

## **PhD Project: Understanding adaptation to climate in the UK: 1800-2000**

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The prospect of substantial and sustained changes to our climate has altered perceptions of the sensitivity and vulnerability of society to climate (weather extremes, variability, incremental change, abrupt change), and also drawn attention to the processes of adaptation. Adaptation to climate change is now a major area of research and also of significant policy development. Yet the dominant perspective on adaptation is futuristic and predictive, as opposed to historic and interpretative. Concession and reference is made only reluctantly to the dynamic and socially contingent nature of adaptation to climate as it has occurred in the past. In particular, there are few well-documented historical and longitudinal accounts of the changing adaptive relationship between climate and society (see Coeur and Lang, 2008, for a rare example).

This project will investigate the ways in which British society has adapted to climate over the past two centuries, 1800 to 2000. The project adopts a deeply contingent view of human adaptation to climate and seeks to reveal the changing contexts, social drivers and processes of adaptation at work: institutional, scientific, perceptual (Hulme et al., under review), regulatory. Particular attention will be paid to the role played by weather extremes as catalysts for change (e.g. Penning-Rowsell et al. 2006). Examples of different forms of adaptation at work that may be investigated include regulatory (1880 design codes; 1953 clean air), institutional (19C insurance), behavioural (vineyards), engineering (1970s Thames Barrier), economic (1980s cold weather payments), scientific (1859 weather forecasts; 1987 severe weather warnings) and managerial (2003 NHS heatwave plan). The project will help develop a positive prospectus about the ways in which future British society can accommodate prospective changes in climate, but also challenge the idea that adaptation to climate change can be predicted, quantified or optimised (see Dessai et al., 2008).

Sources will be primary documents and secondary literature, including Parliamentary papers, historical archives and national and local newspapers. This topic would suit a graduate student from geography, environment sciences, environmental history or sociology.

### References:

- Coeur,D. and Lang,M. (2008) Use of documentary sources on past flood events for flood risk management and land planning **C R Geosciences** doi.10.1016/j.crte.2008.03.001
- Dessai,S., Hulme,M., Lempert,R. and Pielke,R. jr. (in press) Climate prediction: a limit to adaptation? Chapter in, **Living with climate change: are there limits to adaptation?** (eds.) Adger,N.W., Goulden,M. and Lorenzoni,I., Cambridge University Press, Cambridge
- Hulme,M., Dessai,S., Lorenzoni,I. and Nelson,D. (under revision) Unstable climates: exploring the interplay between statistical and experiential constructions of climate **Geoforum**
- Hulme,M. and Turnpenny,J. (2004) Understanding and managing climate change: the UK experience **The Geographical Journal** 170, 115-125.
- Penning-Rowsell,E., Johnson,C. and Tunstall,S. (2006) 'Signals' from pre-crisis discourse: lessons from UK flooding for global environmental policy change **Global Environmental Change**, 16, 323-339.