

R. Alexander Bentley

University of Houston, Dept. of Comparative Cultural Studies, 233 McElhinney Hall,
(713) 743-3987 www.alex-bentley.com rabentley@uh.edu

Current Academic Positions

Full Professor, Department of Comparative Cultural Studies, University of Houston

Also:

Research Associate, Hobby Center for Public Policy, University of Houston

External Faculty, Northwestern Institute on Complex Systems, Northwestern University

Education

PhD. University of Wisconsin (Madison, WI) Anthropology 2001

M.S. Cornell University (Ithaca, NY) Geology (Geochemistry) 1997

M.A. Cornell University (Ithaca, NY) Archaeology 1996

B.A. Bowdoin College (Brunswick, ME) Physics. *Magna Cum Laude* 1992

Authored book: Bentley, R.A., M. Earls, & M.J. O'Brien (2011). *I'll Have What She's Having: Mapping Social Behavior*. MIT Press.

Peer-reviewed articles relevant to this proposal

1. Bentley, R.A., W.A. Brock, C.C.S. Caiado and M.J. O'Brien (2016). Evaluating reproductive decisions as discrete choices under social influence. *Philosophical Transactions of the Royal Society B*, in press.
2. Caiado, C.C.S., W.A Brock, R.A. Bentley and M.J O'Brien (2016). Fitness landscapes among many options under social influence. *Journal of Theoretical Biology* 371: 20150154.
3. Bentley, R.A. & M.J. O'Brien (2016) Collective behaviour, uncertainty and environmental change. *Philosophical Transactions of the Royal Society A* 373(2055), in press.
4. Brock, W.A., R.A. Bentley, M.J. O'Brien & C.C.S. Caiado (2014). Estimating a path through a map of decision making. *PLoS ONE* 9(11): e111022.
5. Bentley, R.A., M.J. O'Brien & W.A. Brock (2014). Mapping collective behavior in the big-data era. *Behavioral & Brain Sciences* 37: 63-119.
6. Bentley, R.A., et al. (2014). Social tipping points and Earth systems dynamics. *Frontiers in Environmental Science* 2:35.
7. Bentley, R.A., Acerbi, A., V. Lampos, P. Ormerod (2014). Books average previous decade of economic misery. *PLoS ONE* 9(1): e83147.
8. Bentley, R.A., C. Caiado & P. Ormerod (2014) Effects of memory on spatial heterogeneity in neutrally transmitted culture. *Evolution & Human Behavior* 35: 257-263.
9. Acerbi, A. & RA Bentley (2014) Biases in cultural transmission shape the turnover of popular traits. *Evolution & Human Behavior* 35: 228 - 236.
10. Acerbi, A., V. Lampos & R.A. Bentley (2014). Robustness of emotion extraction from 20th century English books. In *2013 International Conference on Big Data* (ISBN 9781479912940), pp. 839-846.
11. Acerbi, A., V. Lampos, P. Garnett & R.A. Bentley (2013) The expression of emotions in 20th century books. *PLoS ONE* 8(30):e59030.
12. Bentley, R.A. & M.J. O'Brien (2013). Cultural evolutionary tipping points in the storage and transmission of information. *Frontiers in Psychology* 3: article 569.
13. Bentley, R.A., P. Garnett, M.J. O'Brien & W.A Brock (2012). Word diffusion and climate science. *PLoS ONE* 7(11): e47966.
14. Bentley, R.A. & P. Ormerod (2012). Accelerated innovation and increased spatial diversity in U.S. popular culture. *Advances in Complex Systems* 15: 1150011.
15. Bentley, R.A., M.J. O'Brien, and P. Ormerod (2011). Quality versus mere popularity: a conceptual map for understanding human behaviour. *Mind & Society* 10: 181-191.

16. **Bentley, R.A.**, P. Ormerod & S.J. Shennan (2011). Population-level neutral model already explains linguistic patterns. *Proceedings of the Royal Society B* 278: 1770-1772.
17. **Bentley, R.A.** and M.J. O'Brien (2011). The selectivity of social learning and the tempo of cultural evolution. *Journal of Evolutionary Psychology* 9: 1-17.
18. **Bentley, R.A.**, P. Ormerod & M. Batty (2011). Evolving social influence in large populations. *Behavioral Ecology and Sociobiology* 65: 537-546.
19. Ormerod, P. & **R.A. Bentley** (2011). Modelling creative innovation. *J. Cultural Science* 3: 1-15.
20. **Bentley, R.A.** and P. Ormerod (2010). A rapid method for assessing social versus independent interest in health issues. *Social Science and Medicine* 71: 482-485.
21. **Bentley, R.A.** & P. Ormerod (2009). Traditional models already explain adoption/abandonment pattern (Comment). *PNAS* 106: E109.
22. **Bentley, R.A.** & P. Ormerod (2009). Tradition and fashion in consumer choice. *Scottish Journal of Political Economy* 56: 371-381. (Reported by *The Scotsman*, May 2009)
23. **Bentley, R.A.** (2008). Random drift versus selection in academic vocabulary. *PLoS ONE* 3(8): e3057.
24. Riede, F. and **R.A. Bentley** (2008). Increasing the relevance of mathematical approaches to demographic history. *Quality and Quantity* 42: 275-281.
25. **Bentley, R.A.**, C.P. Lipo, M.W. Hahn & H.A. Herzog (2007). Regular rates of popular culture change reflect random copying. *Evolution and Human Behavior* 28:151-158.
26. **Bentley R.A.** (2007). Social complexity in behavioral models. *Behavioral and Brain Sciences* 30: 19.
27. **Bentley, R.A.** & S.J. Shennan (2005). Random copying and cultural evolution. *Science* **309**: 877-9.
28. **Bentley, R.A.**, M.W. Hahn & S.J. Shennan (2004). Random drift and culture change. *Proceedings of the Royal Society B* **271**:1443-1450. (Reported by *The Economist*, *The Guardian* and *The Telegraph*)

Articles in trade/commercial publications

29. **Bentley, R.A.**, A. Acerbi and A. Hall (2015). Word choices in 20th century U.S., UK, German and Russian literature reflect social mood. *The Socionomist*, January 2015.
30. Earls, M. & **R.A. Bentley** (2013). Big data, not magic data. *Admap* (September).
31. **Bentley, R.A.** and M.J. O'Brien (2012). The buzzwords of the crowd. *New York Times*, 1 Dec 2012.
32. **Bentley, R.A.** M. Earls & M.J. O'Brien (2012). Mapping human behavior for business. *European Business Review* (May-June): 23-26.
33. Earls, M. & **Alex Bentley** (2011). Behavioural change: I'll have what she's having. *Admap* (Oct).
34. Earls, M. & **Alex Bentley** (2009). How ideas spread. *Research World* (April): 13-17.
35. Thomson, S. & **R.A. Bentley** (2009). Why put the 'market' back into marketing. *Admap* (Oct): 15-17.
36. **Bentley, R.A.** & M. Earls (2008). Forget influentials, herd-like copying is how brands spread. *Admap* (Nov): 19-22.

Grants in past decade

- 2016 **\$18,000 Hobby Ctr for Public Policy** "Policy, decision-making & word usage in populations."
2014 **£15,000** (co-P.I.) GW4, U.K. "Collective Human-Information Interaction"
2014 **£34,965** – AHRC (REACT scheme): "Bristol Remembered Interactively So That Others Learn."
2013 **£900** – Institute of Advanced Studies, Bristol University. "How sugar changed the world."
2012 **£187,903** – Royal Society Newton Fellowship for Dr. Alberto Acerbi
2012 **£262,126** – Marie Curie Fellowship for Dr. Thomas Kador.
2009 **£1,674,345** – Leverhulme Trust (Co-PI): "Tipping Points in economic and environmental systems."
2008 **£199,848** – AHRC Early Career Research Grant (PI)
2008 **£610,127** – AHRC (Co-P.I.) "The first farmers of Central Europe"
2005 **£1,350,000**– AHRC Centre for the Evolution of Cultural Diversity (Co-I with many others)