

ERICA A. CARTMILL

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EMPLOYMENT

- 2020-present **Associate Professor of Anthropology**, UCLA
Associate Professor of Psychology, UCLA (0% appointment)
Board Member, Center for Language, Interaction, and Culture (since 2013)
Core Faculty, Center for Behavior, Evolution, and Culture (since 2013)
- 2018-present **Co-Founder/Director**, Diverse Intelligences Summer Institute (www.disi.org)
- 2021-2023 **Periodic Visitor**, Interdisciplinary Studies, Institute for Advanced Study
- 2020-2021 **Visitor**, School of Social Science, Institute for Advanced Study
- 2017-2020 **Assistant Professor of Psychology**, UCLA (0% appointment)
- 2013-2020 **Assistant Professor of Anthropology**, UCLA
- 2008-2013 **Postdoctoral Scholar**, University of Chicago, Department of Psychology
Language Development Project, supervisor: Susan Goldin-Meadow
Spatial Intelligence and Learning Center (SILC), supervisor: Susan Levine

EDUCATION

- 2004-2009 **Ph.D. (Psychology)** University of St Andrews
Dissertation: *Orangutan gestural communication: a cognitive approach*
Advisor: Richard W. Byrne
- 1999-2003 **B.A. (Linguistics)** Swarthmore College

RESEARCH INTERESTS

Evolution of language and social cognition, Gesture, Primate communication, Language development and socialization, Parent-infant interaction, Language and thought, Assessing cognition in AI systems, Multimodality, SETI

GRANTS AND AWARDS (including descriptions of active grants)

- 2023-2025 PI, AccelNet-Design: Accelerating Research Collaboration on Artificial and Natural Intelligences (ARCANI) (National Science Foundation: \$249,974)
Developing a multinational, multidisciplinary network of networks to forward the study of natural and artificial intelligences.
with Jacob Foster (UCLA)
- 2024-2027 PI, “Developing a Research Community in Diverse Intelligences,”
(invited revision, John Templeton Foundation: \$2 million)
Summer institutes, conferences, media, and grantmaking for transdisciplinary research in the social, behavioral, cognitive, and computational sciences
with J. Foster (UCLA)
- 2023-2025 Co-PI, “Exploring the role of compositionality and mechanism design in tool use” (Templeton World Charity Foundation: \$233,942; \$137,000 to UCLA)
Comparing cognition in apes, humans, parrots, and AI in a virtual tool-use environment.
with Josh Tenenbaum and Kevin Smith (MIT)
- 2022-2025 Co-PI, “Joyful by nature: a comparative approach to the evolution and function of joy in intelligent species” (Templeton World Charity Foundation: \$600,000; \$233,097 to UCLA)
Observational and experimental studies of the manifestations and cognitive effects of positive affect in apes, dolphins, and parrots
with X. Nelson (Canterbury); A. Taylor (Auckland); C. Allen (Pittsburgh); H. Lyn (S. Alabama); V. Janik (St Andrews)
- 2020-2023 Co-PI, “The Niche Construction of Adaptive Information by Intelligent Life” (Templeton World Charity Foundation: \$98,926; \$30,675 to UCLA)
Using game theory, complexity, theoretical computer science, and insights from social science to develop new approaches to SETI
with A. Loeb (Harvard); M. Lingham (FIT); J. Foster (UCLA); D. Krakauer (SFI)
- 2019-2023 Co-PI, “Building a Community of Practice in Diverse Intelligences” (Templeton World Charity Foundation: \$3.4 million)
Summer institutes, conferences, and media for transdisciplinary research in the social, behavioral, cognitive, and computational sciences
with J. Foster (UCLA)
- 2018-2023 PI, “Play, Humor, and Joy in Great Apes” (Templeton World Charity Foundation: \$233,668)
Observational and experimental approaches to teasing as a form of bond-testing and play; using eye-tracking to test apes’ and children’s ability to predict surprise
- 2018-2019 Co-PI, “Diverse Intelligences Summer Institute: Pilot” (Templeton World Charity Foundation: \$233,342)
with J. Foster (UCLA)
- 2018 UCLA Undergraduate Research Week Faculty Mentor Award (for excellence in mentoring undergraduate research, UCLA)

- 2017-2018 Co-PI, “Planning a Summer School in Diverse Intelligences”
(Templeton World Charity Foundation: \$99,983)
with J. Foster (UCLA)
- 2016 Hellman Fellows Award (supports a year-long research project for promising faculty at the assistant professor level, UCLA: \$29,937)
- 2015 Sub-award research grant for primate gesture meta-analysis
(John Templeton Foundation: \$12,500)
- 2015 Faculty Career Development Award (UCLA: \$10,856)
- 2014 Faculty Senate Research Grant (UCLA: \$8,000)
- 2008 Grindley Travel Grant (Experimental Psychology Society)
- 2005 Russell Trust Award for field research (University of St Andrews)
- 2004-2008 Postgraduate Fellowship (3 years, 2 given to each cohort, School of Psychology, University of St Andrews)
- 2003 Fulbright Grant in Polish Cultural and Intellectual History
(U.S. State Department)
- 2002 Lande Fellowship for Field Research (Swarthmore College Biology Department)
- 1999 National Merit Scholarship

PUBLICATIONS

JOURNAL ARTICLES

Cartmill, E.A. (*in press*) Overcoming bias in the comparison of human language and animal communication. *Proceedings of the National Academy of Sciences*.

Nelson, X.J., Taylor, A.H., **Cartmill, E.A.**, Lyn, H., Robinson, L.M., Janik, V., & Allen, C. (2023). Joyful by nature: approaches to investigate the evolution and function of joy in non-human animals. *Biological Reviews of the Cambridge Philosophical Society*.

Cartmill, E.A. (2022) Gesture. *Annual Review of Anthropology*, 51, 445-473

Steinberg, D.L., Lynch, J.W., & **Cartmill, E.A.** (2022) A robust tool kit: first report of tool use in crested capuchin monkeys (*Sapajus robustus*). *American Journal of Primatology*, 84 (11), e23428 [First author was a UCLA graduate student]

Bishop, A. & **Cartmill, E.A.** (2021) The body of hierarchy: hand gestures on classic Maya ceramics and their social significance. *Ancient Mesoamerica*, 1-15 [First author was a UCLA graduate student]

Eckert, J., Winkler, S. L., & **Cartmill, E. A.** (2020). Just kidding: the evolutionary roots of playful teasing. *Biology Letters*, 16(9), 20200370 [First author was my postdoctoral scholar and second was a UCLA graduate student]

Cartmill, M., Brown, K., Atkinson, C., **Cartmill, E. A.**, Findley, E., Gonzalez-Socoloske, D., Hartstone-Rose, A., & Mueller, J. (2020) “Marsupial gaits and the evolution of diagonal-sequence walking.” *American Journal of Physical Anthropology*, 171(2), 182–197

Cartmill, E.A. & Hobaiter, C., (2019) Developmental origins of primate gesture: 100 years in the making. *Animal Cognition*, 22(4), 453-459

Cartmill, E.A. & Hobaiter, C., (2019) Gesturing towards the future: Cognition, big data, and the future of comparative gesture research. *Animal Cognition*, 22(4), 597-604

Cartmill E.A., Rissman, L., Novack, M.A., Goldin-Meadow, S. (2017) The development of iconicity in children's co-speech gesture and homesign. *Language, Interaction and Acquisition*, 8(1), 42-68

Byrne, R.W. **Cartmill, E.A.**, Genty, E., Graham, K.E., Hobaiter, C., & Tanner, J. (2017) Great ape gestures: intentional communication with a rich set of innate signals. *Animal Cognition*, 20(4), 755-769

Cartmill, E.A., (2016) Mind the gap: assessing and addressing the word gap in early education. *Policy Insights from Behavioral and Brain Sciences (PIBBS)*, 3(2), 185-193

Trueswell, J.C., Lin, Y., Armstrong, B., **Cartmill, E.A.**, Goldin-Meadow, S., & Gleitman, L. (2016) Perceiving referential intent: dynamics of reference in natural parent-child interactions. *Cognition*, 148, 117-135

Cartmill, E.A., Hunsicker, D., & Goldin-Meadow, S. (2014) Pointing and naming are not redundant: children use gesture to modify nouns before they can modify nouns in speech. *Developmental Psychology*, 50(6), 1660-1666

Cartmill, E.A., Armstrong, B., Gleitman, L., Goldin-Meadow, S., Medina, T.N., & Trueswell, J.C. (2013) Quality of early parent input predicts child vocabulary 3 years later. *Proceedings of the National Academy of Sciences*, 110(28), 11278-11283

Gasser, B., **Cartmill, E.A.**, & Arbib, M. A. (2013) Ontogenetic ritualization of primate gesture as a case study in dyadic brain modeling. *Neuroinformatics*, 12(1), 93-109

Cartmill, E.A., Beilock, S., & Goldin-Meadow, S. (2012) A word in the hand: action, gesture, and mental representation in humans and non-human primates. *Philosophical Transactions of the Royal Society, Series B.*, 367, 129-143

Tebbich, S., Teschke, I., **Cartmill, E.**, Stankewitz, S. (2012) Use of a barbed tool by an adult and a juvenile woodpecker finch (*Cactospiza pallida*). *Behavioural Processes*, 89, 166-171

Teschke, I., **Cartmill, E.A.**, Stankewitz, S., Tebbich, S. (2011) No evidence for cognitive adaptive specializations in tool-using woodpecker finches. *Animal Behaviour*. 82, 945-956. (Selected as research highlight: *Nature*, 478, 431)

Cartmill, E.A., Pruden, S., Levine, S., & Goldin-Meadow, S. (2010) The role of parent gesture in the development of children's spatial language. In *Proceedings of the 34th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press. pp. 70-77

Cartmill, E.A., & Byrne, R.W. (2010) Semantics of orangutan gesture: determining structure and meaning through form and use. *Animal Cognition*. 13, 793-804

Cartmill, E.A., & Byrne, R.W. (2007) Orangutans modify their gestural signaling according to their audience's comprehension. *Current Biology*. 17, 1345-1348

BOOK CHAPTERS

Cartmill, E.A. (2023) Using the Senses in Non-human Communication. In *New Companion to Linguistic Anthropology*. Duranti, A., George, R., & Riner, R. C. (Eds.) Wiley. Pp. 369-390

Cartmill, M., Atkinson, C., Brown, K., **Cartmill, E.A.**, Gonzalez-Socoloske, D., & Hartstone-Rose, A. (in press) How thylacines walked. In *History and Mystery of the Thylacine*. B. Holmes and G. Linnard (Eds.) CSIRO Publishing, Melbourne.

Foster, J.G., & **Cartmill, E.A.** (2018) Managing the Multiplicity of Meaning. In *Co-operative Engagements in Intertwined Semiosis: Essays in Honour of Charles Goodwin*. D. Favareau (Ed.) University of Tartu Press

Cartmill, E.A. & Goldin-Meadow, S., (2015) Gesture. In *APA Handbook of Nonverbal Communication*. D. Matsumoto, H. C. Hwang, & M. G. Frank (Eds.) American Psychological Association (APA). pp. 307-333

Cartmill, E.A., & Maestripieri, D. (2012) Communication as a cognitive specialization in primates. In *The Oxford Handbook of Comparative Evolutionary Psychology*. J. Vonk & T. K. Shackelford (Eds.) Oxford University Press. pp. 166-193

Cartmill, E.A., Demir, Ö.E., & Goldin-Meadow, S. (2012) Studying gesture. In *The Guide to Research Methods in Child Language*. E. Hoff (Ed.) Blackwell. pp. 208-225

Cartmill, E.A., & Byrne, R.W. (2011) Addressing the problems of intentionality and granularity in non-human primate gesture. In *Integrating Gestures*. G. Stam, M. Ishino (Eds.) John Benjamins. pp. 15-26

COMMENTARIES AND OTHER PUBLICATIONS

Cartmill E.A., Foster J.G., Krakauer D.C., and Sharp O. (2020) Diverse Intelligence. *InterPlanetary Transmissions: Stardust, Proceedings of the Santa Fe Institute's Second InterPlanetary Festival*, eds. Krakauer D.C., McShea C.L. (Santa Fe Institute Press, Santa Fe). [Authorship alphabetical]

Cartmill, E.A. (2015) Ape gesture de-coded: evidence and inference. Commentary on Scott-Phillips, T. Nonhuman Primate Communication, Pragmatics, and the Origins of Language. *Current Anthropology*, 56(1), 66-67

MANUSCRIPTS IN PREPARATION, REVIEW, OR REVISION

Laumer, I., Winkler, S., Rossano, F. & **Cartmill, E.A.** (*under final review*) Spontaneous playful teasing in four great ape species.

Zhang, Y., Izad, T., & **Cartmill, E.A.** (*under final review*) Embodying difference: Contrast-marking gestures in U.S. political speech. [First author is a UCLA PhD student and second was an undergraduate]

Cartmill, E.A. (*in revision*) Gestural iconicity and alignment as steps in the evolution of language.

Laumer, I.B., Lewis, L.S., Krupenye, C., Eckert, J., Winkler, S., Köster, M., Mundry R., **Cartmill, E.A.** (*in preparation*) Can chimpanzees and bonobos anticipate surprise in other agents?

Cartmill, E.A., Smith, A., Szymrgala, E., Label, L. (*in preparation*) Young children do not understand mimetic gestures earlier than other iconic gestures: Implications for language evolution and cognitive development. [Second author is a UCLA Ph.D. student. Third and fourth authors were undergraduates]

Smith, K., Abramova, K., **Cartmill, E.A.**, & Kirby, S. (*in preparation*) The experimental study of sign language emergence.

PUBLISHED ABSTRACTS

Cartmill, E.A., Laumer, I., Rossano, F., & Winkler, S. (2023) Playing with others' expectations: playful teasing in four species of great apes. *American Journal of Physical Anthropology*

Cartmill, E.A., Eckert, J., & Winkler, S. (2020) Playful teasing: evidence of joking in non-human primates? *American Journal of Physical Anthropology*, 171, 45-45

Cartmill, E.A., Fessler, D. M., Florkiewicz, B. N., Gane, A., & Ryan, K. (2019) Captive chimpanzees (*Pan troglodytes*) demonstrate contagion in spontaneous scratching behavior. *American Journal of Physical Anthropology*, 168 (S68), 37-37

Molina, A.K., Florkiewicz, B.N., & **Cartmill, E.A.** (2019) Exploring sources of variation in inter-observer reliability scoring of facial expressions using the ChimpFACS. *American Journal of Physical Anthropology*, 168 (S68), 168-168

Cartmill, E.A. (2018) Iconicity and convention in the manual modality: pantomime in language origins. In Cuskley, C., Flaherty, M., Little, H., McCrohon, L., Ravignani, A. & Verhoef, T. (Eds.): *The Evolution of Language: Proceedings of the 12th International Conference (EVOLANGXII)*. doi:10.12775/3991-1.014

Smith, A.M., **Cartmill, E.A.**, & Barrett, H.C. (2018) Understanding vs. describing others' minds: mental state language in a small-scale society. In Cuskley, C., Flaherty, M., Little, H., McCrohon, L., Ravignani, A. & Verhoef, T. (Eds.): *The Evolution of Language: Proceedings of the 12th International Conference (EVOLANGXII)*. doi:10.12775/3991-1.116

Cartmill, E.A. (2017) Combining signals within and across modalities in great ape communication. *Folia Primatologica*. 88 (2), 152-152

Florkiewicz, B., **Cartmill, E.A.** (2017) Studying multi-component facial behaviour in primates. *Folia Primatologica*. 88 (2), 151-151

Cartmill, E.A. (2016) Lasting impacts of the code model on primate communication research. In S.G. Roberts, C. Cuskley, L. McCrohon, L. Barceló-Coblijn, O. Fehér & T. Verhoef (eds.) *The Evolution of Language: Proceedings of the 11th International Conference (EVOLANG11)*. Available online: <http://evolang.org/neworleans/papers/170.html>

Cartmill, E.A. & Byrne, R.W. (2014) Do talk to strangers: maternal and non-maternal interaction in the transmission of primate gesture. *The Evolution of Language (EVOLANG10)* World Scientific Publishing Co. pp. 407-408

Cartmill, E.A. & Goldin-Meadow, S. (2012) Is pantomime a likely stage in language evolution? Evidence from human and primate gesture. *The Evolution of Language (EVOLANG9)* World Scientific Publishing Co. pp. 418-419

Cartmill, E.A. & Byrne, R.W. (2011) Addressing the problem of granularity in primate gesture research. *International Journal of Primatology, suppl.*

Cartmill, E.A. & Byrne, R.W. (2010) Do ape gestures have specific meanings? Shifting the focus from flexibility to semanticity. *The Evolution of Language (EVOLANG8)* World Scientific Publishing Co., pp. 377-378

Cartmill, E.A., & Byrne, R. W. (2009) Maternal influence on orangutan gestural and behavioral development. *Am. J. of Physical Anthropology, suppl.* 48: 103

Cartmill, E.A. & Byrne, R.W. (2008) Strategic perseverance in orangutan gestural communication. *International Journal of Primatology, suppl.*

Cartmill, E.A. & Byrne, R.W. (2008) Discourse without symbols: orangutans communicate in response to recipient understanding. *The Evolution of Language (EVOLANG7)* World Scientific Publishing Co. pp. 405-406

Cartmill, M., Schmitt, D., Lemelin, P., **Cartmill, E.A.**, & Atkinson, C.D. (2008) Gait patterns in primates and marsupials: similarities and differences. *Am. J. of Physical Anthropology, suppl. 46: 77-77*

Cartmill, E.A. & Byrne, R.W. (2006) Determining signaler intentions: use of multiple gestures in captive Bornean orangutans (*Pongo pygmaeus*). *The Evolution of Language: Proceedings of the Sixth International Conference (EVOLANG6)*. World Scientific Publishing Co. pp. 401-402

Cartmill, E.A. & Byrne, R. W. (2006) What failed communication attempts tell us about the mind of the signaler: gestural communication in captive Bornean orangutans (*Pongo pygmaeus*). *Am. J. of Physical Anthropology, suppl. 43: 96-97*

Cartmill, M., **Cartmill, E.A.**, & Schmitt, D. (2005) Walking backwards: testing the association between centers of mass and footfall patterns. *Am. J. of Physical Anthropology, suppl. 40: 84-85*

INVITED TALKS

- Aug 2023 Core faculty at the Complexity-GAINs International Summer School
“Intelligence & Representation: Models of the world in natural and artificial systems” run by the Santa Fe Institute (Cambridge, UK)
- Apr 2023 “Using insights from animal cognition to assess understanding in AI” AI and the Barrier of Meaning workshop (Santa Fe Institute, NM)
- Jul 2021 “Comparative perspectives on gesture and the evolution of language” Rumelhart Symposium (CogSci, Vienna - virtual)
- Jun 2021 “Looking Beyond the Human: Using the diversity of life on earth to inform the search for extraterrestrial intelligence” (Goddard Technosignature Seminar, NASA - virtual)
- Jan 2020 “The Emergence of Form and Reference in Development and Evolution” Talk at Complex Systems Symposium on "Emergence in Communication & Learning" (University of Michigan, MI)
- Jun 2019 Panelist on “Diverse Intelligence” Santa Fe Institute’s InterPlanetary Festival (Santa Fe Institute, NM)
- May 2019 Panelist and discussant in invitational workshop on “Data-Driven Approaches to Searches for the Technosignatures of Advanced Civilizations” (Keck Institute for Space Studies, Caltech, CA)
- May 2019 “Teaching with technology: the good, the bad, and everything else” Social Science Faculty Teaching Faculty to Teach (S²FT²) workshop (UCLA, CA)
- May 2017 “Iconicity and convention in the manual modality: Perspectives on human development and evolution” Plenary talk at Language, Interaction, and Social Organization (LISO) conference (UCSB, CA)
- Apr 2017 “Gesture, pantomime, and the origins of language: Iconicity and convention in the manual modality” Talk in Stanford Linguistics Department’s colloquium series (Stanford, CA)

- Apr 2016 “Meaning and mechanism in ape gesture” Talk given in workshop on “From Tools and Gestures to the Language-Ready Brain” as part of the Action, Brain, Language and Evolution (ABLE) Project (Emory University, GA)
- Feb 2016 “Language in mind” Co-presented with Rafael Nuñez. Talk given at UCLA Center for Language, Interaction, and Culture workshop on “Body Talk.” (UCLA, CA)
- Jun 2015 “Language and evolution.” Public lecture in “Language and _____” series hosted by Goethe-Institut New York (New York, NY)
- Mar 2015 “The development of embodied iconicity: representational gesture over the first 5 years of life.” 37th Annual Meeting of the Deutschen Gesellschaft für Sprachwissenschaft (University of Leipzig, Germany)
- Nov 2014 “Simian semiotics: how do apes construct meaning in their gestures?” Linguistics Colloquium (University of California, Santa Barbara)
- May 2014 “Do infant apes learn gestures from their mothers?” Developmental Psychology Brownbag (UCLA, CA)
- Jan 2014 “Methods and mechanisms in ape gesture.” Workshop on Action, Vision and Language and their Brain Mechanisms (University of Southern California, CA)
- Apr 2013 “From movement to meaning: gesture in language origins and language development.” Psychology Symposium (University of Washington, WA)
- Sep 2012 “Quality, quantity, and malleability of early parent input.” Developmental Psychology Brown Bag (University of Illinois – Urbana Champaign, IL)
- May 2012 “From world to word: the effect of parent input on early word learning.” Workshop on Education (University of Chicago, IL)
- Mar 2012 “Primates and protolanguage: what can we learn from gesture?” Lead speaker, protolanguage workshop hosted by the Department of Philosophy (University of Virginia, VA)
- Mar 2012 “Intent and reference in gesture: what can primates and human infants communicate without language?” Tokyo Evolutionary Linguistics Forum (Tokyo University, Japan)
- Nov 2011 “The development and evolution of human language: comparing gesture use and parent input in apes and humans.” Workshop on Comparative Human Development (University of Chicago, IL)
- Jul 2011 “From ape and human gesture to language.” Workshop on Action, Language, and Neuroinformatics (University of Southern California, CA)
- Oct 2010 “Sometimes tool-use is not the key: cognitive evolution in tool-using Darwin's finches.” Animal Behavior Research Group (University of Chicago, IL)
- Oct 2008 “Gesturing orangutans: identifying structure and meaning in the gestural communication of a non-human primate.” Animal Behavior Research Group (University of Chicago, IL)
- Oct 2008 “Orangutan gesture and social cognition.” Developmental Psychology Brown Bag (University of Chicago, IL)
- Apr 2008 “Do as mom does: maternal influence on infant orangutans.” Behaviour and Evolution Research Group (University of Stirling, Scotland)

- Nov 2007 “Orangutan gestures: linguistic ability and theory of mind.” Department of Psychology (Glasgow Caledonian University, Scotland)
- Jun 2006 “Nonverbal communication in great apes.” (Twycross Zoo, England)
- Apr 2005 “Defining gesture in apes.” Research Department (Apenheul Primate Park, The Netherlands)
- May 2004 “Meaning in movement: reading culture in Polish contemporary dance.” Polish Fulbright Commission and grantees (University of Warsaw, Poland)

CONFERENCE PRESENTATIONS

- Jul 2023 Zhang, Y.I., Izad, T, Huber, J., Saini, S., Gates, M., & **Cartmill, E.A.**, “Gesture during political speech reflects and affects judgements of topic similarity.” Contributed poster. Cognitive Science Society. (Sydney, Australia) [*Presented virtually. First author was UCLA graduate students. Authors 2-5 were UCLA undergraduate students*]
- Apr 2023 **Cartmill, E.A.**, Laumer, I., Rossano, F., & Winkler, S. “Playing with others’ expectations: playful teasing in four species of great apes.” Contributed talk. Annual meeting for the American Association of Biological Anthropologists (Reno, NV)
- July 2022 **Cartmill, E.A.** “Reference in the gestures of children and great apes.” Contributed talk. International Congress of Infant Studies (Ottawa, Canada)
- July 2022 Winkler, S., Laumer, I., Bryant, G., **Cartmill, E.A.** “The presence and function of laughter in animals.” Contributed talk. The International Society for Research on Emotion. (Los Angeles, CA) [*Talk given by Winkler. First author was UCLA graduate student*]
- Mar 2019 **Cartmill, E.A.**, Fessler, D.M., Florkiewicz, B.N., Gane, A., & Ryan, K. “Captive chimpanzees (*Pan troglodytes*) demonstrate contagion in spontaneous scratching behavior.” Contributed poster. Annual meeting for the American Association of Physical Anthropologists (Cleveland, OH)
- Mar 2019 Molina, A.K., Florkiewicz, B.N., & **Cartmill, E.A.** “Exploring sources of variation in inter-observer reliability scoring of facial expressions using the ChimpFACS.” Contributed poster. Annual meeting for the American Association of Physical Anthropologists (Cleveland, OH) [*Poster presented by Molina. First author was UCLA undergraduate student*]
- Nov 2018 Ghazarian, L. & **Cartmill, E.A.** “Metalinguistic Awareness in the Peer Play of Armenian-English Bilingual Children.” Contributed talk. 117th Annual Meeting of the American Anthropological Association. (San Jose, CA) [*Talk given by Ghazarian. First author was UCLA graduate student*]
- Nov 2018 **Cartmill, E.A.** “Bridging semantics and pragmatics in primate communication.” Contributed talk. 117th Annual Meeting of the American Anthropological Association. (San Jose, CA)
- Aug 2018 Florkiewicz, B., **Cartmill, E.A.** “Infant-adult similarity in facial expression and gestural signals of captive chimpanzees.” Contributed Talk. 27th Congress of the International Primatological Society (Nairobi, Kenya) [*Talk given by Florkiewicz. First author was UCLA graduate student*]

- Apr 2018 **Cartmill, E.A.** “Iconicity and convention in the manual modality: pantomime in language origins.” Contributed poster. Twelfth International Conference on the Evolution of Language (EVOLANG12). (Torun, Poland)
- Apr 2018 Smith, A.M., **Cartmill, E.A.**, & Barrett, H.C. “Understanding vs. describing others' minds: mental state language in a small-scale society” Contributed poster. Twelfth International Conference on the Evolution of Language (EVOLANG12). (Torun, Poland) [*Talk given by Smith. First author was UCLA graduate student*]
- Aug 2017 **Cartmill, E.A.** “Combining signals within and across modalities in great ape communication.” Contributed talk. European Federation for Primatology. (Strasbourg, France)
- Aug 2017 Florkiewicz, B., **Cartmill, E.A.** “Studying multi-component facial behaviour in Primates.” Contributed talk. European Federation for Primatology. (Strasbourg, France) [*Talk given by Florkiewicz. First author was UCLA graduate student*]
- Jul 2017 **Cartmill, E.A.** “Mapping hand to world; Development of iconic representation in gesture and homesign.” Contributed poster. Cognitive Science Society (London, UK)
- Aug 2016 **Cartmill, E.A.** “Codifying meaning: how the assumptions of the code model shape ape communication research.” Contributed talk. 26th Congress of the International Primatological Society (Chicago, IL)
- July 2016 Bishop, A. & **Cartmill, E.A.** “Gesture on ancient Maya artifacts.” Contributed talk. Seventh Conference of the International Society for Gesture Studies (Paris, France) [*Talk given by Bishop. First author was UCLA graduate student*]
- Jul 2016 Nafisi, S. & **Cartmill, E.A.** “Contrast-marking gestures in U.S. political rhetoric.” Contributed talk. Seventh Conference of the International Society for Gesture Studies (Paris, France) [*first author was UCLA undergraduate student*]
- Jul 2016 **Cartmill, E.A.**, Novack, M., Goldin-Meadow, S. “Development of iconicity in co-speech gesture and homesign.” Contributed talk. Seventh Conference of the International Society for Gesture Studies (Paris, France)
- Mar 2016 **Cartmill, E.A.** “Lasting impacts of the code model on primate communication research.” Contributed talk. Eleventh International Conference on the Evolution of Language EVOLANG11 (New Orleans, LA)
- Dec 2014 Scelza, B., **Cartmill, E.A.**, Bryant, G. “Effects of age and experience on the use of infant-directed speech.” Contributed talk. 113th Annual Meeting of the American Anthropological Association (Washington, DC)
- Aug 2014 **Cartmill, E.A.**, Hobaiter, C. “Improving comparative approaches to the study of ape gesture and multimodal communication.” Contributed talk. 25th Congress of the International Primatological Society (Hanoi, Vietnam)
- Jul 2014 Young, C., **Cartmill, E. A.**, Levine, S. C., Goldin-Meadow, S. “Gesture and speech input are interlocking pieces: the development of children’s jigsaw puzzle completion ability.” Contributed talk. 36th Annual Conference of the Cognitive Science Society (Quebec City, Canada) [*Talk given by Young*]
- Jul 2014 **Cartmill, E.A.**, Novack, M., Goldin-Meadow, S. “Tracing gesture development: does iconic gesture become more abstract over time?” Contributed talk. Sixth Conference of the International Society for Gesture Studies (San Diego, CA)

- Jun 2014 **Cartmill, E.A.**, Novack, M., Goldin-Meadow, S. “This hand is my hand: representation of self and others in children’s gestures.” Contributed talk. International Conference on Conversation Analysis ICCA (Los Angeles, CA)
- Apr 2014 **Cartmill, E.A.** & Byrne, R. W. “Do talk to strangers: maternal and non-maternal interaction in the transmission of primate gesture.” Contributed talk. Tenth International Conference on the Evolution of Language EVOLANG10 (Vienna, Austria)
- Nov 2013 Lin, Y., **Cartmill, E.A.**, Armstrong, B., Gleitman, L., Goldin-Meadow, S., Trueswell, J. “Perceiving referential intent: dynamics of reference in parent-child interactions.” Contributed poster. 38th annual Boston University Conference on Language Development (Boston, MA) [*Poster presented by Lin*]
- Apr 2013 **Cartmill, E.A.**, Demir, O.E., Green, M., Goldin-Meadow, S., Levine, S. “Parent use of gesture to children with early brain injury.” Contributed talk. Society for Research in Child Development (Seattle, WA)
- Mar 2013 Trueswell, J., Lin, Y., **Cartmill, E. A.**, Goldin-Meadow, S., Gleitman, L. “When timing is (almost) everything: referential dynamics in parent-child interactions.” Contributed talk. 26th Annual CUNY Conference on Human Sentence Processing (Columbia, SC) [*Talk given by Trueswell*]
- Jul 2012 **Cartmill, E.A.**, Demir, O.E., Goldin-Meadow, S., Levine, S. “Using the hand to ground the mind: parents’ use of gesture during decontextualized speech to typically-developing children and children with early brain injury.” Contributed talk. Fifth Conference of the International Society for Gesture Studies (Lund, Sweden)
- Mar 2012 **Cartmill, E.A.**, Goldin-Meadow, S. “Is pantomime a likely stage in language evolution? Evidence from human and primate gesture.” Contributed talk. Ninth International Conference on the Evolution of Language EVOLANG9 (Kyoto, Japan)
- Nov 2011 **Cartmill, E.A.**, Armstrong, B., Gleitman, L., Goldin-Meadow, S., Lin, Y., Trueswell, J. “Quality and quantity of early word learning environments together predict child vocabulary size at 50 months.” Contributed talk. 36th annual Boston University Conference on Language Development (Boston, MA)
- May 2011 Hunsicker, D.S., **Cartmill, E.A.**, Goldin-Meadow, S. “The role of gesture in noun phrase development.” Contributed talk. Jean Piaget Society Annual Meeting (Berkeley, CA) [*Talk given by Hunsicker*]
- Sep 2010 **Cartmill, E.A.**, Byrne, R.W. “Addressing the problem of granularity in primate gesture research.” Contributed talk. 13th Congress of the International Primatological Society (Kyoto, Japan)
- May 2010 **Cartmill, E.A.**, Levine, S., Goldin-Meadow, S. “Gesture and the development of spatial language.” Third annual Inter-Science of Learning Center Student and Post-Doc Conference (Boston, MA)
- Apr 2010 **Cartmill, E.A.**, Byrne, R.W. “Do ape gestures have specific meanings?” Contributed talk. Eighth International Conference on the Evolution of Language EVOLANG8 (Utrecht, The Netherlands)

- Nov 2009 **Cartmill, E.A.**, Pruden, S., Levine, S., Goldin-Meadow, S. “The role of parent gesture in the development of children’s spatial language.” Contributed talk. 34th annual Boston University Conference on Language Development (Boston, MA)
- Apr 2009 **Cartmill, E.A.**, Byrne, R.W. “Maternal social influence of orangutan gestural and behavioral development.” Contributed poster. Annual meeting for the American Association of Physical Anthropologists (Chicago, IL)
- Sep 2008 **Cartmill, E.A.**, Byrne, R.W. “Strategic perseverance in orangutan gestural communication.” Contributed talk. 12th Congress of the International Primatological Society (Edinburgh, Scotland)
- Mar 2008 **Cartmill, E.A.**, Byrne, R.W. “Discourse without symbols: orangutans communicate in response to recipient understanding.” Contributed talk. Seventh International Conference on the Evolution of Language EVOLANG7 (Barcelona, Spain)
- Jun 2007 **Cartmill, E.A.**, Byrne, R.W. “Determining signaler intentions: use of multiple gestures in captive Bornean orangutans (*Pongo pygmaeus*).” Contributed talk. Third Conference of the International Society for Gesture Studies (Chicago, IL)
- Apr 2007 **Cartmill, E.A.**, Byrne, R.W. “Evolutionary pathways to developing a shared lexicon and teaching: insights from signaling and infant rearing in captive orangutans.” Behavioral Discussion Group (University of St Andrews, Scotland)
- Jan 2007 **Cartmill, E.A.**, Byrne, R.W. “How orangutans (*Pongo pygmaeus*) correct communicative misunderstandings: persistence and elaboration in orangutan signaling.” Scottish Primate Research Group (Glenesk, Scotland)
- Apr 2006 **Cartmill, E.A.**, Byrne, R.W. “Determining signaler intentions: use of multiple gestures in captive Bornean orangutans (*Pongo pygmaeus*).” Contributed talk. Sixth International Conference on the Evolution of Language EVOLANG6 (Rome, Italy)
- Mar 2006 **Cartmill, E.A.**, Byrne, R.W. “What failed communication attempts tell us about the mind of the signaler: gestural communication in captive Bornean orangutans (*Pongo pygmaeus*).” Contributed talk. American Association of Physical Anthropologists (Anchorage, AK)

DEPARTMENTAL AND UNIVERSITY SERVICE (UCLA)

- Executive board for Center for Language, Interaction and Culture (CLIC) (2014-present)
- Departmental representative to the UCLA Legislative Assembly (2022-2024)
- Linguistic Anthropology Faculty Search Committee (2023/2024)
- Rising to the Challenge Faculty Search Committee, Department of Anthropology (2023/2024)
- UCLA Regent’s Scholarship Committee (2022/2023)
- President’s Postdoctoral Fellows Speaker Series (2021/2022)
- Committee on Diversity, Equity, and Inclusion, Department of Anthropology (2018/2019)
- Admissions Committee, Department of Anthropology (2016/2017, 2022/2023)
- Standing Review Committee, Department of Anthropology (2015/2016, 2018/2019, 2021/2022, 2023/2024)

Faculty search committee, Department of Anthropology (2015/2016, 2023/2024)
 Panel moderator at 25th Anniversary of UCLA Capuchin Monkey Project event (2015/2016)
 Development Committee, Department of Anthropology (2014/2015, 2017/2018)
 Faculty search committee (targeted search) for Biological Anthropology, Department of Anthropology (2014/2015)
 Goldschmidt Lecture Planning Committee, Department of Anthropology (2013-2015)

PROFESSIONAL SERVICE

2018-present Co-director of the Diverse Intelligences Summer Institute (DISI) (3-week international summer workshop for ~60 early career researchers, focusing on understanding intelligence in animals, humans, and machines)

2018-present Co-organizer of the Diverse Intelligences Summit (3-day workshop for 70+ mid-career and senior scholars to connect and share work in the DI space)

2015-present Chair of Evolution of Language conference series (international biennial conference)

2010-present Member of the Advisory Committee for the Evolution of Language (EVO LANG) conferences (this is the board since there is not a formal EVO LANG society)

2012-present Scientific Committee for International Society for Gesture Studies (ISGS)

2016 Co-organizer for Center for Language, Interaction, and Culture (CLIC) workshop “Body talk” (UCLA)

2013-2014 Lead editor of EVO LANG 10 Conference volume and chair of scientific and prize committees

2011-2012 Co-editor of EVO LANG 9 Conference volume and member of scientific and prize committees

2006-2007 Local organizer for “Evolutionary Approaches to Culture, Cognition and Communication” seminar (University of St Andrews)

2005-2007 Organizer for Cognitive Journal Club (University of St Andrews)

2005-2006 Postgraduate Representative for School of Psychology (University of St Andrews)

2005 Local organizer for Animal Social Learning conference (University of St Andrews)

TEACHING**UCLA (2013-present)****UNDERGRADUATE**

Evolution of Language (2014, 2015, 2016, 2019, 2022)

Language Development and Socialization (2014, 2016, 2018, 2020, 2022, 2024)

Culture and Communication (2016, 2023, 2024)

Animal Communication (2023)

Gesture: Cognition, Communication, and Culture (2015)

Mixed Methods in Linguistic Analysis (2014)

GRADUATE

Animal Emotions (2022)

Behavior, Evolution, and Culture (2019)

Languaging Inequality (co-taught with Elinor Ochs, 2017)

Language, Culture, and Cognition (2016)

Interaction and Communication in Animals (2023)

Biological Anthropology Colloquium (2014, 2016, 2017)

UNIVERSITY OF CHICAGO (2008-2013)

Guest lecturer for undergraduate Language Evolution course (Linguistics, Northwestern University, 2012)

Gesture in Humans and Non-Human Primates (co-designed and taught with Susan Goldin-Meadow and Dario Maestriperi, 2009)

Supervised student projects and internships: 3 high school, 4 undergraduate (2008-2012)

UNIVERSITY OF ST ANDREWS (2004-2008)

Teaching Assistant for General Psychology and Developmental Psychology (continuing education program) (2005-2007)

Teaching Assistant for General Psychology (2004-2006)

CURRENT GRADUATE STUDENTS

Sasha Winkler (Ph.D. candidate in Biological Anthropology). M.A. awarded 2020.
Proposed dissertation topic: *Social play and laughter in primates* (CHAIR)

Lilit Ghazaryan (Ph.D. candidate in Linguistic Anthropology). M.A. awarded 2020.
Proposed dissertation topic: *Language policies and practices in Armenian Kindergartens* (CHAIR)

Andrew Smith (Ph.D. candidate in Biological Anthropology). Dissertation working title:
Understanding and Describing Others' Minds: Mental state language in a small-scale society (CO-CHAIR)

Carolyn Park (Ph.D. student in Linguistic Anthropology). *Embodied perspectives on immigrant labor relations.* (CO-CHAIR)

Jina Ahn (Ph.D. student in Developmental Psychology). *Parent responsiveness and early child word learning.* (CHAIR)

Brenda de Groot (Ph.D. student in Biological Anthropology). *An ethnoprimateological study of infant care.* (CHAIR)

PAST GRADUATE STUDENTS

Fiona Waters (M.A. in Developmental Psychology awarded 2023). M.A. title: *Dramatic Irony: Children's understanding of surprise.* (CO-CHAIR)

Danielle Steinberg (M.A. awarded 2021). M.A. title: *A robust toolkit: First report of spontaneous tool use in crested capuchin monkeys (*Sapajus robustus*)*(Committee Member)

Natsuki Atagi (Ph.D. in Psychology, awarded 2017). Dissertation title: *Children's language experience and their concept of language.* (External Committee Member)

Anna Bishop (Ph.D. in Archaeology awarded). Master's thesis (2016): *The Body of Hierarchy: Hand Gestures on Classic Maya Ceramics and their Social Significance* (Master's Committee Member)

Rosalie Edmonds (Ph.D. in Anthropology, awarded 2019). Master's thesis (2015): *The Multilingual Zoo: Animals, Languages, and Symbolic Capital in Yaoundé, Cameroon* (Master's Committee Member)

Christina Schonberg (Ph.D. in Psychology, awarded 2018). Dissertation title: *Language Experience and Toddlers' Socially-Cued Word Learning.* (External Committee Member)

John Widman (Ph.D. in Ethnomusicology, awarded 2019). Dissertation title: *Music and Language in the Strophic Singing of the Zhuang Minority in Southern China* (External Committee Member)

Rachel Zwass (Ph.D. in Education, awarded 2018). Dissertation title: *The Home Literacy Environment: A Qualitative Investigation of School-Aged Children.* (External Committee Member)

UNDERGRADUATE STUDENT ADVISING

UCLA UNDERGRADUATE THESES

Linea Brink Andersen, Lilit Ghazaryan, Samaya Joshi, Sarah Ross, Talia Villa

UCLA UNDERGRADUATE DIRECTED RESEARCH (199 / 196 / 194)

Emily Boyle, Rebecca Cohen, Sara Darakhshan, Austin Gane, Aliyah Glatt, Madeleine Gates, Lilit Ghazaryan, Jenarae Huber, Tina Izad, Chloe Jones, Taiga Komatsuki, Lauri Label, Victoria Leavitt, Jarett Leiner, John Ruinstein Mijares, Alexandra Molina, Selene Nafisi, Brittney Nguyen, Kelsey Ryan, Hannah Rush, Simran Saini, Raika Rashidi Sharifabad, Emilia Szmyrgala, Brooke Wiedinmyer

UNIVERSITY OF CHICAGO ADVISING

Alison Huntermark (MA in Social Sciences). *The development and use of “palm-up” gestures.*
(Committee Member)

Molly Green (BA in Psychology – 2012). Honors thesis: *Do children with pre- and perinatal unilateral brain lesions receive different linguistic and gestural input from their parents than typically developing children?* (Co-supervised)

PROFESSIONAL MEMBERSHIPS

American Anthropological Association
American Association of Biological Anthropologists
Cognitive Science Society
International Primatological Society
International Society for Gesture Studies
Society for Language Development

INVITED REVIEWER

Agence Nationale Recherche (ANR)	Interaction Studies
American Journal of Primatology	Journal of Experimental Child Psychology
American Journal of Physical Anthropology	Leakey Foundation
Animal Behaviour	National Science Foundation (NSF)
Animal Cognition	Naturwissenschaften
Biology Letters	Neuroscience & Biobehavioral Reviews
Child Development	Philosophical Psychology
Cognitive Science	Philosophical Transactions B
Comparative Psychology	Primates
Current Anthropology	PNAS
Current Biology	Psychonomic Bulletin and Review
Developmental Psychology	Sky Journal of Linguistics
Developmental Science	Scientific Reports
Ethology	Spatial Cognition and Computation
Evolution and Human Behavior	Swiss National Science Foundation
	Templeton World Charity Foundation