

Acknowledgements

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COMMENTARY:

# Climate change stories and the Anthropocene

David Matless

Social sciences and the humanities can utilize the concept of the Anthropocene to add meaning to climate research.

Writing in *Nature Climate Change* five years ago, Mike Hulme<sup>1</sup> opined that the analysis of anthropogenic climate change was dominated by positivist disciplines at the expense of interpretative ones, and argued that storytelling should complement fact-finding. More recently, Castree *et al.*<sup>2</sup> have argued that positivism offers “little or no sense of humans as diverse, interpretive creatures who frequently disagree about values, means and ends”. Furthermore, Hackmann *et al.*<sup>3</sup> urge social scientists “to conduct analyses, offer interpretation and help society create meaning”, with humans viewed as an “integral and differentiated part” of the Earth system. Such sentiments have led to calls for the humanities and social sciences to play a more active role in shaping the climate change debate. The concept of the Anthropocene provides a possible framing for this contribution.

The organization Cape Farewell ([www.capefarewell.com](http://www.capefarewell.com)) has shown that artists can engage the public in the climate change debate, not least through its expeditionary activities<sup>4</sup>. Exhibitions such as the Munich Deutsches Museum's Welcome to the Anthropocene<sup>5</sup> have further helped bring climate change into the cultural domain. The very term Anthropocene has “a resonance that goes beyond the modification of a geological classificatory scheme”<sup>6</sup>, and one contribution of the humanities can be to analyse the power of scientific language and narrative. In setting out the challenges



JULIAN PERRY

**Figure 1** | *Caravan Holiday* (2010), oil painting by Julian Perry, 31 x 26 cm; reproduced by permission of the artist. The image also appears in ref. 14. Perry's work is presented at [www.julianperry.info](http://www.julianperry.info)

of the Anthropocene for his own discipline, Castree has called for geographers, with their peculiar breadth of concerns, from the natural sciences to the humanities, to be “semantic weather makers”<sup>7</sup>.

It is in this spirit that I, as a cultural geographer, offer the ‘Anthroposcenic’ as a semantic proposal. The term foregrounds the way in which landscape becomes emblematic of environmental

transformation. Attention is drawn to those scenes through which processes interrogated under Anthropocene and climate change rubrics become evident; coastlines, glacier snouts, ice sheet edges, felled forest and the like. Such scenic concentration provides stepping points for the humanities as a teller of Anthroposcenic stories, and meeting points with science.

The idea of landscape works differently here from the use of the term in, for example, a recent collection of studies *Landscapes in the Anthropocene*, which seek to quantify “the effects of human disturbances on Earth surface processes”<sup>8</sup>. From a humanities perspective, landscape as a concept gains value from the way it migrates between different frames of reference; the material landscapes of, say, agriculture and environmental management, and the imaginative landscapes of, say, landscape painting and poetry. Work in the humanities has demonstrated that the power of landscape derives from its capacity to shuttle between such different registers, to act as a meeting point for imaginative and material worlds, and to signal their interconnections. Landscape also moves between different forms of value, notably the emotional and financial, with tensions over landscape often emerging where money and sentiment conjoin<sup>9</sup>.

The coast is a key landscape of climate change and can be used to illustrate Anthroposcenic possibilities. I focus here on eastern England, where the coast has been



**Figure 2** | Tower of the buried church of Eccles, from Charles Lyell's *Principles of Geology*<sup>12</sup>, illustrating the 'waste of the coast of Norfolk'. Left; the tower in 1839, showing the inland slope of the hills of blown sand. Right, a view of the tower from nearly the same position, as it appeared after the storm of November 1862, showing waves reaching the foundations.

prominent in debates over environmental management and climate change adaptation, notably where human constructions have been undermined by marine erosion<sup>10</sup>. There is a long cultural history of coastal loss, but from the late twentieth century local scenes became inevitably framed by global scientific narrative, the seashore freighted with climate change stories. To take a recent artistic example, in 2010 painter Julian Perry exhibited 'An Extraordinary Prospect: The Coastal Erosion Paintings', works in oil showing coastal scenes in Norfolk, Suffolk and east Yorkshire (see Fig. 1). Perry depicts erosion by letting human dwellings, notably caravans and bungalows, hover in mid-air, still grounded on grass and topsoil, but with the land below removed. The particular medium used here is significant in achieving uncanny environmental effect. Oil paint, rather than, say, watercolour, allows these objects to retain an improbable substance. Paintings such as *Coastal House Suffolk*, *Happisburgh Defences* and *Caravan Holiday* (Fig. 1) make for exemplary Anthroposcenes.

East Anglian coastlines have been prominent in public engagements with climate change, whether in artistic projects such as Perry's, in the Broads Authority's work in anticipating how climate change might reshape wetland habitats in the Norfolk Broads, an area with national park status, or in scientific research such as the Ancient Human Occupation of Britain (AHOB) project, pushing back human life in Britain to a million years before the present. Key AHOB findings were made at Happisburgh on the north-east Norfolk coast, including 800,000-year-old hominin footprints in forest bed deposits on the

shore in May 2013<sup>11</sup>. Research sites had been exposed by erosion following the destruction and non-replacement of sea defences; Happisburgh, following significant property loss, had also become a key site in debates over contemporary coastal management. As present dwellings fell, signs of older human life became apparent. Prevailing narratives of climate change make twenty-first-century Britons receptive to these ancient Anthroposcenes. The Norfolk coast is now marketed as the 'Deep History' coast, with local museums collaborating with the AHOB and tourist bodies, developing erosion as attraction.

The Anthroposcenic draw attention to the ways in which scientific accounts work alongside artistic interventions and policy initiatives. The coastal examples above come from a recent period of active reflection on climate change and the Anthropocene, but humanities scholarship may also ask what it means to project a recently coined epochal label onto earlier times, where people lived without any sense of their likely retrospective reclassification. An Anthroposcenic study might thereby investigate the history of scientific and artistic encounters with coastal loss, including in the work of geologists such as Charles Lyell, for whom the ruined church tower that stood on the beach at Eccles, just south of Happisburgh, until 1895, was a notable field site. Lyell included drawings of Eccles in later editions of *Principles of Geology* (Fig. 2), the sand dunes, half-burying the tower in 1839, migrating inland by 1862, such that: "the waves washed the foundations of the edifice"<sup>12</sup>. Lyell's text and drawings become meditations on levels of land and sea.

An Anthroposcenic imagination might thus examine the stories engendered by current emblematic landscapes in previous times, offering what Caitlin DeSilvey, in her study of climate change and adaptation at the National Trust property of Mullion Cove in Cornwall, southwest England, terms an 'anticipatory history'<sup>13</sup>: "The project of anticipatory history lies at the intersection of the imagined future and the imagined past. It attempts to unsettle the narrative foundations that stabilize landscape and block reflection on future change."

While the analytical claims of the Anthropocene may be new, the environmental sensibilities and outlooks often invoked — anxiety, pride, hubris, melancholy — pre-date diagnoses of human effects on the Earth system. □

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