# ADRIAN VILIAMI BELL

Department of Anthropology, University of Utah Salt Lake City, UT 84112 • Tel: (801) 581-4185 adrian.bell@anthro.utah.edu • http://adrianbell.wordpress.com updated March 15, 2024

## **EDUCATION**

PhD Ecology, Human Ecology Emphasis, Graduate Group in Ecology University of California, Davis, CA June 2011

MS Integrative Biology, with a Graduate Minor in Statistics BRIGHAM YOUNG UNIVERSITY, Provo, UT 2005

BS Zoology

BRIGHAM YOUNG UNIVERSITY, Provo, UT 2003

### **APPOINTMENTS**

2018-present. Associate Professor, Department of Anthropology, University of Utah

2013-present. Adjunct Curator of Anthropology, Natural History Museum of Utah, University of Utah

2013–2018. Assistant Professor, Department of Anthropology, University of Utah

2022-2023. Guest Researcher, Department of Human Behavior, Ecology and Culture, Max Planck Institute for Evolutionary Anthropology

2011–2013. Visiting Assistant Professor, Department of Anthropology, University of Utah

2011. Associate Instructor, Department of Environmental Science & Policy, U.C. Davis

\_\_\_\_\_\_

## JOURNAL ARTICLES AND BOOK CHAPTERS

\*current or former students mentees

#### **IN REVIEW**

- Johnson\*, L., Bell, A.V., and Di Paolo, M. "Evidence for greater marking along ethnic boundaries." In review at *Human Nature*.
- Burns\*, J., Bell, A.V., and Koster, J. "Community mining in Arang dak, Nicaragua: A gamble or a stable fall-back resource?" In review at *Current Anthropology*.

#### PUBLISHED OR IN PRESS

- Beheim, B. and Bell, Adrian V. (2024) "Why cultural distance can promote or impede group-beneficial outcomes." *Evolutionary Human Sciences*. 5:e14.
- Bell, Adrian V. (in press). "The adaptive landscape of human migration." Oxford Handbook on Cultural Evolution.
- Bell, Adrian V. (2023). "Selection and Adaptation in Human Migration." Evolutionary Anthropology. 1–17.
- Bell, A. V. and A. Paegle\*. (2021). "Ethnic Markers and How to Find Them: An Ethnographic Investigation of Marker Presence, Recognition, and Transmission." *Human Nature*. 32(2), 470–481.
- Bell, Adrian Viliami. (2020) "A Measure of Social Coordination and Group Signaling in the Wild." *Evolutionary Human Sciences*, 2, E34.

- Muthukrishna, M., Bell, A. V., Henrich, J., Curtin, C. M., Gedranovich, A., McInerney, J., & Thue, B. (2020). "Beyond WEIRD psychology: measuring and mapping scales of cultural and psychological distance." *Psychological Science*. 0956797620916782.
- Bell, Adrian Viliami. 2018. "The only way for minority cultural survival." *Nature Human Behaviour* [commentary]. Online 2018/02/26.
- Hillis, Vicken, Adrian Bell, and Jodi Brandt. 2018. "Using cultural multilevel selection to examine the adoption of sustainable management practices among California winegrape growers." *Sustainability Science* 13:71-80
- Johnson\*, Lisa M., Marianna Di Paolo, and Adrian V. Bell. 2018. "Forced Alignment for Understudied Language Varieties: Testing Prosodylab-Aligner with Tongan Data." *Language Documentation & Conservation* 12:80-123.
- Kramer, Karen, Ryan Schacht, and Adrian V. Bell. 2017. "Adult Sex Ratios & Partner Scarcity among Hunter-Gatherers: Implications for Dispersal Patterns and the Evolution of Human Sociality." *Philosophical Transactions B*. in press.
- Bell, Adrian V. and Daniel Hernandez\*. 2017. "Cooperative Learning Groups and the Evolution of Human Adaptability: (Another Reason) Why Hermits are Rare in Tonga and Elsewhere." *Human Nature* 28:1.
- Ryan Schacht and Adrian V. Bell. 2016. "The evolution of monogamy in response to partner scarcity." *Scientific Reports* (6) 32472.
- Burnham, Terence C., Stephen E. G. Lea, Adrian Bell, Herbert Gintis, Paul W. Glimcher, Robert Kurzban, Leonhard Lades, Kevin McCabe, Karthik Panchanathan, Miriam Teschl, and Ulrich Witt. 2016. "Evolutionary Behavioral Economics." in *Complexity and Evolution: A New Synthesis for Economics*, eds. D. S. Wilson and A. Kirman. MIT Press, Cambridge, MA.
- Richerson, Peter, Ryan Baldini, Adrian Bell, Kathryn Demps, Karl Frost, Vicken Hillis, Sarah Mathew, Nicole Naar, Lesley Newson, Emily Newton, Cody Ross, Paul Smaldino, Timothy Waring and Matthew R. Zefferman. 2015. "Cultural Group Selection Plays an Essential Role in Explaining Human Cooperation: A Sketch of the Evidence." *Behavioral and Brain Sciences*. in press.
- Bell, Adrian V., Thomas Currie, Geoffrey Irwin, and Christopher Bradbury\*. 2015. "Driving Factors in the Colonization of Oceania: Developing Island-Level Models to Test Competing Hypotheses." *American Antiquity*. 80(2): 397-407.
- Bell, Adrian V. 2015. "Linking Observed Learning Patterns to the Evolution of Cultural Complexity." *Current Anthropology*. 56(2): 277-281.
- Bell, Adrian V. and Bruce Winterhalder. 2014. "The Population Ecology of Despotism: Concessions and Migration Between Central and Peripheral Habitats." *Human Nature* 25(1): 121-135.
- Bell, Adrian V. 2014. "Cultural Evolution and the Way We Count." *Proceedings of the National Academy of Sciences*. 111(4): 1227-1228.
- Bell, Adrian V., Katie Hinde, and Lesley Newson. 2013. "Who was Helping? The Scope for Female Cooperative Breeding in Early *Homo*. *PLoS ONE* 8(12): e83667.

- Waring, Timothy, and Adrian V. Bell. 2013. "Ethnic dominance damages cooperation more than ethnic diversity: results from multi-ethnic field experiments in India." *Evolution & Human Behavior* 34 (6), pp. 398-404.
- Bell, Adrian V. 2013. "Evolutionary Thinking in Microeconomic Models: Prestige Bias and Market Bubbles." *PLoS ONE* 8(3): e59805.
- Bell, Adrian V. 2013. "The Dynamics of Culture Lost and Conserved: Demic Migration As a Force in New Diaspora Communities." *Evolution & Human Behavior* 34: 23-38.
- Bret Beheim and Adrian V. Bell. 2011. "Inheritance and Ecology: Evolution of Canoe Traits in Eastern Oceania." *Proceedings of the Royal Society B* 278: 3089-3095.
- Lybbert, Travis, and Adrian V. Bell. 2010. "Stochastic Benefit Streams, Learning and Technology Diffusion: Why Drought Tolerance is not the new Bt." *AgBioForum* 13(1): 13-24.
- Lybbert, Travis, and Adrian Bell. 2010. "Why drought tolerance is not the new *Bt*." *Nature Biotechnology* 28: 553-554.
- Bell, Adrian V. 2010. "Why Cultural and Genetic Group Selection are Unequal Partners in the Evolution of Human Behavior." *Communicative and Integrative Biology* 3(2): 159-161.
- Bell, Adrian V., Peter J. Richerson, and Richard McElreath (2009). "Culture Rather than Genes Provides Greater Scope for the Evolution of Large-Scale Human Prosociality." *Proceedings of the National Academy of Sciences* 106(42):17671-17674.
- Monique Borgerhoff Mulder, Samuel Bowles, Tom Hertz, Adrian Bell, et al.. 2009. "Intergenerational Wealth Transmission and the Dynamics of Inequality in Small-Scale Societies." *Science*, 326 682-688.
- Smith, E.A, Hill, K., Marlowe, F., Nolin, D. Wiessner, P, Gurven, M. Bowles, S., Borgerhoff Mulder, M., Hertz, T., and Bell, A. 2010. "Wealth Transmission and Inequality Among Hunter-Gatherers." *Current Anthropology* 51(1): 19-34.
- Gurven, M., Borgerhoff Mulder, M., Hooper, P.L., Kaplan, H., Quinlan, R., Sear, R., Schniter, E., von Rueden, C., Bowles, S., Hertz, T., and A. Bell. 2010. Domestication alone does not lead to inequality: Intergenerational wealth transmission among horticulturalists. *Current Anthropology* 51(1): 49-64.
- Borgerhoff Mulder, M., Fazzio, I., Irons, W., McElreath, R., Bowles, S., Bell, A., Hertz, T and L. Hazzah. 2010. Pastoralism and Wealth Inequality: Revisiting an Old Question. *Current Anthropology* 51(1): 35-48.
- Shenk, M.K., Borgerhoff Mulder, M., Beise, J., Clark, G., Irons, W., Leonetti, D., Low, B. S., Bowles, S., Hertz, T., Bell, A. and P. Piraino. 2010. "Intergenerational Wealth Transmission among Agriculturalists: Foundations of Agrarian Inequality." *Current Anthropology* 51(1): 65-83.
- Bell, Adrian V., Russell B. Rader, Steven L. Peck, & Andrew Sih. 2009. "The positive effects of negative interactions: can avoidance of competitors or predators increase resource sampling by prey?" *Theoretical Population Biology* 76: 52-58.
- McElreath, R., Adrian Bell, C. Efferson, M. Lubell, P. Richerson, and T. Waring. 2008. "Beyond existence and aiming outside the laboratory: Estimating frequency-dependent and payoff-biased social learning strategies." *Philosophical Transactions of the Royal Society B* 363: 3515-3528.

- Bell, Adrian V, and Peter J. Richerson. 2008. Charles J. Lumsden and Edward O. Wilson, Genes, Mind, and Culture: 25th Anniversary Edition. *Journal of Bioeconomics* 10(3): 307.
- Bell, Adrian V. & Mark Belk. 2004. "Diet of the leatherside chub, Snyderichthys copei, in the fall." *The Western North American Naturalist* 64(3): 413-416.

## WORKING PAPERS

- Bell, Adrian V. and Cristina Moya. "How fertility and migration can govern the evolution of outgroup aversion within and across territories."
- Bell, Adrian V. "Immigration Waves and the Stochastic Dynamics of Enclave Formation: Towards a Variance-Sensitive Application of Theory"
- Burns\*, J., Bell, A.V., and Koster, J. "Community Mining in Arang Dak, Nicaragua: Satisficing foraging."

## SCHOLARSHIPS & GRANTS

#### External

- 2023: PI: Collaborative Proposal: *Building the Group Identity Concept from the Ground Up.* NSF Cultural Anthropology. \$425,000 total, \$159,000 to Department of Anthropology, Utah.
- 2023: co-PI: *Investigation of thermogenic adaptations through the study of indigenous diving populations.* Office of Naval Research. \$100,000.
- 2020: co-PI: *Human Adaptations to Diving: Genetics, Physiology, Culture, and Behavior.* Office of Naval Research. \$165,000.
- 2009-2010: Doctoral Dissertation Improvement Grant, for Tongan ethnographic fieldwork. National Science Foundation (\$15,000).
- 2007: Short-term fellow, Biological Invasions NSF-IGERT, for Tongan diaspora fieldwork (\$1,200).
- 2004: Graduate student tuition and travel scholarship; N.C. State Institute in Statistical Genetics.

#### Internal

- 2019: Lisbeth Louderback and Adrian V. Bell. "Plant Resources that Ended the Long Pause: Patterns of Dispersal From West to East Polynesia" (\$19,199).
- 2016: Adrian V. Bell. University Research Committe Faculty Fellowship, "Getting the Public Involved in Social Research: Crowd "Sciencing" the Study of Language, Ethnic Markers, and the Adaptation of Tongan Immigrants in Utah"
- 2015: Adrian V. Bell and Marianna Di Paolo. CSBS Interdisciplinary Research Pilot Program for proposal "Testing the Scope for Crowd Science in Anthropology." (\$8940).
- 2014: Adrian V. Bell and Marianna DiPaolo. University Research Council Grant, University of Utah. "Language, Ethnic Markers, and the Adaptation of Tongan Immigrants to Utah." (\$5300).
- 2012: Adrian V. Bell, Brian Codding, and Alan Rogers. "Student Training in Anthropological Data Analysis: Course Development for Student Research." Innovative Teaching Award, University of Utah. (\$10,000).

## SYNERGISTIC ACTIVITIES

## Invited talks / working groups

2023: Plenary. *Migration's multifaceted, dynamic role in human evolution*. Northwest Evolution, Ecology, and Human Behavior Symposium. September 2023. Boise State University.

- 2023: Working group and invited talk. *Cultural evolutionary drivers of settlement and style: more theory and ethnography needed.* For *OSCEAN:* Genetics, Archaeology, and Cultural Databases in the Pacific. Tartu, Estonia.
- 2020: Talk/Webinar: *Cultlural Evolution in the Field.* Nov 2020. Part of the Dysoc/NIMBioS Webinar Series on Cultural Evolution.
- 2017: Talk: *Advancing Our Evolutionary Understanding of Migration*. May 2017. UCLA Center for Behavior, Evolution, & Culture (BEC)
- 2017: Adult sex ratios and reproductive decisions. February 2017. Wissenschaftskolleg zu Berlin. Institute for Advanced Study
- 2016: Talk: The Cultural Process by Which We Adapt to Our Environment. September 2016. Boise State University.
- 2015: Working Group: Complexity and Evolution: A New Synthesis for Economics. Ernst Strüngmann Forum
- 2015: Talk: *Integrating inferences about our past: new findings and current issues in the peopling of the Pacific and Southeast Asia.* Max Planck Institute for the Science of Human History, Jena, Germany.
- 2014: Talk: Settlement of the Pacific: Testing Competing Theories using an Island-Level Model. Auckland Archaeological Society, University of Auckland.
- 2014: Cultural Evolution of Religion Research Consortium. April 2014. University of British Columbia
- 2013: Explaining cultural diversity: A new evolutionary synthesis. 2013. NESCent, Durham, NC
- 2012: NIMBioS Social Complexity Workshop. *Towards a Formal Theory for the Evolution of Human Social Complexity*. February 2012. Knoxville, Tennessee.
- 2010: Working Group: Visiting Scholar, Centre for the Evolution of Cultural Diversity, 2010. University College London.

#### Referee

PNAS, Journal of Theoretical Biology, Theoretical Population Biology, Evolution and Human Behavior, Proceedings of the Royal Society B, Human Ecology, PLoS ONE, American Antiquity, MAI Journal (AI Journal: A New Zealand Journal of Indigenous Scholarship), Current Anthropology, Evolutionary Human Sciences, and American Anthropologist.

## **Public lectures**

Venues: Hawaiian Cultural Center, Taylorsville, Utah (2013); 'Atenisi Institute, Tonga (2012); Tongan International Academy, Tonga (2013); University of the South Pacific, Tonga (2014); Sainehā High School, Tonga (2010, 2012).

#### Outreach

2015-present: Founding member of the Pacific Islands Studies Initiative at the University of Utah, a program to promote community service-learning, scholarship, and outreach in the Pacific Islander community.

## **Cultural Evolution Society**

2020-present: Secretary

Creator of an interactive teaching module on foundational models of cultural evolution:

http://www.dysoc.org/cesmodules/foundations module/

## COLLABORATORS AND CO-EDITORS

Bret Beheim (UC Davis), Brian Codding (U. of Utah), Tom Currie (University College London), Marianna DiPaolo (U. of Utah), Vicken Hillis (Boise St.), Katie Hinde (Harvard University), Geoffrey Irwin (University of Auckland), Travis Lybbert (UC Davis), Richard McElreath (UC Davis), Cristina Moya (UC Davis), Monique Borgerhoff Mulder (UC Davis), Helen Lee (LaTrobe University), Peter Richerson (UC Davis), Alan Rogers (U. of Utah), Timothy Waring (Uni. of Maine), Bruce Winterhalder (UC Davis)

## THESIS ADVISORS

Peter J. Richerson

Distinguished Emeritus Professor, Department of Environmental Science and Policy University of California Davis

Email: pricherson@ucdavis.edu

Richard McElreath

Director, Department of Human Behavior, Ecology, and

Culture

Max Planck Institute for Evolutionary Anthropology

Email: richard mcelreath@eva.mpg.de

Mark Lubell

Department of Environmental Science and Policy University of California Davis

Email: mnlubell@ucdavis.edu

## **TEACHING**

#### **Active courses**

*Human Migration and Social Change*, University of Utah, Anthropology 4245/6245. Yearly 2014-present. Cultural class on the causes and consequences of migration on human society from early prehistory to the present.

*Introduction to Statistical Thinking in Anthropology,* University of Utah, Anthropology 5230. Yearly 2014-present. Introduction to probability theory, likelihood, and statistical modeling for anthropology students.

*Peoples of the Pacific,* University of Utah, Anthropology 3151/6151. Yearly 2012-present. Cultural class on Oceanic prehistory, social structure at contact, and contemporary culture.

*Mathematical Models of Evolutionary Ecology,* University of Utah, Anthropology 5471. Yearly 2012-present. Introductory course on the use of mathematical theory in evolutionary ecology.

*Evolution of Societies and Cultures*, University of Utah, Anthropology 4150. Introduction to the field of cultural evolution.

Program Director of Ethnographic Field Course. Bi-yearly course held in the Tongan Islands, May – June.

#### Past courses

*Human Evolution,* University of Utah, Anthropology 2020. Yearly 2011-2013. Developed syllabus, lectures and assignments for this class on how evolution has shaped human and non-human primates.

*Environmental Ethics*, UC Davis, ESP 164. Spring 2011. Developed syllabus, lectures and assignments for this class on informing environmental policy by applying various schools of philosophy.

*Modeling the Evolution of Social Behavior*, UC Davis, ANT 261. Winter 2009. Developed syllabus, lectures and assignments for this mathematically oriented course in evolutionary game theory and social evolution.

## AREAS OF SPECIALIZATION

## Programming in Matlab, R, and Mathematica

I use Matlab to numerically analyze systems of differential equations. In R, I have created programs to fit formal statistical models to experimental data. I use Mathematica to build and analyze game-theoretic and evolutionary models.

## Second languages

Spanish and Tongan