

# Fiery Cushman

---

Professor, Department of Psychology  
Harvard University

33 Kirkland St.  
Cambridge, MA 02138  
(617) 495-3862  
cushman@fas.harvard.edu  
<http://cushmanlab.fas.harvard.edu>

## Employment

---

2021-present	Professor, Department of Psychology, Harvard University
2018-2021	John L. Loeb Associate Professor of the Social Sciences, Department of Psychology, Harvard University
2014-2018	Assistant Professor, Department of Psychology, Harvard University
2011-2014	Assistant Professor, Department of Cog., Ling. and Psych. Sciences, Brown University
2008-2011	Post-Doctoral Fellow, Harvard University
2003-2004	Research Assistant, Primate Cognitive Neuroscience Laboratory, Harvard University

## Education

---

2004-2008	Ph.D., Psychology, Harvard University
1999-2003	B.A., Honors Biology, Harvard University

## Honors & Awards

---

2018	Distinguished Scientific Award for Early Career Contributions <i>American Psychological Association</i>
2015	Daniel M. Wegner Theoretical Innovation Prize <i>Society for Personality and Social Psychology</i>
2014	Stanton Prize <i>Society for Philosophy and Psychology</i>
2014	Teaching and Advising Award <i>Undergraduate Council of Students, Brown University</i>
2013	Henry Merritt Wriston Fellowship for Excellence in Teaching <i>Brown University</i>
2013	Teaching with Technology Award <i>Brown University</i>
2008	George W. Goethals Award for Excellence in Teaching <i>Harvard University</i>
2007	George W. Goethals Award for Excellence in Teaching <i>Harvard University</i>

## Publications

---

### Journal articles

Morris, A., Phillips, J. Huang, K. & Cushman, F. Generating options and choosing between them rely on distinct forms of value representation (in press). *Psychological Science*

Martin, J., Buon, M., Cushman, F. The effect of cognitive load on intent-based moral judgment (in press). *Cognitive Science*

Ho, Mark; Cushman, F.; Littman, M. & Austerweil, J. Communication in action: Planning and interpreting communicative demonstrations (in press). *Journal of Experimental Psychology: General*.

Phillips, J., Buckwalter, W., Cushman, F., Friedman, O., Martin, A., Turri, J., Santos, L., Knobe, J. Knowledge before belief (in press). *Behavioral and Brain Sciences*.

Heiphetz, L. & Cushman, F. Introduction to morality as a hub: Connections within and beyond social cognition. (2021) *Social Cognition*. 39(1): 1-3

Sarin, A., Martin, J., Ho, M. & Cushman, F. Punishment is organized around principles of communicative inference (2021). *Cognition*. 208, 104544

Dhaliwal, N., Patil, I. & Cushman, F. Reputational and cooperative benefits of third party compensation (2021). *Organizational Behavior and Human Decision Processes*. 164, 27-51

Patil, I., Zucchelli, M., Kool, W., Campbell, S., Fornasier, F., Calò, M., Silani, G., Cikara, M., & Cushman, F.A. (2021). Reasoning supports utilitarian resolutions to moral dilemmas across diverse measures. *Journal of Personality and Social Psychology*. 120(2), 443

Levine, S., Kleiman-Weiner, M., Schulz, L., Tenenbaum, J. & Cushman, F. Universalization reasoning guides moral judgment (2020). *Proceedings of the National Academy of Sciences*. 117(42), 26158-26169

Bear, A., & Cushman, F.A. (2020). Loss functions modulate the optimal bias-variance tradeoff. *Proceedings of the 42<sup>nd</sup> Annual Virtual Meeting of the Cognitive Science Society*. Cognitive Science Society.

Kleiman-Weiner, M., Sosa, F., Thompson, B., van Opheusden, B., Griffiths, T., Gershman, S., & Cushman, F.A. (2020). Downloading culture.zip: Social learning by program induction. *Proceedings of the 42<sup>nd</sup> Annual Virtual Meeting of the Cognitive Science Society*. Cognitive Science Society.

Cushman F. (2020). Rationalization is rational. *Behavioral and Brain Sciences*, 43, e28, 1-59.

Bear, A., Bensinger, S., Jara-Ettinger, J., Knobe, J., & Cushman, F.A. (2020). What comes to mind. *Cognition*, 194.

Morris, A., Phillips, J., & Cushman, F.A. (2019). How we know what not to think. *Trends in Cognitive Science*, 23(12), 1026-1040.

Martin, J., Jordan, J., Rand, D., & Cushman, F.A. (2019). When do we punish people who don't? *Cognition*, 193.

Morris, A., & Cushman, F.A. (2019). Model-free RL or action sequences? *Frontiers in Psychology*, 10.

Morris, A., Phillips, J., Gerstenberg, T., & Cushman, F.A. (2019). Quantitative causal selection patterns in token causation. *PLoS ONE*, *14*(8), e0219704.

Liu, S., Cushman, F.A., Gershman, S., Kool, W., & Spelke, L. (2019). Hard choices: Children's understanding of the cost of action selection. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 671-677). Montreal, QB: Cognitive Science Society.

Prochownik, K., & Cushman, F.A. (2019). Outcomes speak louder than actions? Testing a challenge to the two-process model of moral judgment. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 2606-2612). Montreal, QB: Cognitive Science Society.

Cushman, F.A., & Gershman, S. (2019). Editor's introduction: Computational approaches to social cognition. *Topics in Cognitive Science*, *11*(2), 281-298.

Ho, M., Cushman, F.A., Littman, M., & Austerweil, J. (2019). People teach with rewards and punishments as communication, not reinforcements. *Journal of Experimental Psychology: General*, *148*(3), 520-549.

Klein, R. A., Vianello, M., Hasselman, F., Adams, B. G., Adams Jr, R. B., Alper, S., ...Cushman, F.A.,... & Batra, R. (2018). Many Labs 2: Investigating variation in replicability across samples and settings. *Advances in Methods and Practices in Psychological Science*, *1*(4), 443-490.

Cova, F., Strickland, B., Abatista, A., Allard, A., Andow, J., Attie, M., ...Cushman, F.A.,... Zhou, X. (2018). Estimating the reproducibility of experimental philosophy. *Review of Philosophy and Psychology*.

Morris, A., & Cushman, F.A. (2018). A common framework for theories of norm compliance. *Social Philosophy and Policy*, *35*(1), 101-127.

Levine, S., Kleiman-Weiner, M., Chater, N., Cushman, F.A., & Tenenbaum, J. (2018). The cognitive mechanisms of contractualist moral decision-making. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

Icard, T., Cushman, F.A., & Knobe, J. (2018). On the instrumental value of hypothetical and counterfactual thought. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 517-522). Austin, TX: Cognitive Science Society.

Ho, M., Littman, M., Cushman, F.A., & Austerweil, J. (2018). Effectively learning from pedagogical demonstrations. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 505-510). Austin, TX: Cognitive Science Society.

Phillips, J., Morris, A., & Cushman, F.A. (2018). Value-guided choice sets support efficient planning. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 792-797). Austin, TX: Cognitive Science Society.

Phillips, J., Knobe, J., Strickland, B., Pauline, A., & Cushman, F.A. (2018). Evidence for evaluations of knowledge prior to belief. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 2259-2264). Austin, TX: Cognitive Science Society.

Kool, W., Gershman, S., & Cushman, F.A. (2018). Planning complexity registers as a cost in metacontrol. *Journal of Cognitive Neuroscience*, *30*(10), 1391-1404.

- Hannikainen, I.R., Machery, E., & Cushman, F.A. (2018). Is utilitarian sacrifice becoming more permissible? *Cognition*, 170, 95-101.
- Barak-Corren, N., Tsay, C.J., Cushman, F.A., & Bazerman, M. (2018). If you're going to do wrong, at least do it right: Considering two moral dilemmas at the same time promotes consistency. *Management Science*. 64(4), 1528-1540.
- Darby, R.R., Horn, A., Cushman, F.A., & Fox, M.D. (2018). Lesion network localization of criminal behavior. *Proceedings of the National Academy of Sciences*, 115(3), 601-606.
- Morris, A., & Cushman, F.A. (2017). The evolution of flexibility and rigidity in retaliatory punishment. *Proceedings of the National Academy of Sciences*, 114(39), 10396-10401.
- Cushman, F.A., Kumar, V., & Railton, P. (2017). Moral learning: Psychological and philosophical perspectives. *Cognition*, 167, 1-10.
- Ho, M., McGlashan, J., Littman, M., & Cushman, F.A. (2017). Social is special: A normative framework for teaching with and learning from evaluative feedback. *Cognition*, 167, 91-106.
- Hannikainen, I., Miller, R.M., & Cushman, F.A. (2017). Act versus impact: Conservatives and liberals exhibit different structural emphases in moral judgment. *Ratio*, 30, 462-493.
- Kool, W., Gershman, S.J., & Cushman, F.A. (2017). Cost-benefit arbitration between multiple reinforcement learning systems. *Psychological Science*, 28(9), 1321-1333.
- Everett, J., Ingbreten, Z., Cushman, F.A., & Cikara, M. (2017). Deliberation erodes cooperative behavior – even towards competitive outgroups, even when using a control condition, and even when controlling for sample bias. *Journal of Experimental Social Psychology*, 73, 76-81.
- Phillips, J., & Cushman, F.A. (2017). Morality constrains the default representation of what is possible. *Proceedings of the National Academy of Sciences*, 114(18), 4649-4654.
- Patil, I., Calò, M., Fornasier, F., Cushman, F.A., & Silani, G. (2017). The behavioral and neural basis of empathic blame. *Scientific Reports*, 7(5200).
- Ho, M.K., Littman, M.L., MacGlashan, J., Cushman, F.A., & Austerweil, J.L. (2016). Showing versus doing: Teaching by demonstration. In D. D. Lee, M. Sugiyama, U. von Luxburg, & I. Guyon (Eds.), *Advances in Neural Information Processing Systems 29*. Barcelona, Spain: Curran Associates, Inc.
- Gershman, S.J., Gerstenberg, T., Baker, C.L., & Cushman, F.A. (2016). Plans, habits and theory of mind. *PLoS ONE*, 11(9), e0162246.
- Kool, W., Cushman, F.A., & Gershman, S. (2016). When does model-based control pay off? *PLoS Computational Biology*, 12(8), e1005090.
- Schweinsberg, M., Madan, N., Vianello, M., Sommer, S. A., Jordan, J., Tierney, W., ...Cushman, F.A.,...& Srinivasan, M. (2016). The pipeline project: Pre-publication independent replications of a single laboratory's research pipeline. *Journal of Experimental Social Psychology*, 66, 55-67.
- Martin, J., & Cushman, F. (2016). Why we forgive what can't be controlled. *Cognition*, 147, 133-143.
- Cushman, F.A., & Morris, A. (2015). Habitual control of goal selection in humans. *Proceedings of the National Academy of Sciences*, 112(45), 13817-13822.

Cushman, F.A. (2015). Punishment in humans: From intuitions to institutions. *Philosophy Compass*, 10(2), 117-133.

Cushman, F.A. (2015). Deconstructing intent to reconstruct morality. *Current Opinion in Psychology*, 6, 97-103.

Schwitzgebel, E., & Cushman, F.A. (2015). Philosophers' biased judgments persist despite training, expertise and reflection. *Cognition*, 141, 127-137.

Martin, J.W., & Cushman, F.A. (2015). To punish or to leave: Distinct cognitive processes underlie partner control and partner choice behaviors. *PLoS ONE*, 10(4), 1-14.

Cushman, F.A. (2015). From moral concern to moral constraint. *Current Opinion in Behavioral Sciences*, 3, 58-62.

Feiman, R., Carey, S., & Cushman, F.A. (2015). Infants' representations of others' goals: Representing approach over avoidance. *Cognition*, 136, 204-214.

Ho, M., Littman, M., Cushman, F.A., & Austerweil, J. (2015). Teaching with rewards and punishments: Reinforcement or communication? In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society* (pp. 920-925). Pasadena, CA: Cognitive Science Society.

Hannikainen, I., Miller, R., & Cushman, F.A. (2014). If it feels bad to me, it's wrong for you: The role of emotions in evaluating harmful acts. *Jury Expert*, 26(3), 20-27.

Cushman, F.A. (2014). The psychological origins of the doctrine of double effect. *Criminal Law and Philosophy*, 10(4), 763-776.

Cushman, F.A. (2014). The scope of blame. Commentary on Malle et al., *Psychological Inquiry*, 25, 201-205.

Cushman, F.A. (2014). The neural basis of morality: Not just where, but when. *Brain*, 137, 974-975.

Miller, R., Hannikainen, I., & Cushman, F.A. (2014). Bad actions or bad outcomes? Differentiating affective contributions to the moral condemnation of harm. *Emotion*, 14(3), 573-587.

Miller, R., & Cushman, F.A. (2013). Aversive for me, wrong for you: First-person behavioral aversions underlie the moral condemnation of harm. *Social and Personality Psychology Compass*, 7(10), 707-718.

Cushman, F.A. (2013). Action, outcome and value: A dual-system theory for morality. *Personality and Social Psychology Review*, 17(3), 273-292.

Cushman, F.A., Sheketoff, R., Wharton, S., & Carey, S. (2013). The development of intent-based moral judgment. *Cognition*, 127, 6-21.

Dillon, K., & Cushman, F.A. (2012). Agent, patient... ACTION! What the dyadic model of morality misses. Commentary on Gray et al., *Psychological Inquiry*, 23, 150-154.

Cushman, F.A., Durwin, A.J., & Lively, C. (2012). Revenge without responsibility? Judgments about collective punishment in baseball. *Journal of Experimental Social Psychology*, 48(5), 1106-1110.

- Cushman, F.A., Murray, D., Gordon-McKeon, S., Wharton, S., & Greene, J.D. (2012). Judgment before principle: Disregarding the action/omission distinction in moral judgment is associated with increased activity in both the control network and the default network. *Social, Cognitive and Affective Neuroscience*, 7, 888-895.
- Schwitzgebel, E., & Cushman, F.A. (2012). Expertise in moral reasoning? Order effects on moral judgment in professional philosophers and non-philosophers. *Mind & Language*, 27(2), 135-153.
- Cushman, F.A., Gray, K., Gaffey, A., & Mendes, W.B. (2012). Simulating murder: The aversion to harmful action. *Emotion*, 12(1), 2-7.
- Cushman, F.A., & Greene, J.D. (2012). Finding faults: How moral dilemmas illuminate cognitive structure. *Social Neuroscience*, 7(3), 269-279.
- Inbar, Y., Pizarro, D., & Cushman, F.A. (2012). Benefiting from misfortune: When harmless actions are judged morally blameworthy. *Personality and Social Psychology Bulletin*, 38(1), 52-62.
- Cushman, F.A. (2011). Morality from the frog's eye view. *Emotion Reviews*, 3(3), 261-263.
- Cushman, F.A., & Young, L. (2011). Patterns of moral judgment derive from nonmoral psychological representations. *Cognitive Science*, 35, 1052-1075.
- Sheppard, B., & Cushman, F.A. (2010). Evaluating norms: An empirical analysis of the relationship between norm-content, operator, and charitable behavior. *Vanderbilt Law Review*, 63(1), 53-104.
- Cushman, F.A., Dreber, A., Wang, Y., & Costa, J. (2009). Accidental outcomes guide punishment in a "trembling hand" game. *PLoS ONE*, 4(8), e6699.
- Cushman, F.A., & Macindoe, O. (2009). The coevolution of punishment and prosociality among learning agents. In N.A. Taatgen & H. van Rijn (Eds.), *Proceedings of the 31<sup>st</sup> Annual Conference of the Cognitive Science Society*. Amsterdam, Netherlands: Cognitive Science Society.
- Cushman, F.A., & L. Young (2009). The psychology of dilemmas and the philosophy of morality. *Ethical Theory and Moral Practice*, 12, 9-24.
- Greene, J.D., Cushman, F.A., Stewart, L.E., Lowenberg, K., Nystrom, L.E., & Cohen, J.D. (2009). Pushing moral buttons: The interaction between personal force and intention in moral judgment. *Cognition*, 111, 364-371.
- Saffran, J., Hauser, M., Seibel, R., Kapfhamer, J., Tsao, F., & Cushman, F.A. (2008). Grammatical pattern learning by human infants and cotton-top tamarin monkeys. *Cognition*, 107, 479-500.
- Cushman, F.A. (2008). Crime and punishment: Distinguishing the roles of causal and intentional analyses in moral judgment. *Cognition*, 108, 353-380.
- Cushman, F.A., Knobe, J., & Sinnott-Armstrong, W. (2008). Moral appraisals affect doing/allowing judgments. *Cognition*, 108, 281-289.
- Koenigs, M., Damasio, A., Adolphs, R., Young, L., Hauser, M, Cushman, F, & Tranel, D. (2008). Koenigs et al. reply. Reply to Kahane, G., & Shackel, N. *Nature*, 452, E5-E6.
- Mele, A., & Cushman, F.A. (2007). Intentional action, folk judgments and stories: Sorting things out. *Midwest Studies in Philosophy*, 31, 184-201.

Young, L., Cushman, F.A., Hauser, M.D., & Saxe, R. (2007). The neural basis of the interaction between theory of mind and moral judgment. *Proceedings of the National Academy of Sciences*, 104(20), 8235-8240.

Koenigs, M., Young, L., Adolphs, R., Tranel, D., Cushman, F.A., Hauser, M.D., & Damasio, A. (2007). Damage to ventromedial prefrontal cortex increases utilitarian moral judgments. *Nature*, 446, 908-911.

Hauser, M.D., Cushman, F.A., Young, L., Kang-Xing Jin, R., & Mikhail, J. (2007). A dissociation between moral judgments and justifications. *Mind and Language*, 22(1), 1-21.

Cushman, F.A., Young, L., & Hauser, M.D. (2006). The role of conscious reasoning and intuition in moral judgments: Testing three principles of harm. *Psychological Science*, 17(12), 1082-1089.

Young, L., Cushman, F.A., Adolphs, R., Tranel, D., & Hauser, M.D. (2006). Does emotion mediate the relationship between an action's moral status and its intentional status? Neuropsychological evidence. *Journal of Culture and Cognition*, 6(1-2), 291-304.

Stevens, J.R., Cushman, F.A., & Hauser, M.D. (2005). Evolving the psychological mechanisms for cooperation. *Annual Review of Ecology and Systematics*, 36, 499-518.

Stevens, J.R., & Cushman, F.A. (2004). Cognitive constraints on reciprocity and tolerated scrounging. Commentary on Gurven, M. *Behavioral and Brain Sciences*, 27, 569-570.

### **Book Chapters**

Wu, C., Velez, N. & Cushman, F. Representational exchange in human social learning: Balancing efficiency and flexibility (in press). *Information seeking*. Cambridge University Press.

Cushman, F.A., Sarin, A., & Ho, M. (in press). Punishment as communication. In J. Doris & M. Vargas (Eds.), *The Oxford Handbook of Moral Psychology*. Oxford University Press.

Cushman, F.A., & Paul, L. (in press). Are desires interdependent? In J. Doris & M. Vargas (Eds.), *The Oxford Handbook of Moral Psychology*. Oxford University Press.

Cashman, M., & Cushman, F.A. (in press). Learning from moral failure. In E. Lambert & J. Schwenkler (Eds.), *Becoming Someone New: Essays on Transformative Experience, Choice, and Change*. Oxford University Press.

Cushman, F.A. (2020). Is cognitive neuroscience an oxymoron? In S. Leslie & S. Cullen (Eds.), *Current Controversies in the Philosophy of Cognitive Science*. Routledge Press.

Kool, W., Cushman, F.A., & Gershman, S. (2018). Competition and cooperation between multiple reinforcement learning systems. In R.W. Morris, A.M. Bornstein, & A. Shenhav (Eds.), *Understanding Goal-Directed Decision Making: Computations and Circuits*. Elsevier.

Miller, R.M., & Cushman, F.A. (2018). Moral values and motivations: How special are they? In K. Gray & J. Graham (Eds.), *The Atlas of Moral Psychology: Mapping Good and Evil*. Guilford Press.

Cushman, F.A. (2017). Is non-consequentialism a feature or a bug? In J. Kiverstein (Ed.), *The Routledge Handbook of Philosophy of the Social Mind* (pp. 262-279). Routledge.

Martin, J., & Cushman, F.A. (2016). The adaptive logic of moral luck. In J. Sytsma & W. Buckwalter (Eds.), *A Companion to Experimental Philosophy*. Wiley Blackwell.

Bartels, D.M., Bauman, C.W., Cushman, F.A., Pizarro, D.A., & McGraw, A.P. (2014). Moral judgment and decision making. In G. Keren & G. Wu (Eds.), *Blackwell Reader of Judgment and Decision Making*. Blackwell.

Cushman, F.A. (2013). The role of learning in punishment, prosociality, and human uniqueness. In K. Sterelny, R. Joyce, B. Calcott, & B. Fraser (Eds.), *Cooperation and its evolution. Life and mind: Philosophical issues in biology and psychology* (pp. 333-372). MIT Press.

Cushman, F.A., & Greene, J.D. (2011). The philosopher in the theater. In M. Mikulincer & P.R. Shaver (Eds.), *Social Psychology of Morality: The Origins of Good and Evil*. APA Press.

Cushman, F.A., Young, L., & Greene, J.D. (2010). Our multi-system moral psychology: Towards a consensus view. In J. Doris et al (Eds.), *The Oxford Handbook of Moral Psychology*. Oxford University Press.

Sinnott-Armstrong, W., Young, L., & Cushman, F.A. (2010). Moral intuitions as heuristics. In J. Doris et al (Eds.), *The Oxford Handbook of Moral Psychology*. Oxford University Press.

Cushman, F.A., & Mele, A. (2008). Intentional action: Two and half folk concepts. In J. Knobe & S. Nichols (Eds.), *Experimental Philosophy*. Oxford University Press.

Hauser, M.D., Young, L., & Cushman, F.A. (2008). Reviving Rawls' linguistic analogy. In W. Sinnott-Armstrong (Ed.), *Moral Psychology and Biology*. Oxford University Press.

Cushman, F.A. (2006). Aping ethics: behavioral homologies and nonhuman rights. In M. Hauser, F. Cushman, & M. Kamen (Eds.), *People, Property or Pets?* Purdue University Press.

### **Essays**

Cushman, F.A. A. (2012, April 26). Baseball's brand of revenge models ancient blood feuds. *Huffington Post*.

Cushman, F.A. (2011). Should the law depend on luck? In M. Brockman (Ed.), *Future Science: 19 Essays from the Cutting Edge*.

Cushman, F.A. (2010, October 19). Science wakes up to morality. *New Scientist* (Issue 2782).

Cushman, F.A., Young, L., & Hauser, M.D. (2006). The psychology of justice: A review of natural justice by Kenneth Binmore (Vol. 28, pp. 95-98). In *Analyse & Kritik*. Lucius & Lucius.

Cushman, F.A. (2006). The declaration of independence: A lab report (pp. 50-61). In *In Character*.

### **Edited Book**

Hauser, M.D., Cushman, F.A., & Kamen M. (Eds.). (2006). *People, Property or Pets?* Purdue University Press.

### **Grants & Fellowships**

---

2019-2021 Office of Naval Research  
*Adaptive choice set construction for complex decisions*  
Role: PI  
Amount awarded: \$819,247

- 2019-2020 Dean's Competitive Fund for Promising Scholarship  
*Establishing a biological basis for harm aversion*  
Role: PI  
Amount awarded: \$34,256
- 2018-2021 John Templeton Foundation  
*Moral Reasoning in Thought and Action*  
Role: Co-PI (with Co-PI Liane Young; additional investigators Katie MacAuliffe, David Rand, Victor Kumar)  
Total amount awarded: \$2,746,931  
To PI Cushman: \$837,399
- 2018-2019 Mind, Brain & Behavior Faculty Research Grant  
*Cognitive Foundations of Cooperation*  
Role: Co-PI (with Co-PI Joe Henrich)  
Amount awarded: \$35,000
- 2017-2018 Dean's Competitive Fund for Promising Scholarship  
*The role of empathy in learning to avoid harm to others*  
Role: PI  
Amount awarded: \$34,500
- 2015-2016 Foundations of Human Behavior Initiative, Harvard University  
*Goals, habits and theory of mind: Experimental and computational studies*  
Co-PI (with Co-PI Sam Gershman)  
Amount awarded: \$40,000
- 2014-2017 Office of Naval Research  
*A computational approach to human moral judgment*  
Role: PI  
Amount awarded: \$859,320
- 2014-2017 John Templeton Foundation  
*Aspects of Religious Experiences: Investigations from Science, Philosophy, Theology and Religious Studies*  
Role: Director of Psychological Research  
Total amount awarded: \$4,655,995  
To PI Cushman: \$353,750
- 2014-2016 Prospective Psychology (a program funded by the John Templeton Foundation)  
*Social Prospection: A Predictive Coding Model of Mental State Inference*  
Role: PI  
Amount awarded: \$107,900
- 2013-2014 Office of Naval Research  
*A computational approach to human moral judgment*  
Role: PI  
Amount awarded: \$155,000
- 2012-2013 National Science Foundation, Law and Social Sciences Program  
*The psychology of punishment: Lessons learned from moral luck*  
Role: PI  
Amount awarded: \$84,987

2008-2010 Mind, Brain and Behavior Initiative  
Post-doctoral Fellowship Award

2005-2008 National Science Foundation  
Graduate Research Fellowship Award

## Presentations

---

### Invited Talks & Colloquia (by PI only)

- "Investigating Moral Intuitions" Cognition, Brain and Behavior Seminar, Harvard University, Sept. 23, 2004
- "The Origins of Moral Principles" Cognition, Brain and Behavior Seminar, Harvard University, Dec. 14, 2006
- "Two Processes of Moral Judgment" University of Oslo, March 16, 2007
- "Moral Psychology and the Evolution of Cooperation" Australian National University, Aug. 22, 2007
- "The Origins of Moral Principles" Cognitive Talk Series, Yale University, Oct. 2, 2007
- "Crime and punishment: The role of causal and mental state attributions in moral judgment" New York University, March 7, 2008
- "Intentions and Outcomes: Which do we punish, and why?" Berkman Center for Internet and Society, Harvard Law School, May 12, 2008
- "Intentions and Outcomes: Which do we punish, and why?" Gruter Institute for Law and Biology, May 21, 2008
- "Three functions of morality" Judicial Education Program, September 15, 2008
- "Intentions and Outcomes: Which do we punish, and why?" Marascopa County Judicial Education Day, March 6, 2009
- "Intentions and Outcomes: Which do we punish, and why?" Judicial Education Program, March 26, 2009
- "Plato's Pickle: The origins of moral principles" Gruter Institute for Law and Biology, May 20, 2009
- "Intentions and Outcomes: Which do we punish, and why?" Society for Evolutionary Analysis in Law, April 18, 2009
- "Intentions and Outcomes: Which do we punish, and why?" Judicial Education Program, June 18, 2009
- "Intentions and Outcomes: Which do we punish, and why?" Harvard Law School Association for Law and Mind Sciences, Sept. 21, 2009
- "Two Functions of Morality" Cognition, Brain and Behavior Seminar, Harvard University, October 29, 2009
- "Intentions and Outcomes: Which do we punish, and why?" Judicial Education Program, November 2, 2009
- "Two Functions of Morality" University of Arizona, November 7, 2009
- "The Origins of Moral Principles" Workshop on Moral Psychology, The Interdisciplinary Center, Herzelya Isreal, Apr. 27, 2010
- "Two Functions of Morality" California Institute of Technology, June 3, 2010
- "Three Functions of Morality" Society for Philosophy and Psychology Pre-Conference Workshop on Morality, June 9, 2010
- "The Arch and the Spandrel" Cold Spring Harbor Summer Workshop in Social Cognition, July 15, 2010
- "Two Functions of Morality" Culture and Mind Project Workshop on Moral Psychology, September 17, 2010
- "Two Functions of Morality" Moral Psychology Talk Series, Yale University, October 13, 2010
- "Two Functions of Morality" Workshop on Experimental Ethics, Pontifícia Universidade Católica do Rio de Janeiro, Dec. 7, 2010

"Moral Dilemmas and Cognitive Architecture" Workshop on Experimental Ethics, Pontificia Universidade Católica do Rio de Janeiro, Dec. 10, 2010

"Moral Intuitions and Moral Principles" Cognitive Neuroscience Talk Series, Dartmouth College, February 10, 2011

"Two Functions of Morality" Colloquium, Columbia University Department of Psychology, Oct. 26, 2011

"The Origins of Moral Principles" Social Psychology Talk Series, Yale University, Oct. 31, 2011

"The Aversion to Harmful Action" Carnegie Council for Peace, Nov. 7, 2011

"The Development of Intent-Sensitive Moral Judgment" Developmental Psychology Talk Series, Yale University, December 14, 2011

"The Aversion to Harmful Action" NeuroCog Collective Workshop, Jan. 7, 2012

"Two Functions of Morality" Social Psychology Talk Series, U. Mass. Amherst, Feb. 24, 2012

"Two Functions of Morality" Metro Experimental Research Group, March 16, 2012

"Where do Moral Principles Come From?" Experiments in Ethics Workshop, London, May 4, 2012

"Two Functions of Morality" Roger Williams University Colloquium, Oct. 10, 2012

"Action, outcome and value: From computational neuroscience to political disputes" University of Pennsylvania Political Psychology Series

"Action, outcome and value" Morality Preconference, Society for Personality and Social Psychology, New Orleans, Jan. 17, 2013

"Action, outcome and value" Winterschool in forensic psychology, Munich Germany, Feb. 2, 2013

"Action, outcome and value" Rensselaer Polytechnic Institute, Troy NY, Feb. 27, 2013

"Two Functions of Morality" University of Pennsylvania, March 12, 2013

"The trouble with harm" Janus Forum, Brown University, Providence RI, April 17 2013

"Action, outcome and value" Princeton Neuroscience of Social Decision-Making series, Princeton NJ, May 8, 2013

"What do psychologists know about morality?" Penn Summer Fellowship in Neuroethics, Philadelphia PA, June 25, 2013

"Action, outcome and value" International Summer School in Affective Sciences, Geneva, July 12, 2013

"Misery Loves Company" Workshop on Infant Social Cognition, Institut Jean Nicod, ENS, Paris, September 17, 2013

"Learning Matters" Harvard Social Psychology Series, Cambridge, September 24, 2013

"Learning Matters" Wash. U. at St. Louis Philosophy Department Colloquium, Nov. 14, 2013

"Learning Matters" Cornell Behavioral Economics and Decision Research Workshop, Dec. 3, 2013

"Learning Matters" Harvard Cognitive Psychology Series, Dec. 5, 2013

"Learning Matters" Boston College Developmental Series, Jan. 21, 2014

"Learning Matters" University of Maryland, March 6, 2014

"Learning Matters" Macquarie University, May 30, 2014

"Learning Matters" Monash University, June 2, 2014

"Learning Matters" Society for Philosophy and Psychology Stanton Award lecture, June 21, 2014

"Learning Matters" CEU International Summer School in Morality, Budapest, June 25, 2014

"Moral Habits" Cognitive Science Society, Quebec City, July 25, 2014

"Habits of Thought", Prospection in Social Life Workshop, Barcelona, October 10, 2014

"Learning Matters" Harvard Behavioral and Experimental Economics Workshop, October 14, 2014

"Learning Matters" Murphey Institute, Tulane University, November 7, 2014

"Two Functions of Morality" Center for Law Brain and Behavior, Harvard University, November 18, 2104

"How can a reinforcement learning model of morality possibly be right?" Workshop on Moral Learning, University of Michigan, Ann Arbor, May 17 2015

"Biased by Morals" American Association for Justice, Montreal, July 13, 2015

"Habitual Control of Goal Selection" New York University, September 24, 2015

"Learning Matters" Northwestern University, October 29, 2015

"Moral Habits" Harvard Law School SALMS meeting, November 19, 2015

"Moral Learning" Folk Epistemology Preconference, Society for Personality and Social Psychology, Jan. 21, 2016

"Moral Habits" Brown University, March 18, 2016

"Imagination and Moral Transformation" SPP Preconference on Transformative Experience, June 1, 2016

"From moral concern to moral constraint: The next frontier for neuroethics" University of Pennsylvania Neuroscience and Society Public Talk Series, October 6, 2016

"Learning matters" Georgia State University Neurophilosophy Forum, September 23, 2016

"Is non-consequentialism a feature or a bug?" Symposium on Behavioral Ethics, Harvard Business School, Oct. 21, 2016

"How to know what not to think" Brown University Pleasure, Reward and Value conference, March 18, 2017

"From moral concern to moral constraint" Association for Psychological Science (APA) invited symposium, May 27, 2017

"Social is Special" Yale Developmental Psychology Seminar Series, September 13, 2017

"How to know what not to think" Caltech Behavioral and Social Neuroscience Colloquium, October 26, 2017

"How to know what not to think" Princeton University workshop on Cognitive Control and Moral Responsibility, October 31, 2017

"How we know what not to think" UCL Affective Neuroscience Lab Seminar Series, March 8, 2018

"How we know what not to think" University of Toronto Social Personality Research Group Series, March 13, 2018

"How we know what not to think" UC San Diego Department Colloquium, March 16, 2018

"How we know what not to think" Social Neuroscience and Philosophy workshop, Duke University, June 6, 2018

"Is non-consequentialism a feature or a bug?" Workshop on Welfare Economics and Normative Ethics, University of Pennsylvania, Oct 26 2018

"How we know what not to think" SPSP Preconference on Justice and Morality, February 7, 2019

"How we know what not to think" Mind, Brain and Culture Colloquium, Emory University, March 6, 2019

"How we know what not to think" Neuroeconomics Seminar, University of Zurich, March 21, 2019

"Rationalization is Rational" Mind and Morality Lab Talk, Boston University, March 27, 2019

"Folk Contractualism" Brazil Legal Symposium, Harvard Law School, April 11, 2019

"How we know what not to think" Behavioral Science Workshop, Booth School of Management, University of Chicago, April 15, 2019

"Folk Contractualism" Sommers lab meeting, University of Chicago Law School, April 16, 2019

"How we know what not to think" Management and Organizations Seminar, Kellogg School of Management, Northwestern University, April 17 2019

"How we know what not to think" FAX workshop, Northeastern University, April 27, 2019

"How we know what not to think" RLDM (Reinforcement Learning and Decision Making conference), McGill University, July 12, 2019

"How we know what not to think" NYU Social Psychology Colloquium, Oct. 24, 2019

"How we know what not to think" Stanford Psychology Colloquium, Nov. 13, 2019

"How we know what not to think" MIT Sloan Marketing Seminar, Nov. 19, 2019

"How we know what not to think" University of New Hampshire Colloquium, Dec. 5, 2019

"How we know what not to think" Tulane University, Murphy Institute Ethics and Public Affairs Lecture, Feb. 28, 2020

"How we know what not to think" Johns Hopkins University Colloquium, September 15, 2020

"How we know what not to think" Princeton University Colloquium, November 6, 2020

"The logic of universalization guides moral judgment" Social Cognition Preconference, Society for Personality and Social Psychology, Feb. 10, 2021

"How we know what not to think" Cambridge University Social Psychology Seminar, November 6, 2021

"How we know what not to think" VU Amsterdam Psychology Colloquium, March 4, 2021

"The logic of universalization guides moral judgment" University of California, San Diego Social Psychology Seminar, March 9, 2021

"The logic of universalization guides moral judgment" Reading Center for Cognition Research, University of Reading, May 4, 2021

"The possibility of violence" Oxford Center for Ethics, Law and Armed Conflict. Oxford University, May 14, 2021

### **Talks from Submitted Abstracts** (by PI only)

- "The role of reasoning and intuition in moral judgment" Society for Philosophy and Psychology, Washington University, June 2, 2006
- "Two processes of moral judgment" Society for Personality and Social Psychology, Jan. 27, 2007
- "Outcomes vs. Intentions: Which do we punish, and why?" Society for Judgment and Decision-making, November 15, 2008
- "Accidental outcomes guide punishment in a 'Trembling Hand' game" Society for Personality and Social Psychology, Jan. 2010
- "The effect of bias and expertise in philosophical practice: Empirical evidence" Society for Philosophy and Psychology, Portland Oregon, June 2010
- "The scope of character judgments: Prediction, affiliation, religion and beyond" Society for Personality and Social Psychology, Jan. 2011
- "The origins of moral principles: A case-study of the action-omission distinction" Society for Philosophy and Psychology, Montreal, July 2011
- "The development of intent-sensitive moral judgment" Cognitive Development Society, Philadelphia, October 2011
- "Do liberals and conservatives agree about moral character?" Society for Experimental Social Psychology, Washington, D.C., October 2011
- "The development of intent-based moral judgment" Society for Personality and Social Psychology, New Orleans, January 2013
- "What is an optimal intervention?" International Conference on Thinking, Providence, August 2016
- "Intuitive Metacontrol" Society for Experimental Social Psychology, Boston MA, Oct. 14 2017
- "Are desires interdependent?" American Philosophical Association, New York NY, Jan. 8 2019
- "Rationalization is Rational" SESP (Society for Experimental Social Psychology), Toronto, Oct. 19 2019

### **Guest Lectures** (by PI only)

- On moral psychology for Richard Holton at Dept. of Philosophy, M.I.T., Nov. 28, 2006
- On the evolution of cooperation for Ian Gilby at Dept. of Anthropology, Harvard University, Dec. 19 2006
- On moral psychology for Joshua Knobe at Dept. of Philosophy, University of North Carolina, Apr. 4 2007
- On the evolution of punishment and prosociality for Martin Novak at Program for Evolutionary Dynamics, Harvard University, Dec. 11 2008
- On moral psychology for Harvard Business School moral psychology workshop, Jan. 2010
- On moral psychology for Cold Spring Harbor workshop on Social Cognition, July 15 2010
- On moral psychology for Harvard Business School moral psychology workshop, Jan. 2011
- On moral psychology for Drazen Prelec at MIT Sloan Business School, Apr. 28, 2011
- On moral psychology for Wellcome Trust workshop on Social Cognition, Aug. 14 2011
- On experimental methods for Experimental Philosophy Bootcamp, Yale U., Aug. 12, 2011
- On moral psychology for Cold Spring Harbor workshop on Social Cognition, July 15 2012
- On moral psychology for Liane Young at Boston College, October 23 2012
- On moral psychology for Wellcome Trust workshop on Social Cognition, July 15 2013
- On reinforcement learning for Thomas Serre Computational Methods course, April 14, 2013
- On effective presentation styles for doctoral student professional development, Harvard University,
- On ethical decision making for HKSG leadership conference, June 18, 2015
- On moral psychology for MIT architecture / media lab course, Nov. 11, 2015
- On cognitive neuroscience for Nancy Gertner at Harvard Law School, Feb. 3 2016
- On moral psychology for Liane Young at Boston College, March 17 2016
- On moral psychology and law for Nancy Gertner at Harvard Law School, Feb. 13 2018
- On moral psychology for Ben Enke at Harvard University, Sept. 12 2019
- On value guided decision making for Susanna Seigal at Harvard University, April 1, 2020

## **Public Lectures** (by PI only)

- "Morals in Monkeys and Man" Parker High School, Oct 22, 2003
- "What is Human Nature?" Vermont Academy, Nov. 16, 2006
- "The Science of Babies" with Peter Blake, Museum of Science, Boston, Aug. 5, 2007
- "What is Philosophy?" Vermont Academy, Nov. 6, 2007
- "Altruism and Selfishness" with Peter Blake & Dave Rand, Museum of Science, Boston, Nov. 29, 2007
- "The origins of human conflict" Vermont Academy, Jan. 22, 2008
- "The aversion to harm" PopTech Annual Conference, Camden, Oct. 24, 2013

## **Posters** (by PI only)

- "Core knowledge of intentions: A preference for actions over omissions" Society for Research on Child Development, March 31 2007
- "The interaction of intentions and consequences in punishment and reward" Society for Neuroeconomics, Sept. 28, 2007
- "The interaction of intentions and consequences in punishment and reward" Society for Philosophy and Psychology, June 28, 2008
- "The coevolution of punishment and prosociality among learning agents" Cognitive Science Society, July 30, 2009
- "Psychological responses to the performance of harmful actions" Society for Personality and Social Psychology, Jan. 2010
- "When its wrong not to act: How the brain processes harmful omissions" Cognitive Neuroscience Society, Apr. 2010

## **Teaching and Mentoring**

---

### **Classroom Instruction**

#### *Primary Instructor*

- PSY 1520: Responsibility, Harvard University, 2020
- PSY 15: Social Psychology, Harvard University, annually 2014-2021
- CLPS 0700: Social Psychology, Brown University, annually 2012-2014
- CLPS 1280: Dual Systems in Cognition, Brown University 2013
- CLPS 2770: Moral Psychology, Brown University, 2012
- Sophomore Tutorial, Harvard University, 2007-08

#### *Regular Co-Instruction*

- 2560R: Laboratory in Social Cognition (with Josh Greene)
- 3420: Research Workshop in Social Psychology (with Mina Cikara & Josh Greene)
- PSY 2020: Cognition, Brain & Behavior Proseminar
- PSY 2010: Departmental Proseminar

### **Mentoring**

#### *Postdoctoral*

- Natalia Velez, 2020 - present
- Charley Wu, 2019-2020
- Max Kleiman-Weiner, 2018-2020
- Adam Bear, 2018-present
- Sydney Levine, 2017-present
- Regan Bernhard, 2017-2019

Indrajeet Patil, 2017-2019  
Wouter Kool, 2015-2019  
Jonathan Phillips, 2014-2019  
Giuseppe Ugazio, 2016-2018  
Jorie Koster-Hale, 2014-2016  
Martin Day, 2014-2016

*Doctoral*

Ryan Miller, Brown University, Ph.D. 2017  
Justin Martin, Harvard University, Ph.D. 2017  
Monica Burns, Harvard University, Ph.D. 2018  
Adam Morris, Harvard University, Ph.D. 2021 (expected)  
Dylan Tweed, Harvard University, Ph.D., 2021 (expected)  
Arunima Sarin, Harvard University, Ph.D. 2022 (expected)

*Master's Student Advising (Extension School):*

April Gardner, M.A. 2018

*Visiting students:*

Jim Everett 2016 (visiting from Oxford University)  
Leor Zmigrod 2019 (visiting from Cambridge University)

*Doctoral Dissertation Committee Member:*

Ivan Kroupke, Adam Mastroianni, Jason Nemirow, Graham Noblit, Thomas Pouncy, Kyle Dillon, Benedek Kurdi, Jack Cao, Monica Burns, Mark Ho, Max Kleimen-Weiner, Edward Patzelt, James Dungan, Regan Bernhard, Gus Cooney, Mark Thornton, Patrick Heck, Joanna Korman, Laura Niemi, Indrajeet Patil, Donal Cahill, Jeff Cockburn, Jorie Koster-Hale, Gideon Goldon, Andrew Monroe

*Undergraduate honors thesis, Primary or co-advisor:*

Maria Barth, Jay Costa, Sophie Wharton, Lurui Le, Rocksheng Zhang, Cindy Pollack, Hannah Boettcher, Greg Sewitz, Laurel Mattos, Joanna Lustig, Adam Bear, Robin Sifre, Adam Morris, Julia Franckh, Hannah Begely, Mahnoor Kahn, Tom Osborn, Jonas Nelle, Marcus Trenfield

*Undergraduate honors thesis, Reader:*

Liz Kaye, Eric Wilson, Kelsey Ichakawa, Hannah Harris, Regina Fairfax, Jacob Verrey, Yana Lee, Katherine Playfair, Terry Lee, Lia Kaynor, Constanza Bustamente, Ava Zhang

Freshman/Sophomore advisor, Brown University, 2012-2014  
Psychology Concentration Advisor, Harvard University, 2005-2011  
Resident Tutor in Cabot House, Harvard University, 2005-2011

**Service**

---

**Psychology Department**

Diversity, Inclusion and Belonging Committee: 2020-present  
Psychology Department Undergraduate Curriculum Committee: 2018-2019  
Restricted Funds Committee: 2016-2018  
Colloquium Committee: 2014-2019  
Social Psychology Research Seminar Series Committee: 2014-present

## Harvard University

Harvard Speaker's Bureau, 2018-present

Mind, Brain & Behavior Steering Committee: 2016-2017, 2020-2021

Mind, Brain & Behavior Planning Committee for Junior Research Symposium: 2015-2017

Mind, Brain & Behavior Affiliate: 2014-present

Faculty member of Center for Law, Brain and Behavior: 2014-present

Faculty Advisor to Harvard Model Congress (undergraduate organization): 2014-present

Member of Senior Common Room of Cabot House: 2014-present

Member of Senior Common Room of Lowell House: 2019-present

Co-organizer of summer boot camp in computational social cognition, July 2017

## Professional Societies

### Leadership

Program Co-Chair, 2012 Meeting of the Society for Philosophy and Psychology

Executive Board, Society for Philosophy and Psychology, 2011-2014

### Membership

Association for Psychological Science, Cognitive Development Society, Moral Psychology Research Group, NeuroCog Collective, Society for Experimental Social Psychology, Society for Philosophy and Psychology, Society for Personality and Social Psychology, Society for Social and Affective Neuroscience

Fellow, Association for Psychological Science

## Editorial and Peer Review

### Editorships

Editorial Board, *Cognition* 2015-present

Co-editor of special issue on "Moral learning", *Cognition*, 2017

Co-editor of special issue on "Computational social cognition", *Topics in Cognitive Science*, 2019

Co-editor of special issue on "Morality as a hub", *Social Cognition*, 2020

### Recognition

Certificate of Reviewing Excellence by editors of *Cognition* on behalf of Elsevier

### Grant review

National Science Foundation, US-Israel Binational Science Foundation, Templeton Foundation

### Ad hoc editor or peer reviewer

Behavioral and Brain Science, Behavioral Research Methods, Brain, British Journal of Psychology, British Journal of Social Psychology, Child Development, Cognition, Cognitive, Affective, and Behavioral Neuroscience, Cognition and Emotion, Cognitive Development, Cognitive Science, Current Biology, Developmental Psychology, Emotion, Evolution and Human Behavior, Infant and Child Development, Journal of Cognitive Neuroscience, Journal of Empirical Legal Studies, Journal of Experimental Child Psychology, Journal of Experimental Psychology - General, Journal of Experimental Psychology - Learning Memory and Cognition, Journal of Experimental Social Psychology, Journal of Personality and Social Psychology, Judgment and Decision Making, Management Science, Memory and Cognition, Mind and Language, Nature, Neuroimage, Neuroscience and Biobehavioral Reviews, Organizational Behavior and Human Decision Processes, Personality and Social Psychology Bulletin, Philosophical Psychology, Psychological Science, Proceedings of the National Academy of Sciences, Political Psychology, Public Library of Science -

ONE, Psychological Bulletin, Review of Behavioral and Brain Functions, Review of Philosophy and Psychology, Science, Social Cognitive and Affective Neuroscience, Social Neuroscience, Thinking and Reasoning

*Award selection*

Wegner Theoretical Innovation Prize, Society for Personality and Social Psychology, 2016

Stanton Prize, Society for Philosophy and Psychology, 2015