Thomas J. H. Morgan, Ph.D.

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Positions and Education

Academic positions

2016–present	Assistant Professor of Evolutionary Anthropology, School of Human Evolution and Social Change, Arizona State University
	Additional affiliations: Research affiliate, Institute of Human Origins (IHO) Core faculty, Adaptation, Behavior, Culture and Society Research Group Research affiliate, Global Biosocial Complexity Initiative (GBCI)
2014–2016	Postdoctoral Researcher, UC Berkeley

Education

- 2009–2013 Ph.D., Biology, University of St Andrews
- 2006–2009 B.A., Zoology, University of Cambridge

Research

Peer reviewed journal articles, published or in press

*'s denote joint first authorship.

<u>Underlined</u> authors are postdocs or graduate students under my supervision.

- 20 2020 **Morgan T.J.H.** & Thompson, B. Biased transformation erases traditions sustained by conformist transmission. Biology Letters.
- 19 2020 <u>Miu E.</u>, **Morgan T.J.H.** Cultural adaptation is maximized when intelligent individuals rarely think for themselves. Evolutionary Human Sciences.
- 18 2020 Brand C.O., Heap S., **Morgan T.J.H.**, Mesoudi A. The emergence and adaptive use of prestige in an online social learning task. Scientific Reports.
- 17 2020 **Morgan, T.J.H.***, Suchow J.W.* & Griffiths T.L., Experimental evidence for the coevolution of learning and memory. Philosophical Transactions of the Royal Society B.
- 16 2020 **Morgan, T.J.H.**, Suchow J.W. & Griffiths, T.L. What the Baldwin Effect affects depends on the nature of plasticity. Cognition.
- 15 2019 <u>Lenfesty, H. L.</u>, **Morgan, T. J. H.**, By reverence, not fear: Prestige, religion, and autonomic regulation in the evolution of cooperation. Frontiers in Psychology.
- 14 2019 **Morgan, T.J.H.**, Acerbi, A. & van Leeuwen, E.J.C. Defining the majority in conformity research: instances versus individuals. PlosONE.
- 13 2019 Brand, C.O., Ounsley, J.P., van der Post, D., **Morgan T.J.H.** Cumulative Science via Bayesian Posterior Passing: An introduction. Metapsychology.
- 12 2018. Street, S.E.*, **Morgan, T.J.H.***, Thornton, A., Brown, G.R., Laland, K.N. & Cross C.P. Human mate-choice copying is domain general social learning. Scientific Reports. (83rd most read publication in Scientific Reports of 2018, out of 17,000 total publications).
- 11 2016 Cross, C.P., Brown, G.R., **Morgan, T.J.H.** & Laland, K.N. Sex differences in confidence influence patterns of conformity. British Journal of Psychology. 1–13.
- 102016Morgan, T.J.H. Testing the Cognitive and Cultural Niche Theories of Human
Evolution. Current Anthropology. 57(3): 370–377.
- 9 2016 Muthukrishna, M., **Morgan, T. J. H.,** & Henrich, J. The when and who of social learning and conformist transmission. Evolution and Human Behavior, 37(1), 10–20. (Published before August 2016 arrival at ASU).
- 8 2015 **Morgan, T.J.H.**, & Griffiths, T.L. What the Baldwin Effect affects. Proceedings of the 37th Annual Conference of the Cognitive Science Society.
- 7 2015 **Morgan, T.J.H.**, & Harris, P. L. James Mark Baldwin and contemporary theories of culture and evolution. European Journal of Developmental Psychology, 5629, 1–12.

- 6 2015 **Morgan, T. J. H.**, Uomini, N.T., Rendell, L.E., Street, S.E., Lewis, H.M., Cross, C.P., Evans, C., Kearney, R., de la Torre, I., Whiten, A., & Laland, K.N. Experimental evidence for the co-evolution of hominin tool-making teaching and language. Nature Communications, 6, 1–8.
- 5 2014 **Morgan, T.J.H.**, Laland, K.N. & Harris, P.L. The Development of Adaptive Conformity in Young Children: Effects of Uncertainty and Consensus. Developmental Science.
- 4 2013 Mesoudi, A., S. Blanchet, A. Charmantier, É. Danchin, L. Fogarty, E. Jablonka, K.N. Laland, **T.J.H. Morgan**, G.B. Müller, F.J. Odling-Smee & B. Pujol. Is Nongenetic Inheritance Just a Proximate Mechanism? A Corroboration of the Extended Evolutionary Synthesis. Biological Theory, 189–195.
- 3 2012 **Morgan, T. J. H.**, & K. N. Laland. The Biological Bases of Conformity. Frontiers in Neuroscience 6, 1–7.
- 2 2011 **Morgan, T. J. H.**, L. E. Rendell, M. Ehn, W. J. E. Hoppitt, & K. N. Laland. The Evolutionary Basis of Human Social Learning. Proceedings of the Royal Society B: Biological Sciences.
- 1 2011 Rendell, L.E., L. Fogarty, W.J.E. Hoppitt, **T.J.H. Morgan**, M.M. Webster, and K.N. Laland. Cognitive Culture: Theoretical and Empirical Insights into Social Learning Strategies. Trends in Cognitive Sciences 15, 68–76.

Peer reviewed journal articles in submission or preparation

8	ln prep.	Suchow J.W., Morgan T.J.H., Lall V.H., Hamrick J.B., Meylan S.C., Mitchell A.P., Wilkes M., Glick D.I., de la Guardia C., Snyder J.M., Kleinfeldt S.E. & Griffiths T.L. Fully automated behavioral experiments of cultural transmission through crowdsourcing.
7	ln prep.	Brand, C.O., Mesoudi, A., Morgan T.J.H. Trusting the experts: The domain specificity of prestige-biased social learning.
6	ln subm.	van Leeuwen, E.J.C., Morgan T.J.H. & Riebel, K. Foraging zebra finches (Taeniopygia guttata) use public information rather than conforming to majorities. (Under review at Biology Letters).
5	ln prep.	Morgan T.J.H & Thompson, B. Payoffs and punishment can stabilize traditions against biased transformation.

4	ln subm.	<u>Tiokhin L.</u> , Yan M., Morgan T.J.H . Competition for priority and the cultural evolution of research strategies. (Under 2 nd round of review at Nature Human Behaviour).
3	ln prep.	Morgan T.J.H. , Fogarty L. & Feldman, M.W. Does non-genetic inheritance challenge evolutionary theory?.
2	ln prep.	Morgan T.J.H. *, Suchow J.W.* & Griffiths T.L. Experimental gene-culture simulations show human culture can fail to accommodate environmental change.
1	ln subm.	<u>Tiokhin, L.</u> , Panchanathan, K., Lakens, D., Vazire, S., Morgan, T.J.H. , Zollman, K., Honest Signaling in Academic Publishing. (Under review at Perspectives in Psychological Sciences).

Non-peer reviewed journal articles

1 2020 <u>Miu E.</u>, Boyd R., Richerson P.J., **Morgan T.J.H**. A theory limited in scope and evidence. Behavioral and Brain Sciences.

Non-peer reviewed book chapters

- 2 2015 **Morgan, T. J. H.**, C. P. Cross & L. E. Rendell. Nothing in Human Behavior Makes Sense Except in the Light of Culture: Shared Interests of Social Psychology and Cultural Evolution. In Zeigler-Hill, V., L. L. M. Welling & T. K. Shackelford (eds) Evolutionary Perspectives on Social Psychology. Springer.
- 1 2013 Laland, K. N., A. Cowie, & **T. J. H. Morgan**. What animals other than primates can tell us about human cultural transmission. In Ellen, R., Lycett, S., Johns, S. (eds) Understanding Cultural Transmission in Anthropology. Berghahn: New York/Oxford.

Textbooks

1 2018 **Morgan, T. J. H.** Bones, Stones and Human Evolution. TopHat Monocle. An interactive, online textbook. Not peer reviewed.

4	In prep.	Morgan, T. J. H. Review of <i>The Evolution of Knowledge: Rethinking science for the Anthropocene</i> by Jurgen Renn. Evolutionary Studies in Imaginative Culture.
3	In press	Morgan, T. J. H. Review of <i>Beyond the Meme: Development and structure in cultural evolution</i> edited by Alan Love and William Wimsatt. Evolutionary Studies in Imaginative Culture.
2	2018	Morgan, T. J. H. Review of <i>A Different Kind of Animal: How Culture Transformed our Species</i> by Robert Boyd. Evolutionary Studies in Imaginative Culture. 2 (2) 115-118
1	2018	Morgan, T. J. H. Review of <i>Darwin's Unfinished Symphony</i> by Kevin N. Laland. Evolutionary Studies in Imaginative Culture. 2, 121-124.

Research Grants

- 2 2016- Co-PI on \$4.5M grant FP00007906 from DARPA through NGS2.
- 2020 Project entitled "Culture-On-A-Chip Computing: Crowdsourced Simulations of Culture, Group Formation, And Collective Identity", in collaboration with UC Berkeley. Total of 3 PIs, 20% ASU recognition.
- 1 2015– Postdoctoral researcher on \$474,697 grant 1456709 from the NSF, 2018 PI Thomas Griffiths. (I co-wrote the application and was named personnel, but not a co-PI). Project entitled "Testing evolutionary hypotheses through large-scale behavioral simulations". 0% ASU recognition.

Invited symposia and workshops

8 2019 Opportunities for Cultural Evolutionary Developmental Psychology. **Morgan T.J.H.** Invited workshop at Santa Fe Institute.

7	2018	Experimental Human Gene-Culture Coevolution. Morgan T.J.H. , Suchow J.W. & Griffiths T.L. Departmental seminar series at UCLA. <u>Video</u> .
6	2018	Life History, Learning & Memory. Morgan T.J.H. , Suchow J.W. & Griffiths T.L. Invited workshop at UC Berkeley.
5	2018	Experimental Human Gene-Culture Coevolution. Morgan T.J.H. , Suchow J.W. & Griffiths T.L. Departmental seminar series at St Andrews University.
4	2018	Experimental Human Gene-Culture Coevolution. Morgan T.J.H. , Suchow J.W. & Griffiths T.L. Departmental seminar series at Durham University.
3	2015	Gene-culture interactions and cognitive evolution. Morgan T.J.H. Departmental seminar series at UC Davis.
2	2014	The co-evolution of culture and cognition. Morgan T.J.H. Departmental seminar series at UC Berkeley.
1	2011	The evolutionary basis of human social learning. Morgan, T. J. H. , L. E. Rendell, M. Ehn, W. J. E. Hoppitt, & K. N. Laland. Departmental seminar series at Durham University.

Conference presentations

- 16 2018 Experimental gene-culture coevolution of human social learning in a changing environment. **Morgan T.J.H.**, Suchow J.W. & Griffiths T.L. Cultural Evolution Society Conference. USA.
- 15 2018 The empirical study of cognitive and demographic complexity in cultural evolution. **Morgan T.J.H.** Culture Conference. UK.
- 14 2016 Evolutionary consequences of learning, culture and complex behaviors. Morgan
 T.J.H. 85th annual meeting of the American Association of Physical Anthropologists. USA.
- 13 2015 How plasticity can re-direct evolution, **Morgan T.J.H.** EvoDevo PanAm. USA.
- 12 2015 What the Baldwin Effect affects, **Morgan T.J.H.**, Suchow J.W. & Griffiths T.L. CogSci Conference. USA.
- 11 2015 The social transmission of Oldowan lithic technology, Morgan, T.J.H., Uomini, N. T., Rendell, L. E., Street, S. E., Lewis, H. M., Cross, C. P., Evans, C., Kearney, R., de la Torre, I., Whiten, A., & Laland, K. N. The Paleoanthropology Society Conference. USA.
- 10 2015 Gene-culture interactions and the evolution of human cognition. **Morgan, T.J.H.**, Uomini, N.T., Rendell, L.E., Street, S.E., Lewis, H.M., Cross, C.P., Evans, C.,

Kearney, R., de la Torre, I., Whiten, A., & Laland, K.N. Society for American Archaeology Conference. USA.

- 9 2015 The development of adaptive conformity. **Morgan, T.J.H.**, Laland, K.N. & Harris, P.L. Society for Research in Child Development Conference. USA.
- 8 2014 What the Baldwin Effect affects. **Morgan T.J.H.**, Suchow J.W. & Griffiths T.L. Human Behavior and Evolution Society Conference. Brasil.
- 7 2013 Confidence, consensus & conformity in children, **Morgan, T.J.H.**, Laland, K.N. & Harris, P.L. European Human Behaviour and Evolution Association Conference. Netherlands.
- 6 2013 Genetic control of non-genetic inheritance: Fact or fallacy? **Morgan T.J.H.** & Laland K.N. European Society for Evolutionary Biology. Portugal. <u>Video</u>.
- 5 2012 The social transmission of flint knapping technology, **Morgan, T.J.H.**, Uomini, N.T., Rendell, L.E., Street, S.E., Lewis, H.M., Cross, C.P., Evans, C., Kearney, R., de la Torre, I., Whiten, A., & Laland, K.N. European Human Behaviour and Evolution Association Conference. UK.
- 4 2012 Culture and decision making. **Morgan T.J.H.** Laland Lab Conference. UK.
- 3 2011 The evolutionary basis of social learning, **Morgan, T.J.H.**, L.E. Rendell, M. Ehn, W.J.E. Hoppitt, & K.N. Laland. Association for the Study of Animal Behaviour Summer Conference. UK.
- 2 2011 The evolutionary basis of human social learning. **Morgan, T.J.H.**, L.E. Rendell, M. Ehn, W.J.E. Hoppitt, & K.N. Laland. European Human Behavior and Evolution Association. Germany. (Awarded best student talk.)
- 1 2010 Social learning strategies in humans. **Morgan, T.J.H.**, L.E. Rendell, M. Ehn, W.J.E. Hoppitt, & K.N. Laland. European Human Behaviour and Evolution Association Conference. Poland.

Teaching

Teaching awards

2 2020 SHESC "Excellence in Teaching" award for ASM 494/594: Bayesian Statistics in Theory and Practice. (Shared with around 20 other faculty members). 1 2018 SHESC "Innovation in Teaching" award worth \$1500 for ASM 104: Bones, Stones and Human Evolution. (I was the sole recipient).

Courses Taught

- ASM 104 Bones, Stones and Human Evolution. (Awarded the SHESC "Innovation in Teaching" award (2018)).
- ASM 246 Human origins
- ASM 494/594 Special Topics: Bayesian Statistics in Theory and Practice (Awarded the SHESC "Excellence in Teaching" award (2020)).
- ASB 590 Reading and Conference

Postdoctoral researchers

- 1. Elena Miu, 2018 2020. Now a postdoctoral researcher working with Heidi Colleran at the Max Planck Institute for Evolutionary Anthropology.
- 2. Hillary Lenfesty, 2017 2020. Now a visiting/adjunct researcher at SHESC, ASU.

Graduate students

Chair:

- 1. Melanie Foreman, PhD Anthropology, 2019 present.
- 2. Leonid Tiokhin (Co-chair), PhD Anthropology, 2018 2019. Now a postdoctoral researcher working with Daniel Lakens at Eindhoven University of Technology.

Committee member:

3. Liam Gleason, PhD Anthropology, 2020 – present.

- 4. Eunice Villasenor, PhD Anthropology, 2018 present.
- 5. James Zerbe, PhD Anthropology, 2018 present.

Undergraduate students

1. Julia Phelps, 2018 – present.

Service

Committee positions

Within ASU:

- 1. ESC speaker series organizer Fall 2019, SHESC, ASU.
- 2. Personnel committee (2018 present), SHESC, ASU.
- 3. Search committee member (2018), SHESC, ASU.

Beyond ASU:

- 1. Member of Society for Research in Child Development (SRDC) "State of the Science" committee on cultural learning (2019 present).
- Organizing committee member for the 2nd meeting of the Cultural Evolution Society (2018), ASU.

Software

<u>Dallinger</u> is an online experimental-automation platform for the behavioral and social sciences. It facilitates the rapid execution of large-scale networked experiments that would otherwise be impossible. It is also freely available for anyone to use in their own research. I created Dallinger with my collaborator Jordan Suchow in 2014, and continue to develop and maintain it as well as train others to use it. Dallinger is currently used by tens of scientists, and data collected via Dallinger has appeared in more than 30 academic papers and conference presentations.

Peer-review is a public good and I take this responsibility seriously. I have reviewed grant applications (NSF), books, and scientific papers. I have reviewed manuscripts for the following journals:

- 1. Animal Behavior
- 2. Biology Letters
- 3. British Journal of Developmental Psychology
- 4. Cognitive Science
- 5. Current Anthropology
- 6. Evolutionary Human Sciences
- 7. Evolution and Human Behavior
- 8. Human Nature
- 9. International Journal of Behavioral Development
- 10. Journal of Paleolithic Archaeology
- 11. Nature Communications
- 12. Nature Human Behaviour
- 13. Philosophical Transactions of the Royal Society B
- 14. PLOS ONE
- 15. PNAS
- 16. Proceedings of the Royal Society B
- 17. Royal Society Interface
- 18. Scientific Reports

Selected media coverage

"Human language may have evolved to help our ancestors make tools", Michael Balter, Science, 2015, (doi:10.1126/science.aaa6332).

"Toolmaking experiment suggests prehuman ancestors used words", David Perlman, SF Gate, 2015.

"Man's first conversation was about DIY", Ellie Zolfagharifard, The Daily Mail, 2015.

Outreach	
2020	Project mentor for AP students at McNair Academic high school, NJ.
2019	Interviewed by science communicator Ricardo "The Dissenter" Lopez. Video of interview is available <u>online</u> .
2018	Interviewed by academic textbook publisher Tophat Monocle as part of their "Textbook heroes" series.
2012-2013	Associate Researcher, St Leonard's School, St Andrews. A paid position with the goal of educating final year high school students about current research, academic methodologies and university life.
2011	Hosted table at Royal Society 350 th Anniversary Science Expo, South Bank Centre, London.
2011	A large-scale event in London for visitors of all ages and backgrounds. Hosted activity at Dundee Science Expo. A large event focusing on young children.
2010	Hosted activities at Sensation Science Centre, Dundee. A museum event for families with young children assuming no relevant knowledge.