Jemma Lorenat
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EDUCATION

PhD, Mathematics (2010 – 2015)
>   Simon Fraser University (Canada) and Université Pierre et Marie Curie (France)
>   Doctoral programs in mathematics at the Department of Mathematics at SFU and at the
>   Institut de mathématiques de Jussieu, Paris Rive Gauche at UPMC
>   Thesis: "Die Freude an der Gestalt: Methods, Figures, and Practices in Early
>   Nineteenth Century Geometry."
>   Advisors: Prof. Thomas Archibald and Prof. Catherine Goldstein

MA, Liberal Studies (2008 – May 2010)
>   City University of New York Graduate Center
>   Thesis: "The development and reception of Leopold Kronecker's philosophy of
>   mathematics"

BA (Summa Cum Laude), Mathematics (2005 – May 2007)
>   San Francisco State University

Undergraduate Studies (2004 – 2005)
>   University of St Andrews, St Andrews, Scotland

EMPLOYMENT

>   2020 – Present, Pitzer College, Associate Professor of Mathematics

>   2015 – 2020, Pitzer College (Claremont, CA), Assistant Professor of Mathematics

>   2013 – 2015, Pratt Institute (Brooklyn), Visiting Instructor

>   2013 – 2015, St Joseph's College (Brooklyn), Visiting Instructor

PUBLISHED RESEARCH

2022   "An Okapi Hypothesis: Non-Euclidean Geometry and the Professional Expert in
        American Mathematics." *Isis* 113(1), pp. 85 – 107.

        "Alice Turner Schafer: changing expectations for women in mathematics" *Fifty Years of
        Women in Mathematics* ed. Janet L. Beery, Sarah J. Greenwald, Cathy Kessel. Springer,
        pp. 243–354.

        "I can see the ellipsoid from the inside: Girtonian responses to Francis Galton's Survey
        on Mental Imagery" *Mathematical Intelligencer* 44(2), pp. 153 – 160.

2021   "Measuring past geometers: a history of non-metric projective anachronism"
        *Anachronisms in the history of mathematics: essays on the historical interpretation of
        mathematical texts* ed. Niccolò Guicciardini. Cambridge University Press, pp. 251 – 280.

"A competent translation/a pitiful bungle: The Foundations of Geometry" *Mathematical Intelligencer* 43(3), pp. 60 – 70.

2020   "Drawing on the imagination: the limits of illustrated figures in nineteenth-century geometry" *Studies in the History and Philosophy of Science Part A* 82, pp. 75 – 87.

"Certain modern ideas and methods: "geometric reality" in the mathematics of Charlotte Angas Scott" *The Review of Symbolic Logic* 13(4), pp. 681–719.

"Actual accomplishments in this world: the other students of Charlotte Angas Scott" *Mathematical Intelligencer* 42(1), pp. 56 – 65.

"Dessin et Imagination: débats sur le role des figures dans l'enseignement et l'apprentissage de la géométrie à trois dimensions au XIXe siècle" *Images des Mathématiques* (http://images.math.cnrs.fr/Dessin-et-imagination-debats-sur-le-role-des-figures-dans-l-enseignement-et-l.html?lang=fr)

2019   "Je n'ai point ambitioné d'être neuf: modern geometry in early nineteenth-century French textbooks" *Interfaces between mathematical practices and mathematical eduation* ed. Gert Schubring. Springer, pp. 69–122.

2017   "Radical, ideal and equal powers: naming objects in nineteenth century geometry" *Revue d'histoire des mathématiques* 23 (1), pp. 71–123.

"Modern and pure: teaching geometry in early twentieth-century women's colleges" *Women in Mathematics: 100 Years and Counting* ed. Beery, Greenwald, Jensen-Vallin, and Mast. Springer, pp. 305 – 344.

"The greatest geometer since the time of Apollonius" *Mathematical Intelligencer* 39(3), pp. 46 – 52.

2016   "Synthetic and analytic geometries in the publications of Jakob Steiner and Julius Plücker (1827–1829)" *Archive for History of Exact Sciences* 70(4), pp. 413 –462.

2015   "Polemics in public: Poncelet, Gergonne, Plücker, and the Duality Controversy" *Science in Context* 28(4), pp. 545 – 585.

2014   "Figures real, imagined and missing in Poncelet, Plücker, and Gergonne" *Historia Mathematica* 42(2), pp. 155 – 192.

2012   "Not set in stone: nineteenth century geometrical constructions and the Malfatti Problem" *BSHM Bulletin: Journal of the British Society for the History of Mathematics* 27(3), pp. 169 – 180.

EDITING AND REVIEWS
Ongoing
        Column Editor, "Years Ago" *Mathematical Intelligencer* (2017 –).

Associate Editor, *Historia Mathematica* (2020 –).

Member of Comité de rédaction, *Cahiers François Viète* (2021 –).

2022   "Book Review: *Against All Odds: Women's Ways to Mathematical Research Since 1800,* edited by Eva Kaufholz-Soldat and Nicola M. R. Oswald" *MAA Reviews* (https://www.maa.org/press/maa-reviews/against-all-odds-women-s-ways-to-mathematical-research-since-1800)

2020   "Book Review: *A Richer Picture of Mathematics*, David Rowe" *Notices of the American Mathematical Society* 67(7), pp. 1029 – 1031.

"Book Review: *Descriptive Geometry, The Spread of a Polytechnic Art: The Legacy of Gaspard Monge*, edited by Évelyne Barbin, Marta Menghini, and Klaus Volkert" *MAA Reviews* (https://www.maa.org/press/maa-reviews/descriptive-geometry-the-spread-of-a-polytechnic-art)

2018   "Book Review: *Pushing Limits*, Ted Hill" *Historia Mathematica* 45(3), pp. 304–305.

2016   "Analyses d'Ouvrages: Lise Bioesmat-Martagon (éd.) *Eléments d'une biographie de l'Espace géométrique*" *Revue d'histoire des sciences* 69(2), pp. 403–405.

"Book Review: *Sciences Mathématiques 1750–1850: continuités et ruptures*, Christian Gilain, Alexandre Guilbaud (eds.)" *Historia Mathematica* 43(4), pp. 446–449.

CONFERENCE PAPERS AND INVITED TALKS

2022   AMS-SMF-EMF Joint International Meeting. Grenoble, July. "Between biography and prosopography: the research school as a unit of analysis for considering the history of women in mathematics."

Seminar PhilMath Intersem, Paris, June. "Russell, Von Staudt, and Hilbert in the Bryn Mawr Mathematics Journal Club Notebooks."

2021   Vassar College, Department of Mathematics Seminar, Poughkeepsie, November and Bryn Mawr College, Department of Mathematics Destressing Seminar, Bryn Mawr, May 2022: "The problem and probability of marriage for alumnae in Progressive Era United States."

Canadian Society for History and Philosophy of Mathematics Online Colloquium, May. "To advance mathematics: evidence for women's intellectual ambition in the Bryn Mawr graduate program and beyond."

Marriages, Couples, and the Making of Mathematical Careers, March. "The problem and probability of marriage among lady mathematicians in Progressive Era America."

2020   Association for the Philosophy of Mathematical Practice, Zürich, January (Keynote address). "Mathematics or moonshine: non-euclidean geometry in *The Monist* at the turn of the twentieth century."

AMS/MAA Joint Meeting, Denver, January (Special session on creating spaces for mathematics). "The case for mathematical models: in which Charlotte Angas Scott attempts to build a mathematical research school."

2019   Congress of Logic, Methodology, and Philosophy of Science and Technology, Prague, August. "Cultured people who have not a technical mathematical training: audience, style, and mathematics in *The Monist.*"

Invited Conference: Origins of Structuralism, Vienna, August. "Analytic evidence and geometric meaning: forms of structuralism in nineteenth-century analytical geometry."

Mathematics in Practice Conference, Stanford, May. "What is the use of a book without pictures?"

Workshop on duality as an archetype of mathematical thinking, Centre International de Rencontres Mathématiques, Luminy, March. "Marching two-by-two: the progress of duality in geometry during the early nineteenth-century."

The Mathematical Association of America Golden Section, San Jose, February. "Demands upon your imagination: developing mental images in nineteenth-century pure geometry."

2018   International Congress of Mathematics, International Commission in the History of Mathematics Symposium, Rio, August. "Demands upon your imagination: developing mental images in nineteenth-century pure geometry."

Workshop on Modernism in Geometry: Scott and Hilbert, Université Denis Diderot, Paris, June. "Certain Modern Ideas: the history, mathematics, and philosophy of Charlotte Angas Scott."

University of California Los Angeles, History of Science Seminar, June. "Certain Modern Ideas: the history, mathematics, and philosophy of Charlotte Angas Scott."

CIRMATH Americas, University of Virginia, May. "Mathematics for Philosophers: *The Monist* from 1890 to 1906."

Anachronism(s) in the History of Mathematics: The Seventh Biennial Bacon Conference, California Institute of Technology, April. "Portraying Projective Geometry: The Presence and Absence of Measurement in Nineteenth Century Pure Geometry."

Claremont Center for the Mathematical Sciences Colloquium, February. "Certain Modern Ideas and Methods. A look at the history and philosophy of Charlotte Angas Scott."

Sonia Kovalevsky Mathematics Day 2018 Keynote Address, Pomona College, February. "First, but not last. Charlotte Angas Scott and the history of women in mathematics."

Southern California History and Philosophy of Logic and Mathematics Group, UC Riverside, January. "Algebraic symbols and geometrical reality in the writings of Charlotte Angas Scott."

AMS/MAA Joint Meeting, San Diego, January (Special session on alternative proofs in mathematics). "Algebraic symbols and geometrical reality: the algebraic geometry of Charlotte Angas Scott."

2017   Atul Vyas Memorial lecture in mathematics, Claremont McKenna College, November. "Making Sense: A Historical Exploration of Intuition in Mathematics."

California State University, Fullerton Mathematics Colloquium, November. "Polemics in Public: the principle of duality in early nineteenth-century geometry."

Association for Women in Mathematics, Los Angeles, April. "Certain Modern Ideas and Methods: Charlotte Angas Scott's Philosophy of Mathematics."

2016   Philadelphia Area Society for the History of Mathematics, Villanova, December. "*Anschauliche Geometrie* in 1832: Jakob Steiner, the illustrated figure, and the imagination."

Colorado State University History of Mathematics Seminar, Fort Collins, November. "Defining Generality in Modern Pure Geometry: radical axes, ideal common chords, and lines of equal powers."

AMS/MAA Joint Meeting, Seattle, January (Invited session on the history of mathematics). "Vorstellungskraft without sensory media."

2015   HSS Annual Meeting, San Francisco, November. Roundtable on diagrammatic notational systems: "Jakob Steiner's virtual geometry."

Doing Mathematics in Different Cultural Contexts, A Conference in honor of Judith V. Grabiner, Pitzer College, Claremont, October. "Radical, ideal and equal powers: Renaming Points and Lines in Modern Geometry."

Colloque "1750–1850 : ruptures et continuités en géométrie" Nancy, June. "Examining the opposition between synthetic and analytic geometry in the early research of Jakob Steiner and Julius Plücker."

AMS/MAA Joint Meeting, San Antonio, 2015 (Invited session on the history of mathematics): "Polemics in public: Controversies around the principle of duality in early nineteenth century geometry."

2014   HSS Annual Meeting, Chicago, November 2014. Session Organizer jointly with Abram Kaplan on Evidence in Mathematics: "The figure and other forms of geometric evidence."

PEDAGOGICAL WRITING
2020   "From Carriage Wheels to Interest Rates: The Evolution of Word Problems in Algebra Textbooks from 1901 to Today." with Elodie Arbogast, Ethan Baer, Carla Condori Bazan, Robert Bettinger, Emily Carpenter, Hiawatha Davis III, Derick Grant, Olivia Howe, Neil Kelley, Maya Minier, Naima Orozco-Valdivia, Alan Peck, Carolina Saavedra, Sumesh Shiwakoty, Hunter Sidel, Carter Stripp, Josephine Terrien, Simone Wolynski, and Leana Yearwood. *Journal of Humanistic Mathematics* 10 (1).

SERVICE TO THE PROFESSION
Co-organizer, History of Mathematics through Collaboration: Toward a Composite Portrait of Oswald Veblen. Mathematisches Forschungsinstitut Oberwolfach (December 2022).

Organizer, Claremont History and Philosophy of Mathematics Seminar (2016 –present). https://colleges.claremont.edu/ccms/history-and-philosophy-of-mathematics-seminar/

Co-organizer, Joint Mathematics Meeting History of Mathematics Seminar (2018 to present)

Co-organizer, The Orange County and Inland Empire Seminar in the History and Philosophy of Mathematics and Logic (2017 – present). https://faculty.ucr.edu/~reck/OCIE-Group.html

Program Coordinator, History of Mathematics Special Interest Group of the Mathematical Association of America (2021 – present).

Councilmember, Canadian Society for History and Philosophy of Mathematics (2022 – present).

Coordinator, Gateway for Exploring Mathematical Sciences (2015 – 2017). http://ccms.claremont.edu/GEMS

GRANTS and AWARDS
American Philosophical Society Franklin Research Grant (2021)
Graves Award for teaching in the Humanities (2020)
Alwin C. Carus Research Grant (2020)
Maria Gaetana Agnesi Third Centennial Prize (2018)
Montucla Prize, International Commission for the History of Mathematics (2017)
National Science Foundation Grant, Mathematisches Forschungsinstitut Oberwolfach

(2016)
Graduate Travel Grant, American Mathematical Society (2014)
National Science Foundation Travel Grant, History of Science Society (2014)
Graduate International Research Award, Simon Fraser University (2012)
Leibniz Scholar, Mathematisches Forschungsinstitut Oberwolfach (2012)
Graduate Fellowship, Simon Fraser University (2011, 2012)
Mathematics Student Teaching Award, Simon Fraser University (2011)
Philip Morrison Fellow, American Assoc. for the Advancement of Science (2011)
Department Graduate Entrance Scholarship, Simon Fraser University (2010)

ILLUSTRATIONS

Cover illustration,
> *Mathematical Intelligencer* 39(3), 2017
> *Mathematical Intelligencer* 40(3), 2018
> *Mathematical Intelligencer* 42(1), 2020

Series of mathematicians' portraits drawn for the presentation, "How Kroneckerian Became an Adjective," for the AMS/MAA Joint Meeting in 2011.
Mathematician Portrait Gallery, MAA Mathematical Sciences Digital Library
http://www.maa.org/publications/periodicals/convergence/portrait-gallery