

LAYERS IN THE LANDSCAPE: DEEP MAPPING IN CARDIGAN BAY

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NOTE: The Flexible Grants for Small Groups application form may have been updated since this proposal was submitted.

The Research Idea *The innovative thesis of the project*

"According to quantum physics, you cannot 'just' observe something....to make an observation you must interact with the object you are observing."

(Hawkins, S. 2010, p.80).

Stories about rising sea levels, flooding and the drowning of coastal settlement are interpreted by the popular media to be disasters which place our coastal communities under stress. Our interactions with these events are therefore coloured both by this sense of dramatic doom and by the discipline through which we are engaged. Nowhere is the evidence for this more visually apparent than in the submerged forests and peats which border the coastline of West Wales. Often these forests are lost beneath our beaches, generally appearing only periodically after storms. These storms create a context of chaos with which the forests are then associated.

We propose that the regular rebirth of these submerged trees through the challenges of flooding and erosion offers opportunities to observe such events through a wide angle perspective that sees past the chaos. Utilizing a range of experts in diverse fields from within science, humanities and the arts we will combine to form a new understanding regarding the interplay of flooding facts and fictions through the layering of time. Our processes will be transparent as we interact with one another's expertise, presenting our culmative observations in an interdisciplinary format that will weave the various layers into one cohesive, video narrative.

Background *Current research reference points and their limitations*

Public awareness regarding the presence of climate change is currently rising along with the sea levels. Increased adverse weather causes frequent flooding and higher rates of erosion in places which can make an otherwise abstract concept all too personal. As a consequence, society must make choices about what to protect and what to abandon. Such decisions are now part of our political agenda and for those in threatened coastal communities, such as along Cardigan Bay, a greater understanding of the current situation and of how to accept and adapt to change is required. The facts

may appear to foretell doom and gloom but they also offer insights into the past on which we live. Likewise, fictions may offer a way to integrate change into our lives. To imagine the next part of the story, we need the arts, humanities and sciences to work together, as separately neither offers us the whole story for each are limited by their own expertise.

Existing research in Cardigan Bay displays a rich geological and biological record that documents changes in our environment covering the last 10,000 years. Footprints left by our ancestors some 5,000 years ago appear and disappear in the peats as evidence of our previous interactions with the forest and the encroaching tide. It is place associated with many stories, some are famous such as Cantre'r Gwaelod and Bendigeidfran's crossing to Ireland; but others are barely known of, such as Plant Rhys Ddwfn, Rhysyn and the Mermaid and the Salty Welsh Sea.

The Focus *How the research provides a fresh approach to real-life problems*

Up until now the main sources of information regarding a landscape's history have not conversed with one another. This project will create that conversation. As outlined above, the pressing problems of adapting to climate change are keenly felt by the inhabitants of low lying properties. Properties whose value has been curtailed as a consequence, allowing for unusually affordable homes which support a thriving artistic community. The wider populace are also impacted by these experiences, but are usually left out of any discussion. For many, exposure to such issues is delivered by a media intent on sensationalism, using emotive language that instils fear without offering either context or answers.

However, by offering a change of perspective we can observe that these shifts in land and seascape have historically been part of the sea's continuous process of advance and retreat, aided and abetted by man. We can borrow the eyes of other disciplines to look at the shifting layers from new angles, to reveal a more holistically informed understanding that may reduce fear and encourage action.

Therefore, questions we might ask include: How can we collect information that may soon be lost to weather? How are we to assimilate differing interpretations? How do we engage both the immediate and distal community to develop a sense of ownership regarding the management of such change?

We feel that through a process of deep mapping we can address these questions; capturing imaginations, informing minds and stimulating hearts into a new way of perceiving the world.

Theoretical Novelty *What conceptual innovation the research is aiming at*

The conceptual novelty of this research lies in seeking an emerging palimpsest from the quality of observation that each expert will apply to a common subject, with no single angle holding the whole view - or taking a dominant role. In this respect it challenges established protocols, offering a format through which the social sciences can enter into interdisciplinary discussion. A more complete picture may be revealed as each party shifts to accommodate one another's piece in the jigsaw. This has wide implications for society, which must accommodate other views in order to survive in a modern democracy.

The research also aims to seek a new method upon which to explore geomythological study into flooding. Scientists have often seen themselves as the prime movers in the dissemination of this information which has, perhaps, played to the media's sensationalist presentation of the topic. Our more holistic approach seeks to redress the balance. Initially this will be achieved via a video format, which will provide each contributor with an equal voice through process as well as the same data to take away afterwards into their own fields. Perhaps developing further collaborations en route. The final film can thus be used as a teaching aid, a backdrop to performance, a geotourism marketing tool and so on and so forth. We will also seek other performative, literary and geoscientific methods of dissemination from the information we will have gleaned in the experience, feeding that back out into both the communities and the academic context.

Methodology *How different disciplinary inputs will interact in empirical inquiry – specific methodological examples are often helpful for non-specialist readers*

Each expert will undertake and share their own field research according to their usual methodologies. This will involve the artist drawing the other contributors as they work; the storyteller adapting traditional stories from oral and literary traditions.; the philologist deciphering the storyteller's original Medieval Welsh manuscripts as well as acting as a translator between the Welsh and English speaking communities; the geo-archeologists collecting new data in the field and laboratory; the songwriter singing a

response that weaves the stories and science into one and the poet replying to them all geomythologically.

The aim is to explore potential information encoded in the stories, placing factual data within a fictional context along with documenting responses given by the rest of the team.

The unifying method will be to video each contributor as they work, which will expose the thinking behind final presentations and feed back into the film. This will allow everyone to interrogate one another's process whilst simultaneously removing hierarchical boundaries between specialist and non-specialist.

The resulting findings will be woven together into a cohesive deep map. In this way, previously segregated disciplines will be both informed and integrated whilst adapting in response to one another. Currently we anticipate that this deep map will be expressed through an edited video to demonstrate the observational and actively responsive processes undertaken by each field expert, woven together into one cohesive narrative. The aim of this video is thus to fuse facts and fictions into a transmedial response to the flooding of Cardigan Bay.

Work Plan *How the work will be organised over the award period and what outputs are intended.*

The project is designed into three work packages:

1. Single view point: Initial individual research – developed and led by the individual's expertise, including holding that independent focus when in collaboration. For example, when the artist draws the others at work. Also part of this phase will be email and skype contact to discuss the outcomes of each individual's research collectively. The outcomes will vary according to the different fields. E.g.: Artist – drawings and videos of drawing process. Geo-archeologist – series of illustrations describing landscape change over 10,000 years. Musician – composed and performed sound piece. Storyteller – stories researched and created. Poet – geomythologically created poetry. (Early 2016)
2. Multiple viewpoint: Influencing one another – physical meetings and actions at the location as a team. We will share knowledge and outcomes to see how one set of

findings affects another. How do they fit together? Do they create harmonies or dissonance? Where can they combine and where do they need defined space?
(Performed and videoed - Spring/early Summer 2016.)

3. Fused Narrative: Video of group findings edited to reveal the deep mapping of the location through scientific and creative strategies.

Outcome *What further steps and what longer-term outcome are envisaged*

We anticipate that the project output will be a deep map that will be expressed through an edited video to demonstrate the observational and actively responsive processes undertaken by each field expert. The video will be woven together into one cohesive narrative with the aim of this video to fuse facts and fictions into a transmedial response to the flooding of Cardigan Bay. The film maker in question will take a passive role in order to be the canvas and easel upon which the team creates. The video will be produced by late summer 2016. We anticipate a public launch of the video, using the experts to present their personal narratives inspired by the work in the early autumn of 2016. This video will then be available to the experts to use within their own space as well as for public engagement events across a range of venues.