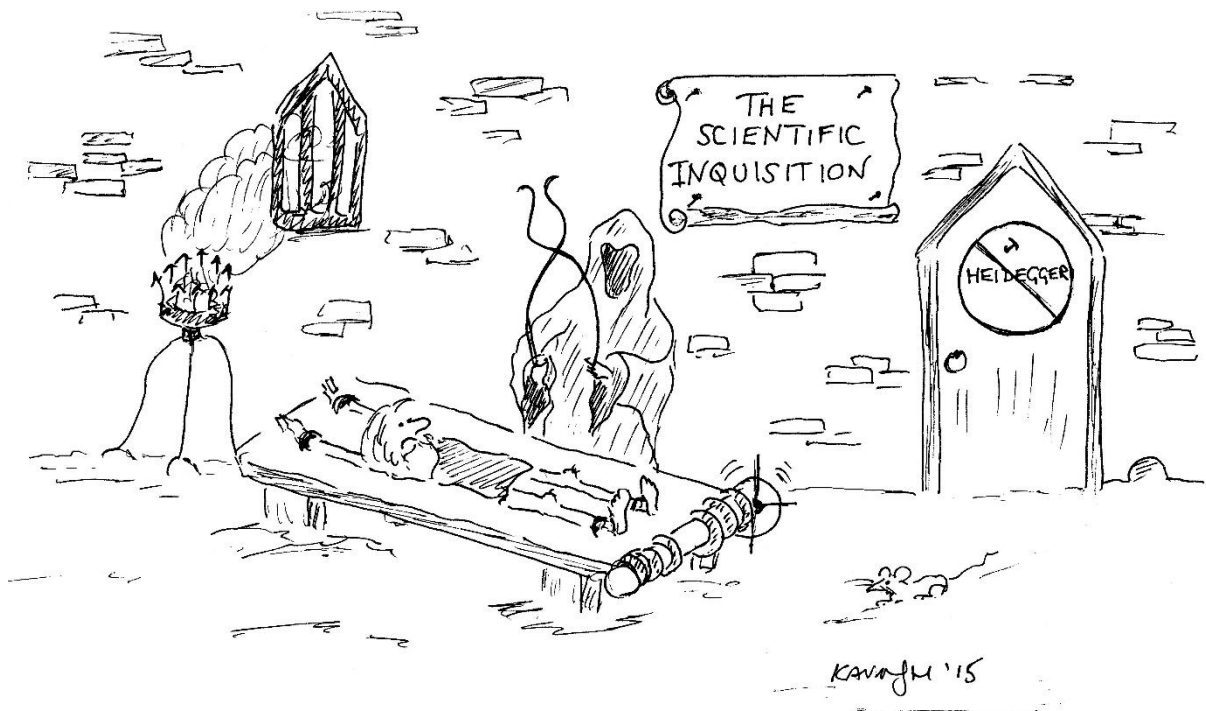
Although the term itself was only coined 50 years ago by the geologist Dorothy Vitaliano (1968), geomythology is not a new practice. From the earliest recesses of classical antiquity scholars have grappled with the notion that archaic cosmological narratives may be contained in epic poems and accounts, such as Homer’s *Iliad* (circa 760-710 BCE, cf. Fagles, 1990) and Hesiod’s *Theogony* (circa 700 BCE, cf. Caldwell, 1987). From the paradoxographer Palaephatus to the philosophy of Plato, from Strabo’s geography and on to Pliny the Elder’s natural history pioneering explorations were undertaken to seek the relationship between tales of the land and the land itself, between the intangible patterns of mythology and the tangible

ones of empiricism. These discussions were inherently multidisciplinary and continued to be so throughout antiquarianism in the West until the Victorian era. At this juncture, the fashion for ‘useful knowledge’ took over, separating the sisters of science and story into competing disciplines over which science wore the crown (Keene 2015).

Bounded in the epistemic bias of orthodox perspectives storytelling has since been dismissed as an inferior feature in the intellectual landscape (Gazin-Schwartz and Holtorf 1999); a source to be critiqued or stood behind as a bridge for public engagement but not as a partner to be afforded equal value. Therefore, despite the combined essence of geomythological research, emphasis has always remained upon examining what alleged facts may be hidden in the tracks of alleged fictions.

In so doing, modern geomythological studies sieve land and seascape stories through the purview of geoscience (Mayor 2004; Nunn 2012; 2014a; 2014b; Vitaliano 1973; 2007). The truth chased has been incarcerated because the communication consistently runs only in the one direction: Science asks of myth a question, myth attempts to answer, science decides whether or not the answer was ‘correct’. Then asks another question. And so on and so forth. The questions asked are always variations upon: ‘Dear Miss Myth, how much can we stretch your tangibility...are you really real?’ (Fig. 2).

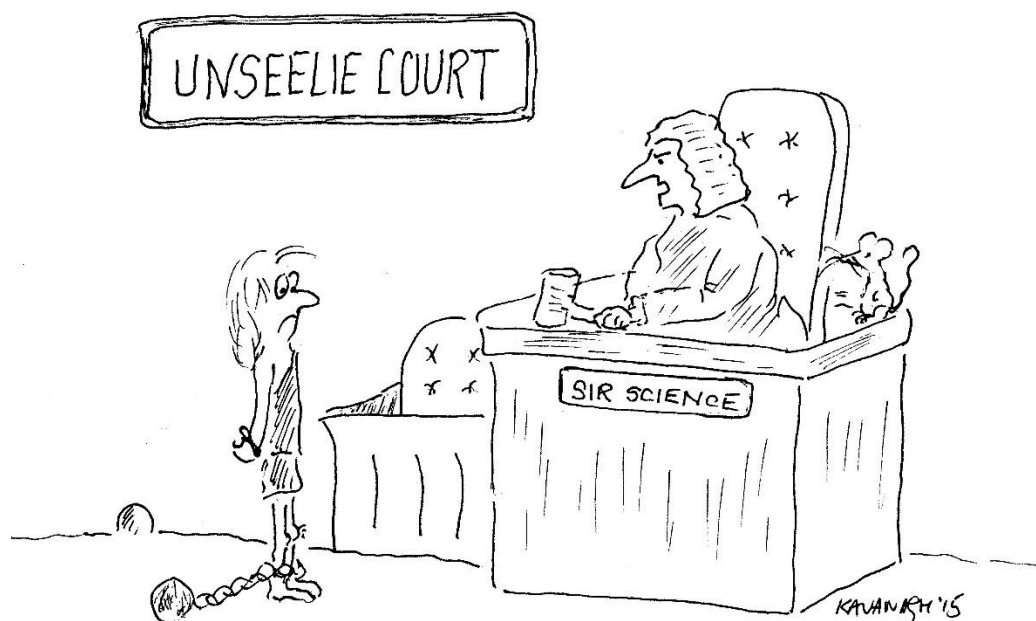
Reality is defined in this practice as being something that can be empirically proven; it is not a philosophically informed concept. Miss Myth is then either disregarded as being ‘false and fanciful’ a ‘silly story’, or she receives a pat on the head for having got some of it ‘right’. Sir Science goes on his way, in search of the next tale to plunder.



It is rare for Miss Myth to be allowed to question back, or to challenge the decisions made. She is dismissed as being naïve, primitive, superstitious because she is allegedly ‘pre-scientific’ and therefore surely cannot possess the appropriate skills. She rarely has her offerings understood from within their own position as stories rather than as technical reports. Instead they are examined out of context whilst she stands in the dock, awaiting her judgement (Fig. 3). The impact of this is that having met at a crossroads, the champions of science and mythology never quite engage in a constructive discussion (Piccardi and Masse 2007) and thus eventually continue in their merry ways along different paths, albeit often with the same destination in mind – that of engaging with land and seapaces authentically.

Therefore, I wondered; what would happen if we gave them an equal stage? What if the orthodox hierarchy were to be dismantled and instead of being a diktat, an inquisition, the geomythological discussion became a demotic cartographical construct (Pluciennik 2015) that all routes across the land could share. Where the real is composed of “things-in-phenomena” in which phenomena constitute the ontological primitive unbounded by oligarchical awards of meaning (Barad 2003, p.817). Thus, instead of having a striation of isolated narrative paths arguing through our communities, we would have a coalition, an interpretative polyphony; a deep map.

A deep map is not a thin map. Or at least, it is not a single, thin, map. It is a folding of site specific representations whose connection with a cartographical map is akin to the relationship between a “thick” and a “thin” description (Ryle 1949; Geertz 1973; Holloway 1997). This is because it creates a pattern of social and cultural relationships, connections which go beyond any single account. It transcends a mere statement of facts, allowing for poly-dimensional signification; “it is performativity put to work” (Roberts 2016, p.viii).



It is also, rarely, able to be singular for it applies the term ‘map’ from the 16<sup>th</sup> century latin *mappa mundi* – ‘sheet of the world’ – and adds depth by integrating more than one sheet at a time from many accounts of the location. It is a collection of data that shows an area where the geographic features are accompanied by conceptual ones; such as those of folktale, literature and music. It is a palimpsest of perception.

Deep maps do not adhere to empirical legislation, they “do not explicitly seek authority...but provoke negotiation between insiders and outsiders, experts and contributors, over what is represented and how. Framed as a conversation and not a statement...” (Bodenhamer et al 2015, p.4). In this way, the deep map can become a conduit for rethinking geomythological research and archaeological representation.

As an approach to synergizing multi-vocality (Bender 1998; Hodder 1999) the term’s lineage has been well documented elsewhere (see Bodenhamer et al, 2015; Roberts 2016) and is thus not required here. Suffice to say that within archaeology it was infamously appropriated by Michael Shanks and Mike Pearson, in conjunction with Cliff McLucas, through theatre/archaeology in the guise of Brith Gof. Their practice was essentially a site-specific response to landscape that attempted to ‘open’ place by laminating often tensioned approaches to the same locale. Applying the model of antiquarianism, they considered a deep map to be a conceptual stratification that reflects “everything you might ever want to say about a place” (Pearson and Shanks 2001, p.65). It is therefore even more than just a two-way conversation; it is a heteroglossic debate.

Defined by Bakhtin (1981) as being a ‘national language’ through which multiple speech types, or dialects, converse, heteroglossia can itself be layered. This layering creates a polyphony of interdigitating internal stratifications (Bakhtin 1981; 1984). Characterised by the independent power of each containing voice, polyphonic narratives are inherently open ended (Joyce 2002). Simultaneity supercedes linearity, particularly when stories are told through more than text alone. As an output it therefore hopes to honour all areas equally and when applied to archaeology could be described as a multifaceted depiction of time and place, embedding evidence within its spatial temporal context from hitherto unexplored angles. It reframes perspective and in so doing unsettles pre-existing authorities.

In this manner the deep map can be said to resonate with Karen Barad’s onto-ethico-epistemology in that it represents phenomena revealed through the ontological inseparability of intra-acting agencies (Barad 1999; 2003; 2007). Through being both inter and intra-actional, responsibility is shared and unrestrained by finite conditions. The agencies in question are the various disciplinary voices who, in actively listening to one another, are able to converse harmoniously rather than in competition; creating a choir instead of a row. For in changing the apparatus, the map, we make the world differently; we expose the invisible.

Of course, this anthropology of practice can be effectively achieved with alternative ‘thin’ mapping also. Where deep mapping is conditioned to address the creases, the unplotted domains, to essay the intermezzos and edges by its multi-scalar dimensionality, its thinner counterpart can also levy into hitherto unexplored cracks in our praxis. Two examples of this

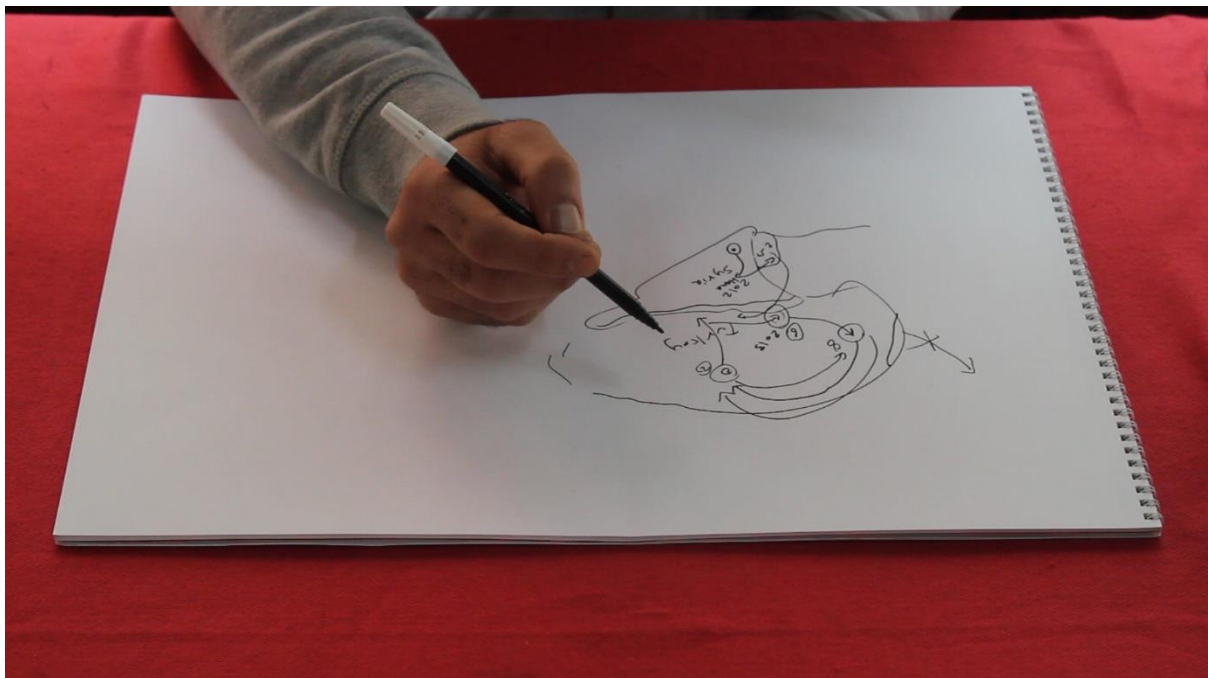
come from Nishat Awan, University of Sheffield and Hagit Keysar of the Public Lab in Jerusalem (Public Lab 2015).

Nishat Awan's discipline is architecture, a remit which she extends to include the exploration of migratory spaces. She explores borders, boundaries and thresholds of identity through spatial mapping in order to examine and record the lived narratives of citizenship in our rapidly changing world. The perspective taken is not the one of official authority however, it is taken from eyes who are hidden inside the margins of society. These maps are not cartographical propaganda, they depict intimate journeys in search of freedom.

Awan's aim is to make public these spaces and citizens who have been pushed to the perimeters, both physically and politically; to challenge our normative assumptions about land and landscape, about a sense of belonging that transcends birth right and paper residency. As uncertainty grows on all sides of the refugee rhetoric there is an increasing urgency behind collating an informed portal for fair discussion. With the Topographical Atlas of European Belonging (Awan 2016) she has found a way of allowing visual media to lend itself to this end with sensitive acuity.

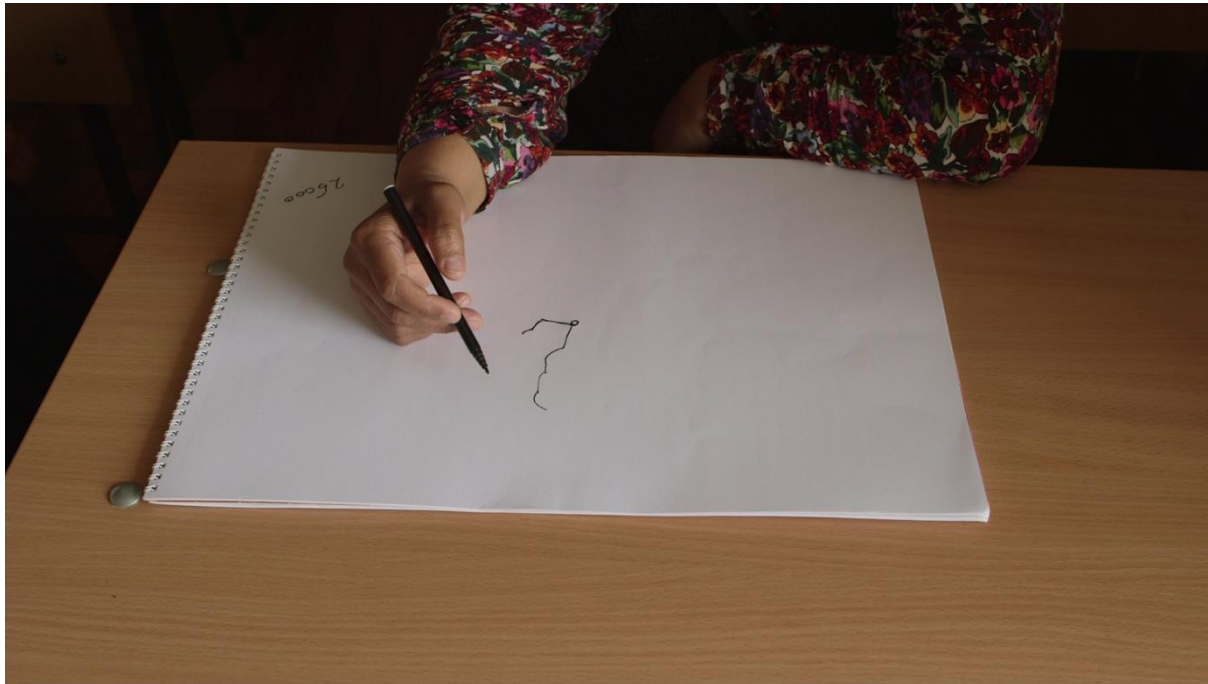
Collected as part of this project to define Europe's ambiguous edges, the two images I have included represent the direct experience of individual migrations across and along these shifting frontiers. These maps speak in fragments, from moments of recollection. They are experience.

The first image (Fig. 4) is of a Syrian man drawing his journey away from home. His pen's narrative loops around the friends who showed him hospitality as he navigated back and forth between Syria, Lebanon and Turkey. An activist leaving in fear for his life the words he spoke told of obstacles, confused dates and a gratitude for having been able to slip between places and danger with few questions raised.





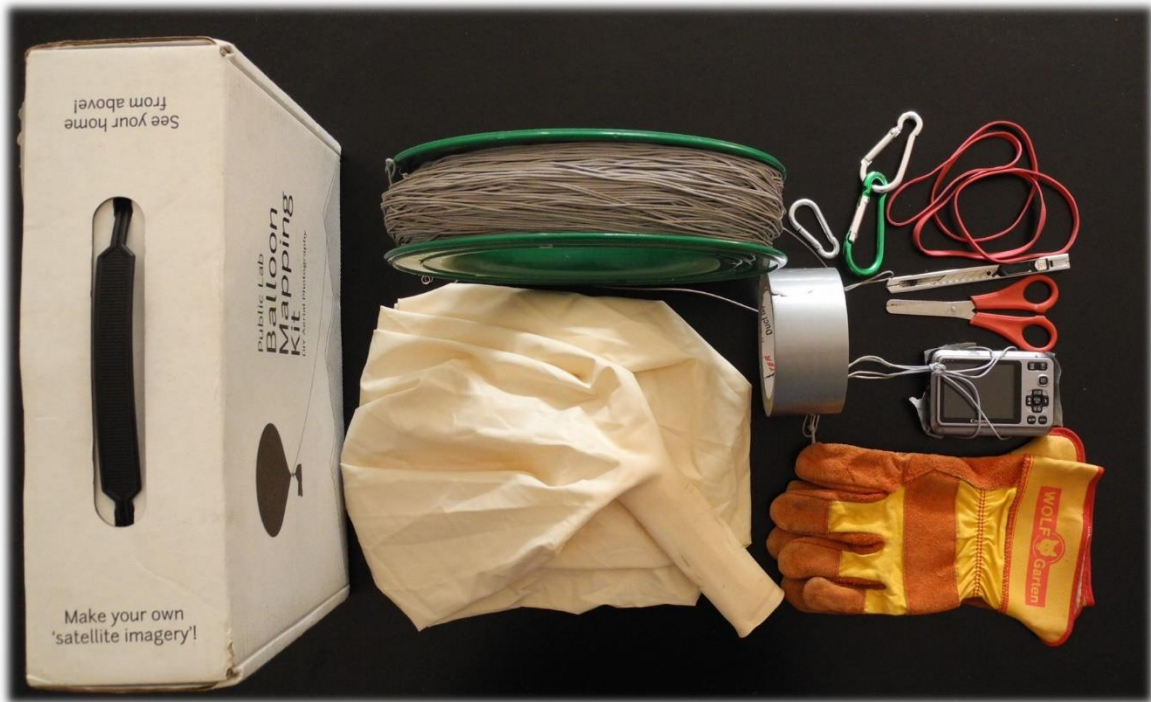
The second image (Fig. 5) is of an Afghan woman drawing her passage out of Afghanistan. Her map was small, her knowledge of where she had been, minimal, for she mostly travelled under cover of darkness. A memory of Tajikistan, of family, people smugglers and moving through the night directed her hand. Time was marked by body chronologies, such as the birth and age of her children. Upon arriving in what she thought was Slovenia but was actually the Ukraine, Awan says that this lady wondered if she was now looking upon what Europe was.



These issues of identity and the fragility of belonging pervade the collection which has been both exhibited and published online. Supported by the Independent Social Research Foundation (ISRF), the project continues to seek changes in our comprehension of division and humanity. For the digital mapping is not an end in itself, rather, it simply identifies the terrain we have yet to walk.

A very different example of how a change of mapping apparatus can alter the geographical perspective comes from Hagit Keysar, an anthropologist, artist and activist based in Israel-Palestine. She has been working extensively with Public Lab in Jerusalem (Keysar 2016), enabling both Israeli and Palestinian communities to make their own balloon or kite-elevated cameras with which to take aerial photographs of the urban environments in which they reside. These cameras come in a basic kit form that are easily constructed and can be used discreetly, disguised amongst recreational kites and balloons (Fig. 6) They are also quieter than a quadcopter and with considerably less maintenance or structural vulnerability. As a citizen-led initiative this project has been exploring the political and social implications of collaborative technologies in places of civil inequality and conflict. Developed through a partnering of architects and planners with communities and activists, the collaborators have been united in their need for a DIY form of mapmaking.

Hagit says that for her the central impetus has been to step away from directly contesting the official, conflicting, maps which supported propaganda and instead to find a new way of seeing



the city; to navigate away from the authoritative jurisdictions of formal political discourse and into the spaces in between where communities are adapting to an ever changing environment. Her aim has been to liberate the relational patterns between place and people.

The resulting maps depict homes and pathways which have been destroyed by industrial development. They reveal villages whose existence is publicly denied. They decolonize the skies as inhabitants photograph their presence from the end of a piece of string, claiming their civilian view from the State's presentation of spaces. The aerial photographs are then able to be used as evidence, to challenge political rhetoric, to defend the otherwise defenceless. Away from the domination of authoritative opinion they allow a new way of seeing; these maps give a voice to the invisible (Fig. 7).

New ways of seeing, where the authority is even handed across areas of expertise is the premise I have worked from with my own mapping projects. Where Keysar has taken aerial photography as her canvas and Awan found herself recording memory, one of the routes I embarked upon was to step into the humanities with layers of myth and landscape through film, inspired by the work of Robert Ascher (1986; 1988; 1991).

In addition to his extensive contribution towards the birth of post-processual archaeology, Robert Ascher was also an anthropologist, an artist; a mythographer through film (Ramey 2014). Having become dissatisfied with orthodox modes of representation within the humanities, asserting that "to reach a wider community, writing is not enough" (1981, p.67), he explored alternatives that took a more "oblique perception so necessary to the interpretation of culture."



Considering this obliqueness to be the jurisdiction of the arts, at Cornell he experimented with the inherent interplay film embodies between dream and non-dream (Langer 1953), through applying direct camera-less animation to myth. This technique, which involves drawing directly onto celluloid, allows the film maker to retain total control; it is not a collaborative affair. As such it then becomes lone authored, a visual kin to an academic paper like the one you are currently reading. However, it is still well disposed towards being a form of deep mapping because film, myth and dream have an unconstrained relationship with time; fact and fiction merge; geography is fluid and voices intersect one another. Abstractions are fragmented further, without loss of coherency. Together they tell a story on many levels, thus filtered

through an anthropological lens this triad allows one individual to translate culture with minimum intrusion.

The result is a series of four short films that allow myth to be its many faceted nature, including “a kind of map that directs and guides people through anything from property rights to behaviour toward the gods” (Ascher 1981, p.70) Watching these many years after their conception I was struck by the freedom they still possess, the freedom to speak symbolically; the way tales do and science attempts to not.

It is this tension between the two different modes of communication, one in which the cultural imagination is free to roam and one in which it is not, that I seek to address through deep mapping geomythology. Instead of untangling a cumulative ball of interpreted experience into neat little boxes, geomythology would instead thread them even closer together into a weave within “which the successive episodes of deposition, or layers of activity, remain superimposed one upon the other without loss of evidence, but are so re-worked and mixed together that it is difficult or impossible to separate them out into their original constituents” (Bailey 2007, p.204).

I wondered; would this trigger a type of interactive causation where overlapping scales of reference interact, resulting in the blurring of divisions, thus allowing for mutual transformation that could change the way we engage with one another academically?

Just as we can see the various folds of geoscience through the different specialisms it employs we see an equivalent within the arts, when drama and music come together, painting and installations - but what equivalent stratigraphy of process may be revealed from within a geomyth through a deep map that engages science with story, story with science, if all are represented without any attempt to tear them apart? The key, I decided, lay in the manner of engagement. After Ascher, film was an obvious choice of containment for the weaving of things. However, this film would not be sole authored, it would bring together similar combinations of drawing and footage with words and sound; but from disparate sources.

This unity could be expressed through a re-working of the term ‘pragmatology’ by Michael Shanks, wherein it means not the study of that which is practical (although that is not excluded) but the theory and practice of ‘pragmata’. Pragmata are ‘things’ in Ancient Greek. “The verb at the root of pragmata is *prattein* — to act in the material world, engaged with things” (Rathje et al 2016, p.5). These include that which is active as well as passive; so deeds and doings, duties and obligations, encounters and responses. Pragmatology is the creative process of engagement with things in the material world, where ‘things’ are not individually discrete but become themselves through our involvement with them. How we relate to the past, and to each other about the past, delineates how it exists and there can be no end to the manner in which it is rewritten, reframed, rethought.

## 2 The Bridge

I applied this theory to my research into the flood stories of West Wales. Some of these have a trackable lineage of <1,000 years, whereas the geo/archaeological data with which I related them spans inundation from >15,000 years. The former is due to how far back we have extant literature, the latter from the first known flood; following the last glacial maximum (Haynes et al. 1977; Shi and Lamb 1991). This process has led me to grapple with a wide breadth of disciplines which don't commonly share a desk; from Medieval Welsh texts through the semiotics of modern folk stories to bore holing, sample processing in the lab, composing poetry and trawling inside archives.

Amongst the tales that have kept me company through the endless mud and words has been that of Bendigeidfran and Branwen, from *The Mabinogi*. *The Mabinogi* is a group of four stories from within a larger collection of eleven texts composed in Middle Welsh which possibly originated as oral tales, then being later written out by monks within *The White Book of Rhydderch* and *The Red Book of Hergest*, circa 1350 and 1400 respectively (Davies 2007).

In one of the branches, Branwen, daughter of Llŷr (sister of Bendigeidfran, son of Llŷr and King over the Island of the Mighty) is married off to the King of Ireland as part of a political alliance. The plan backfires from the offset, eventually Branwen sends a message home for help via a starling. Bendigeidfran then summons an army and goes over to Ireland with the intention of sorting things out. Again, that doesn't go quite as well as hoped. So what we have is a clash of communication between West Wales and East Ireland, a marital dispute, a sea crossing through flooded land - and the tragedy of ensuing war.

It was the sea crossing and references to trees appearing in the waves that attracted my attention. I consequently analysed this text per my own methodology, details regarding which I refer you to within an earlier work (Kavanagh 2015), for the sake of brevity. Suffice to state that in conclusion I was comfortable positing that there was sufficient correlation between the geoscientific and the mythological data to argue for what has been taken to be fiction to now be taken to be possible fact. That if Bendigeidfran had been a 'real' man, then he may indeed have been able to look as if he walked across the Irish Sea from shore to shore.

Upon reaching this stage I selected significant points of information and imagery, wrapping them into a short film in collaboration with six other experts. The film maker, Jacob Whittaker, and I layered sketches with footage, quotations with interpretive song and original music. The purpose of this was for it to serve as a Proof of Concept (POC) pilot to test the interdisciplinary methodology, rather than to be a completed product in its own right.

However, it does stand alone. As a time capsule for that stage of deep mapping, *Y Bont/The Bridge* (2015) reflects one small stretch of coastline across space and disciplines. It does not compromise integrity and aims to re-establish the very foundation upon which normative perspectives reside. Hopefully it will also cause viewers to not feel like they now *know* something new, but rather that they have the desire to go and find out more about the things which we included (Ramey 2014). It is thus a post-representational expression of cultural

communication that forms just one digitised layer of a deep map, an assemblage of iterations where “boundaries do not sit still” (Barad 2003, p.817).

In this manner it is transmedial. “Transmedia intertextuality works to position consumers as powerful players while disavowing commercial manipulation. It levels ideological conflict” wrote Marsha Kinder in 1991 (p.119). Somewhat transmedial and intertextual in her own right, Kinder has published over a hundred essays along with a range of books and films across a breadth of genres since the 1960’s, always with narrative as her continuous theme. She coined the term ‘transmedia’ to encompass interactive, multifaceted platforms as a seed for change in which ideological conflicts within established and reforming narratives can seek to attain unification. This unification is sought by levelling the playing field in which normally competing communities battle. Instead they are given equal space to communicate in their own manner, without the insidious antagonism of hierarchy. It isn’t about diluting everybody and everything into one uniform consensus though, rather it is about facilitating the different expressions of one narrative through a plethora of portals.

An example of this would be the Indiana Jones franchise. It began, not with the film ‘Raiders of the Lost Ark’ in 1981, but with one called ‘The Secret of the Incas’ in 1954. Since then it has spanned a rewrite, sequels, books, comics, toys, a television show... until now the only people left creating about Indy are the audience themselves via such formats as Minecraft, tourism situated participatory culture, social media and cosplay. It has inspired generations of children to investigate archaeology, been used to both build and break down stereotypes within the field (Mickel 2015) and has thus over reached the boundaries of commercial control to take on adventures of its own.

Transmedia storytelling of this kind has become so embedded in our culture during the last twenty years that Carl Scolari and Indrel Ibrus point out how we now have the official professional credit of ‘transmedia producer’ in the United States, along with various transmedia funding schemes and similar processes in place within the European Union, such as the MEDIA program and its associated support networks in the member countries (Scolari and Ibrus 2014).

It is a subject that has fascinated many scholars of digital media over the last decade, but in an interview with Henry Jenkins (Provost’s Professor of Communication, Journalism and Cinematic Arts at the University of Southern California) Kinder stated that these expansions can yield more than just revenue, she had “always been convinced that there’s an important interplay between artistic experimentation and theoretical breakthroughs” (2015, p.262).

Amongst others, she cites Marcel Proust’s ‘A la recherche du temps perdu’ (1922) as having inspired Gerald Genette’s ‘Narrative Discourse: An Essay in Method (1980), as being a relevant case in point. She goes on to explain how the friction created by having art and academia interact can open hitherto unexplored theoretical discussions. As a specialist in learning through participatory culture and public engagement Jenkins’ research is distinct yet connected to this in being prolifically involved in linking academic researchers with the media industry, predominantly by developing new ways of thinking through old problems. He defines transmedia as being the flow of content through multiple platforms. It flows through multiple

platforms because it is “a narrative so large, it cannot be covered in a single medium ” (2006, p.95).

He considers it to be an ideal form for our modern era of ‘collective intelligence’, a phrase coined by Pierre Lévy in 1994 which refers to the impact of cyberspace upon society’s relationship to knowledge and culture. Through the manner in which access has been widened by the internet, Levy asserts that we are moving from a position of isolation (the Cartesian model *cogito*, ‘I think’) to one as a collective (*cogitamus*, ‘we think’) (1994). The resulting collective knowledge space (a *cosmopedia*) dissolves the boundaries between disciplines into a patchwork within which any and all fields can knit and fold. A shared discourse then becomes an inevitable emergence. ”Participants pool information and tap each other’s expertise as they work together to solve problems...to form new knowledge communities. Transmedia narratives also function as textual activators – setting into motion the production, assessment, and archiving of information... [and reflecting] the economics of media consolidation or what industry observers call ‘synergy’” (Jenkins 2007, paragraph 8).

As transmedia projects utilize a melange of different semiotic modes in order to reinforce one another, they are thus also a form of deep map where a mixture of associated agendas combine to further a single overarching harmony which speaks to a wider audience than each factor could attain on their own. Both are concerned with the reconstruction of knowledge through building story worlds, where ‘story’ refers to a narrative trajectory that is not static but are dynamic models of constantly developing situations (Ryan 2013).

With the exception of Marie-Laure Ryan, transmediality is generally concerned with representing what is usually a fiction through media-centric platforms. Whereas the notion of deep mapping does not differentiate between fact or fiction, arts or sciences and need not be constrained within any particular format. They nonetheless reflect different aspects of one another, they are “a trajectory, a constellation of shifting impulses – in many ways ultimately educational – rather than a unified set of technical approaches or a creative methodology...[they] work against the grain of disciplinary exclusivity, re-narrating the world in ways not pre-conditioned by the *realpolitik* of an epistemological *status quo* that maintains a culture of possessive individualism. It’s for this reason that deep mapping cuts across the methods of the sciences and arts, playing with their relationship as a means to reconfigure social memory and place-identity. By activating testimonial imagination in response to the recovery of spectral traces of forgotten or untold pasts, deep mappings act educationally, critically bridging otherwise antagonistic positions and stories so as to provoke new understandings” (Biggs 2014, paragraphs 1 and 14).

‘Provoking new understandings’ is the lynchpin here. By altering our usual way of looking we can remove the restrictive boundaries placed upon orthodox delineations, we can dissolve the fantasy of otherness and that allows for convention to be dismantled intellectually. A variety of agendas can therefore be accommodated across a single nexus of one text through a many worlds relation, or through one world across a many texts relation (Ryan 2013). In this, the term ‘world’ is a little ambiguous as it may refer to a set of context defined ontological properties by fiction or fact, or to a user-centric field of reference. Either way it follows a

Proppian notion (Propp 1968) of journeying ‘to another kingdom’ where one inhabits a different reality through the imagination.

This is essentially what the archaeologist does when interpreting a site or assemblage. We have a teleological code to which we adhere our imagination. We immerse ourselves in the conceptual landscape that we are uncovering with every spit and trench; building a world in our minds with every stone we move. With experience we bring a dearth of extra diegesis to aid, or hinder, our world building view and we refer (and add to) the collective foreknowledge of landscape and archaeological historicity. The past people and places we encounter become personal, to the extent that we may succumb to the effect of ‘fictional homelessness’ when our research is completed. Just as a gamer may feel when they return to their physical reality.

As the information we archaeologists produce rapidly becomes a web of sub-disciplines that can transcend the world of a dig, sometimes the dig itself can take on legendary status as its history is regenerated through every telling to the diggers who come after, or through media outputs such as television shows, social media, graphic novels and again, even Minecraft.

However, to apply Tim Ingold’s words from *Lines: A Brief History* (2007), their core is always directed down a trail-following method which is largely destination orientated, pre-determined by the funding agenda they are obliged to honour. Whereas transmedial and transfictional world building can go further than this. It can wayfare, where wayfaring is akin to sailing with no pre-ordained direction, free to anchor in whichever harbour presents itself.

This is a little tricky to present in a funding bid as it is quantifiable only in retrospect. It does not entirely follow a checklist of pre-determined aims and objectives, nor does it fit comfortably into a time scale. When applied to archaeology this can allow for an opening of both expression and method that leads one away from the conventional sources of funding and into dangerous waters where art and science meet. Geomythology sits as a bridge across this water, with the geomythologist balancing carefully upon its wire (Fig. 8).





Academic and non-academic sectors can take an equal stand. Science can hold hands with story - BUT, this requires a radical reappraisal of how we finance and supervise research, for it does not fit neatly into our long established boundaries. Whilst funding bodies and institutions may claim to want to be interdisciplinary and devoid of ivory towers separating insiders from outsiders, when it actually comes to directing the money or devising marketing strategies, the practical implications of spreading over, say, eleven, different departments results in a rapid reversal of enthusiasm.

We therefore don't need to just deep map a physical landscape, or express our story transmedially. We need to deep map an entire academic perspective. For surely, one of the values of archaeology is its ability to cross-pollinate and position itself as a conduit for changing perceptions in landscapes of both the ground and of the imagination? Geomythology is a prime example of this. Archaeological representation has a track record of being able to regenerate old narratives and visual form to suit a more enlightened century, redefining knowledge production and gradually reconstructing power alliances (Moser 2003; 2014). So we are not without hope even though it is not easy to navigate the political minefield of ploughing up outmoded ways of thinking.

For geomythology, this ploughing involves convincing geoscience that stories are not merely the fanciful wanderings of overactive poesy that occasionally gets detail 'right' and convincing storytellers that science is not just the dry dungeon of Dr Spock-like insensitivity. It also requires coercing other disciplines to share their space. Room has to be made within academic thinking for modes of presenting research that do not fit within traditional structures. It also involves convincing funding bodies that stories are more than just puppets for public engagement, to be tacked on the end of projects in order to tick a box indicating community awareness. They are a method and a portal in their own right, just as science can be utilized to trigger a storytelling bonanza, with or without a hat and whip.

### **3 Layers**

“Deep mapping can be looked upon as an embodied and reflexive immersion...” concluded Les Roberts in the preface to *Deep Mapping*, a Special Issue of *Humanities* (2016, p.14). I concur, for this is exactly what seven of us did when developing the P.O.C. pilot *Y Bont/The Bridge* into a process of transmedially deep mapping the wider locale of Cardigan Bay. The ISRF, who had supported Nishat Awan, awarded us a flexible small project grant in order to facilitate this endeavour. This public benefit foundation seeks to fill the gap in social science that traditional funding bodies leave behind, promoting “independent minded researchers to explore and present original research ideas which take new approaches and suggest new solutions...” (ISRF, 2016a); they are pioneering a new approach to funding criteria.

This innovation enabled my previous team to dive a step or two further into experiential experimentation, working together on two field days; the first in Borth and the second at Tan-y-Bwlch, both on the Ceredigion coast. Our aim was “to form a new understanding regarding

the interplay of flooding facts and fictions through the layering of time” (ISRF 2016b, paragraph 2).

The first field day saw us sharing our various knowledge streams concerning the land and seascape in question. This covered the deluge tales held in local memory, the extant literature in Middle Welsh and Irish, folk songs, myth and geoscience. Martin Bates (geoscience and archaeology) opened by sharing how he approaches a scientific understanding of space, place and time and it rapidly became apparent that he starts, and ends, with pictures – which we immediately realised was a unifying factor amongst the group. We walked along the beach as he explained what we could see from his perspective; the peats and sediments, traces of earlier channels, Bronze Age foot and hoof prints, fish traps and of course the submerged forest.



Debate was lively, as was the weather. The sky hung heavy and the spray bit as Jacob Whittaker (artist and film maker) lugged his camera equipment over the slippery ground. Recording conversations was tricky in those conditions but he did manage to snatch some key moments of explanation, interaction and creative practice, ably assisted by Peter Stevenson (story teller and illustrator) who hung onto the boom with frozen fingers (Fig. 9). Maria Hayes (artist and illustrator) also battled the elements as she attempted to sketch the desolate tree stumps with ink and parchment. Lynne Denman (heritage interpreter and singer) translated some of Martin’s specialist lingo into everyday speak and sang to the waves of mermaids and loss. Diarmuid Johnson (philologist and musician) dodged the paper problem and wrote directly on the sand; inscribing quotations from Cad Goddeu/The Battle of the Trees (Evans 1910) overspun with

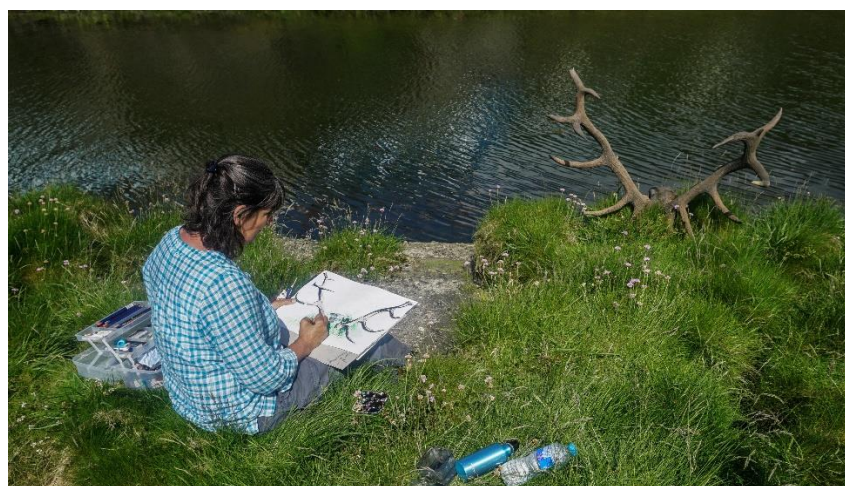
the theme of peace ('Hedd') to symbolise our synergy. I took stills and moved between everybody, attempting to keep out of their way as they found their own harmonies in the wind.

This first day set everyone up to then go and work either separately or in partnerships, as they chose, responding to what they had experienced in witnessing each other's process. With sound recordings to aid memory as to what we had each agreed to deliver and an online file into which they could place creations, I waited. Drawings were the first to arrive; collages and montages of Medieval script with sketched trees. Stacks of scientific data flooded the account. I provided more stills than a gallery. Other contributors were quieter, some needed regular reassurance regarding what our remit was because the coherency which was so tangible when all together became more ephemeral upon finding oneself working alone. That crisis of confidence was what I was looking for however, for it is in those moments that people find the cracks in their own thinking and expansion can occur. That is where reflexivity is sown.

Out of these fissures came the second field work day.

The climate was kinder than before as Martin took geo-archaeological samples via auger and test pit, assisted in the technical work by me and the physical labour by Diarmuid, who had never engaged with such activity before. Peter sketched the proceedings, maintaining a steady sharing of information by way of questions and listening (Fig. 10). Jake and I continued to record it all by film and photographs.

Meanwhile, Maria was ensconced by a small bridge. Painting (Fig. 11). Painting portraits of a set of antlers which had recently been found by visitors from Birmingham, Julien Culham and Sharon Davies-Culham, in the shallows at Borth. Julien and Sharon had reacted to their discovery in textbook style; leaving it in situ, taking photographs and contacting the relevant authorities. Martin had returned to the site and uncovered the find, which was curiously in roughly the same place where the remains of an auroch had been found in the 1960's. They had then gone to the labs at University of Wales Trinity Saint David for cleaning and sampling, producing a subsequent radiocarbon date in the Middle Bronze Age. These antlers, belonging to an Imperial red stag immediately grasped public attention. They also gradually took over directing the remaining course of our trajectory.

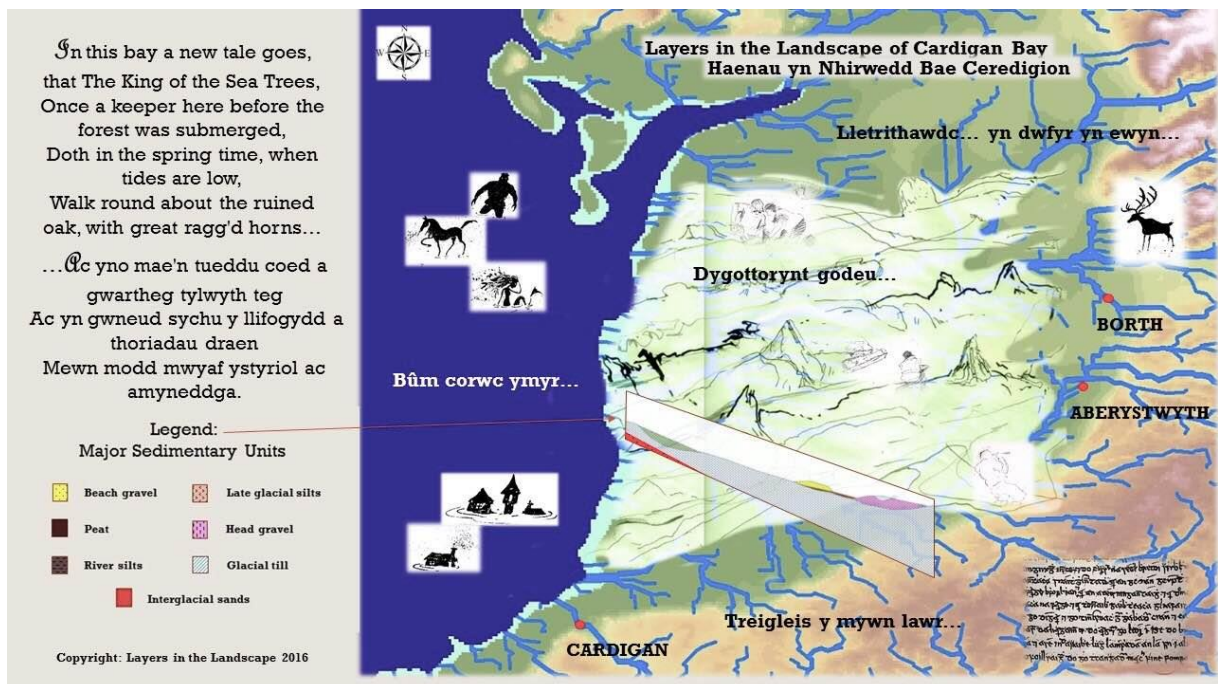


Influenced also by various other projects that occurred throughout the ensuing months, sitting next to a photograph of the antlers, I began to write up all the data we had gathered into a myth. A myth that was also a poem. A poem that was also a time line. A time line that was also a story about flooding, about a changing world and lost inhabitants. The protagonist was a creature who guarded that liminal space between land and sea. He wore antlers as a crown, had cloven hoofs (which tied in with the aforementioned hoof prints imprinted in peat and clay), the body of an auroch. He fitted the description Peter had given of a creature who guarded the folk lore land of Plant Rhys Ddwfn, a utopia out on the Ceredigion horizon. His manner of tale telling opens after the form by William Shakespeare in *The Merry Wives of Windsor* (Craig, 1914; Act 4, Scene 4) and concludes after Ariel's speech in *The Tempest* (Act 3, Scene 3), also Shakespeare. In-between it follows Taliesin, with echoes of other poets (such as Dafydd ap Gwilym, Llywerch Hen, W.B. Yeats and R.S.Thomas) reverberating in the lines.

Maria and Peter took this myth-poem, *King of the Sea Trees*, along with the scientific timeline and shut themselves away in the studio. Their idea was to see if they could create a line of artwork that expressed their understanding of this information, the direct experience of handling the artefacts, of walking the space, of hearing the past languages spoken and sung. As ever, Jake was behind a lens, recording. Having never worked closely together (none of the team had interacted as a whole during the previous film's inception) and being from very different traditions this combination was, in its own way, as unique as Martin and Diarmuid had been when both hauling on an auger. The result was a most beautiful scroll of cave painting-like animals, early people, glaciers and meltwater dancing across 120,000 years as the paper became the Cardigan Bay we know of today and are visualising into the past (Fig. 12). More critically, for our purposes, the result was also a piece of footage which realizes deep mapping in process (see: *Layers* 2017).



During and since then, a variety of offshoots have arisen *en route*. We have experimented with a heritage information panel that reflects the various layers, along with an abstract thin map of the deep map (Fig. 13). The art'chaeology element has begun to inform projects elsewhere, including within education (Kavanagh 2016), and opportunities for tourism related activities are being implemented in conjunction with Visit Wales' marketing strategy which names 2017 'The Year of the Legend' and 2018 'The Year of the Sea'. Performances have occurred; wayfaring with King of the Sea Trees, stories and song as part of series of science walks by the bay. Other artists have joined in the play, with Emily O'Reilly recording the sound of our walked performances and then weaving it into a textile piece called 'Oscillate' (O'Reilly 2016). I responded to that with a photograph of the shoreline that reflected her colours and layering, she is now weaving a response back – and so it continues.



At the time of writing, Jake and I have just completed putting all of this together into the video narrative we promised the ISRF. We have stepped back from presenting a product and instead have concentrated solely upon the intra-action of mapping layers. Upon process – and process upon sharing, becomes synthesis (Snow 1959).

I cannot, or rather will not, speak for the rest of the team. However, for myself, what I have uncovered through this project is that working with a mixture of disciplines and a mixture of academics and non-academics, of institutionally trained thinking and intuition, of art and science, is really no different to working with any combination of individuals. The same challenges of personality and circumstance, skill and time, comprehension and commitment, terminology and patience abound. All that is different is that extenuated effort has to be made to listen most carefully to one another, to be additionally considerate, to take care with how language and power are used. One is brought up close to one's own manner. There can be no assumptions based upon shared praxis. This level of transparency can make some people supremely uncomfortable, others it will inspire.

Was it easy? No. Was it difficult? No. It was... and still is... immersive. Letting go of producing a product allows one a freedom that I found to be reminiscent of Ascher's stop motion animation. However, working with so many other people from distinctly different positions also brings the very restrictions that Ascher was opting away from, in that it demands that at least one individual become conceptually multi-lingual so as to be able to hold all the disparate elements together – when those disparate elements are other people. At least one person has to therefore become fully in trust to the others, at their mercy – to take on the liminality without fearful over control but also without losing hold of the reins. Not unlike theatre direction. Overall, it allows people to rethink their own internal dialogues, how they position themselves (and each other and their genres) in the broader map of the sociological imagination (Mills 2000). Individual quirks are emphasized, challenges which could usually be swallowed by disciplinary convention and speed of delivery become more clearly seen. Similarities are obvious. A little like walking, rather than travelling by car, moments are felt more keenly. This was not a journey of speed or sophistication, it was a journey of stumbles and new perspectives sought from fallen positions. I learned to look a little more clearly with other people's eyes, consequently my mental map of where I live is now enriched with their vision.

#### 4 Conclusion

As with psychogeography (Débord 1955; Self 2007), the very essence of deep mapping almost evaporates under the weight of attempts to pin it down into a static definition (Biggs 2014). This makes explaining it to people who are not yet INSIDE the map, in a paper such as this one, an inherently partial exercise. This is because both psychogeography and deep mapping are about movement; they are “not a static relationality but a doing - the enactment of boundaries - that always entails constitutive exclusions and therefore requisite questions of accountability” (Barad 2003, p.803). What was becomes what is, what is becomes what isn't; all can be reversed in an instant; at some points the detail is microscopically precise and at others it balloons into a broad generalisation. Whereas deep mapping is concerned with the layers of influence and expression, psychogeography is concerned with exploring how the environment has a psychological influence and the psychology, in turn, has an environmental influence. Both seek to destabilise habitual patterns, to explore without direction, to uncover that which is often overlooked. They are not destination driven and as such can remove more signposts than they lay down. However, psychogeography is urban centric, whereas deep mapping makes no delineation between the urban and the rural. It isn't focused on people, it's focused on the land *and* the landscape; on the accountable layering of stories.

McLucas attempted to offer a structure of tenets by which to guide, or explain, the *doing* of this in order to counter the dilemma (McLucas, no date). Thus here I shall conclude by responding to them in the light of the experiences I have hitherto cited, in the hope that they may clarify possible remaining questions in the minds of any reader - and also that they may offer some insight into what it is like to wear a deep map like a shared diving suit.

- i. “Deep maps will be big” - The intellectual space created by bringing together multiple disciplines is inherently big. The deep mapper needs to not be fazed by

how to navigate through such largesse. Not all potentiality has to be immediately realised. To be confident enough to allow natural developments within each field and within each combination of fields whilst being sufficiently ruthless as to be able to extract only that which is immediately resonant is how balance is maintained.

- ii. “Deep maps will be slow.” - Do not hurry. The need for full immersion is paramount and can only come with, and be actualised by, time in a manner not dissimilar to situated knowledge. Individuals will not work at a uniform speed, they are developing their own, independent, collaborations with each other and the location in the act of joint and sole creation. The unfolding of relationships cannot be fast tracked. Each will flourish at their own pace and to their own criteria, regardless of what they may promise at the outset. However swift and connected certain harmonies may be, the overall choir can only travel at the speed of its slowest components.
- iii. “Deep maps will be sumptuous” - The richness of multi-layered orchestration is what creates this sumptuousness. Guarding against over-saturation has to be carefully conducted, for ‘loud and complicated’ is not the same as ‘deep and resonant.’ The flavours can clash but need to do so in a way that is effective; this unified tension is the polyphony.
- iv. “Deep maps will only be achieved through the articulation of a variety of media” - Transmediality, rather than multimediality, is perhaps advisable because the latter requires a reliance upon digital technology that is not actually essential.
- v. “Deep maps will have at least three basic elements...[and] an archival system that remains open and unfinished.” - Three levels are the minimum required to make a map more than two dimensional. However, this can be in the form of two active and one passive. This makes the actualizing a little smaller and thus more manageable, piece by piece. One deep map will have many roads that fall off the edge it itself creates, these roads can be picked up at any future point (or simultaneously) into another direction. In stepping back from product and concentrating upon actualising process potentiality becomes exponential.
- vi. “Deep maps will require the engagement of both the insider and outsider – It is not insular, although the participants themselves may be. Being seen from outside of one’s normativity is how edges are clarified.
- vii. “Deep maps will bring together the amateur and the professional, the artist and the scientist...” - Deep maps are unifying. Ideas of status become nonsensical because everybody is an expert regarding their own perspective.
- viii. “Deep maps might only be possible and perhaps imaginable now” - There is an over-arching ‘present’ in a deep map that dissolves notions of time. Digital media certainly helps to facilitate a unity within such a dreamlike position but other mediums are also hugely flexible when it comes to manipulating reality, such as performance and poetry.
- ix. “Deep maps will not seek the authority and objectivity of conventional cartography. They will be politicized, passionate and partisan. They will involve negotiation and contestation over who and what is represented and how. They will give rise to debate about the documentation and portrayal of people and places” – This is the

*doing* of deep mapping, rather than the technique, which is what the previous tents addressed. It is the inevitable result of applying the technique.

- x. “Deep maps will be unstable, fragile and temporary. They will be a conversation and not a statement” – Embrace the fragility, allow oneself to become unstable in the security of combined focus. Process is a coming-into-being that is rarely without pain. It is also temporary.

“The archaeological imagination is rooted in a sensibility, a pervasive set of attitudes toward traces and remains, towards memory, time and temporality, the fabric of history” (Shanks, 2012, p.25). The archaeological imagination lends itself fluently to mapping, be it deeply or otherwise. Archaeology’s role is to expose that which is hidden, to address fact and fiction with equal analysis, to study layers in the landscape. Whilst my films are themselves completed, the deep map to which they adhere (and contain) is still very much a work-in-progress and may never, actually, be finished – but that doesn’t matter, for such apparatus “are inherently unstable, continually unfolding and changing in response to new data, new perspectives and new insights” (Bodenhamer et al 2015, p.4). The ‘world as it is’ in which we live does not stand still, it does not pose for a cartographic portrait that will remain true beyond a mere moment. It is forever in flux. It flows like a river beneath the bridge on which our thinking stands, a river into which we can never step twice. Therefore, instead of becoming lost in the flood we have to either be carried passively like driftwood or be active in our sailing, to lead change by joining forces, to bridge the self-imposed disciplinary divides.

”Foucault points out that juridical systems of power produce the subjects they subsequently come to represent. Juridical notions of power appear to regulate political life in purely negative terms. . . . But the subjects regulated by such structures are, by virtue of being subjected to them, formed, defined, and reproduced in accordance with the requirements of those structures” (Butler 1990, p.2).

This is that folding-within of definitions we encountered. I therefore suggest that if this is so, then let us step out of the grid (Maher 2014), build a new world in which the structure is in accordance with our collective intelligence, bridging divisions together. Let us redesign the map.

## **Figures**

Fig. 1: Iria – Copyright: Erin Kavanagh 2015.

Fig. 2: The Inquisition – Copyright: Erin Kavanagh 2015.

Fig. 3: Diktat v. Demotic – Copyright: Erin Kavanagh 2015.

Fig. 4: Map of a migrant journey out of Syria – Copyright: Nishat Awan and Cressida Kocienski, 2016.



Fig. 5: Map of a migrant journey out of Afghanistan – Copyright: Nishat Awan and Cressida Kocienski, 2016.

Fig. 6: Public Lab Balloon Mapping Tool Kit – Copyright: Public Lab 2015.

Fig. 7: DIY aerial photograph above Hebrew University – Copyright: Public Lab 2014.

Fig. 8: The Geomythological High Wire – Copyright: Erin Kavanagh 2016.

Fig. 9: Lynne Denman, Jacob Whittaker and Peter Stevenson filming on Borth Beach – Copyright: Layers 2016.

Fig 10: Dr. Martin Bates, explaining the stratigraphy at Tan-y-Bwlch, to Peter Stevenson who is also drawing the whole process – Copyright: Layers 2016.

Fig. 11: Dr. Maria Hayes painting the Borth antlers at Tan-y-Bwlch – Copyright: Layers 2016.

Fig. 12: A test draft of a Thin Deep Map, Cardigan Bay, West Wales – Copyright: Layers 2016.

Fig. 13: Layers in the Landscape, a single frame of a deep map – Copyright: Layers 2016.

## **Filmography**

Cycle (1986) Dir. Robert Ascher, USA, 5mins

Bar Yohai (1988) Dir. Robert Ascher, Israel, 6mins

Blue. A Tlingit Odyssey (1991) Dir. Robert Ascher, USA, 6 mins

The Golem (1995) Dir. Robert Ascher, USA, 4 mins

Y Bont/The Bridge (2015) Dir. Erin Kavanagh; Prod. Jacob Whittaker, Wales, 3.45 min.

<https://www.youtube.com/watch?v=xh5dhOoCrec>

Layers in the Landscape (2017) Dir. Erin Kavanagh; Prod. Jacob Whittaker, Wales, 20 mins

<http://www.geomythkavanagh.com/layers-in-the-landscape>

Secret of the Incas (1954) Paramount Pictures, USA, 98 mins

Raiders of the Lost Ark (1981) Paramount Pictures, USA, 115 mins

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