

## Archaeology under the Volcano, Spring 2010

### THEME 5: UNPREDICTABILITY

April 9

Our theme for this week is 'unpredictability'; the island of Montserrat, where the Soufrière Hills volcano began erupting in 1995, serves as our main volcanic test case. We will have a guest speaker, Tom Leppard, who conducted archaeological survey on Montserrat over the holiday break. Keep in mind that the Doug Aitken art installation 'Eraser' and the Jimmy Buffet song 'Volcano' from our March 29 class both tie into Montserrat and Soufrière Hills, so you've already had a sneak peek at the island.

Our readings will be skewed more toward the hard sciences this week, though per request we will also have the competing vantages on the 1993 Galeras eruption provided by two books written for a popular audience. As always, don't get lost in details but read for overall themes and main points. Keep in mind the issue of predictability/unpredictability evoked in each reading.

#### Readings (and non-readings)

Hacking, I. 1990. "Contents and chapter 1: the argument," in *The Taming of Chance, Ideas in Context*, pp. vii-xii, 1-10. Cambridge: Cambridge University Press.

\*this is your 'theory' offering for the week. If you've never read any Hacking, he is an innovative philosopher of science and this book is a sequel to his 1975 book, *Emergence of Probability* (see [http://books.google.com/books?id=10VfQgAACAAJ&cd=1&source=gbs\\_ViewAPI](http://books.google.com/books?id=10VfQgAACAAJ&cd=1&source=gbs_ViewAPI)). He has more recent writings on probability, but *The Taming of Chance* is a classic. Hincks, T., W. Aspinall, P.

Baxter, A. Searl, R. Sparks, and G. Woo. 2006. Long term exposure to respirable volcanic ash on Montserrat: a time series simulation. *Bulletin of Volcanology* 68:266-284.

Miles, David. 2007. Archaeology under the Volcano. *British Archaeology* 97 (nov/dec).

<http://www.britarch.ac.uk/ba/ba97/feat3.shtml>

Odbert, H., and G. Wadge. 2009. Time series analysis of lava flux. *Journal of Volcanology and Geothermal Research* 188 (4):305-314.

\*I love the phrase in the article 'the hostile nature of lava vents effectively renders direct measurement of instantaneous lava flux impossible'!

Pulsipher, Lydia Mihelic. 2001. Our *maroon* in the now-lost landscapes of Montserrat. *The Geographical Review* 91 (1-2):132-142.

Selva, J., A. Costa, W. Marzocchi, and L. Sandri. 2010. BET\_VH: exploring the influence of natural uncertainties on long-term hazard from tephra fallout at Campi Flegrei (Italy). *Bulletin of Volcanology* (online first/in press as of April 2010).

Williams, S. 2001. *Surviving Galeras*. Boston: Houghton Mifflin Company. pp. 100-160.

vs. Bruce, V. 2001. *No Apparent Danger*. New York: HarperCollins Publishers. pp. 155-160, 199-226.

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Music for and of Montserrat....

The producer of the Beatles, Sir George Martin, set up AIR Studios on Montserrat in 1979. For 11 years musicians including Paul McCartney, Dire Straits, Stevie Wonder, The Police, The Rolling Stones, Elton John, Rush, Duran Duran, Supertramp, Little River Band, Ultravox, Phil Collins, Jimmy Buffett, Eric Clapton and Lou Reed travelled there to record. The studio was relocated to London after suffering major destruction in Hurricane Hugo in 1989 (see <http://www.georgemartinmusic.com/montserrat.htm>). Martin, who still maintains a home on Montserrat, staged a concert in the Royal Albert Hall in London in 1997 to raise money for the islanders following the start of volcanic eruption in 1995. As your musical bit for this week I'm including this YouTube of Dire Straits' 'Money for Nothing' with Sting, Eric Clapton, and Phil Collins participating in the 'Music for Montserrat' benefit concert: <http://www.youtube.com/watch?v=G1INMBsNEw8> .

The most famous Montserratian musician is soca bandleader Alphonsus 'Arrow' Cassell, who had the 1983 hit 'Hot! Hot! Hot!'. Here is an interesting Wikipedia on Montserrat's music: [http://en.wikipedia.org/wiki/Music\\_of\\_Montserrat](http://en.wikipedia.org/wiki/Music_of_Montserrat); you may want to click on the hyperlink for soca if you are not already familiar with it. Here is a YouTube for Hot! Hot! Hot! <http://www.youtube.com/watch?v=zqWsAYPWzNI> to get you in an island mood for class!

\*\*\*\*\*Please watch Joe Versus the Volcano (1990) prior to class on your own; it is NOT on streaming Netflix, unfortunately. It is available at [http://tvshack.net/movies/Joe\\_Versus\\_the\\_Volcano\\_1990/](http://tvshack.net/movies/Joe_Versus_the_Volcano_1990/) for free. While you watch it, keep in mind the way that American working life, nature/culture, and volcanic islands are portrayed in relation to one another.