

## Travis LaCroix | CURRICULUM VITAE

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CONTACT INFORMATION	✉ 740 Social Science Tower University of California, Irvine Department of Logic and Philosophy of Science 3151 Social Sciences Plaza Irvine, CA 92697-5100	✉ tlacroix@uci.edu 🌐 travislacroix.github.io 🌐 uci.academia.edu/tlacroix
CITIZENSHIP	Canada	
APPOINTMENTS	<b>Mila (Québec Artificial Intelligence Institute)</b> , Montréal, Québec CAN Visiting Researcher / Research Assistant, July 2018 – June 2020 Supervisor: Yoshua Bengio  <b>Concordia University</b> , Montréal, Québec CAN Coordinator, <i>Social Justice Centre</i> , October 2019 – June 2020	
EDUCATION	<b>University of California, Irvine</b> , Irvine, California USA Ph.D, Philosophy, June 2020 (Expected). GPA: 3.97/4.00 <i>Department of Logic and Philosophy of Science</i> Dissertation: “Complex Signals: Modularity, Reflexivity, & Hierarchical Structure” Committee: Jeffrey Barrett (Chair) Brian Skyrms Simon Huttegger Cailin O’Connor  M.A., Social Science, March 2018 <i>Institute for Mathematical Behavioral Science</i>  <b>Simon Fraser University</b> , Burnaby, British Columbia CAN M.A., Philosophy, April 2016. GPA: 4.05/4.33 Thesis Topic: “On Signalling Games and Their Models” Committee: Nicolas Fillion (Chair) Matt DeVos  <b>University of British Columbia</b> , Vancouver, British Columbia CAN B.A. (Hons.), Philosophy; English Literature, April 2014. GPA: 81.5/100 First-class standing  <b>Camosun College</b> , Victoria, British Columbia CAN A.A., English, April 2011. GPA: 8.14/9	

PUBLICATIONS

Peer-Reviewed Publications

4. LaCroix, Travis. 2019. "Using Logic to Evolve More Logic: Composing Logical Operators via Self-Assembly." *British Journal for the Philosophy of Science* (Forthcoming). [doi.org/10.1093/bjps/axz049](https://doi.org/10.1093/bjps/axz049)
3. LaCroix, Travis. 2019. "Biology and Compositionality: Empirical Considerations for Emergent-Communication Protocols." *NeurIPS 2019 Workshop on Emergent Communication: Towards Natural Language*. [arxiv.org/abs/1911.11668](https://arxiv.org/abs/1911.11668)
2. LaCroix, Travis. 2019. "Evolutionary Explanations of Simple Communication: Signalling Games & Their Models." *Journal for General Philosophy of Science / Zeitschrift für allgemeine Wissenschaftstheorie* (Forthcoming). [doi.org/10.1007/s10838-019-09481-7](https://doi.org/10.1007/s10838-019-09481-7)
1. LaCroix, Travis. 2018. "On Salience and Signaling in Sender-Receiver Games: Partial Pooling, Learning, and Focal Points." *Synthese* (Forthcoming). [doi.org/10.1007/s11229-018-1766-z](https://doi.org/10.1007/s11229-018-1766-z)

ARTICLES

Papers Under Review

(Draft available upon request)

*Revise & Resubmit Decision Received*

- "Communicative Bottlenecks Lead to Maximal Information Transfer"  
[R&R from *Journal for Experimental and Theoretical Artificial Intelligence*]
- "Epistemology and the Structure of Language" (w/ J. A. Barrett)  
[R&R from *Erkenntnis*]

*Under Review*

- "The Correction Game"
- "Dynamics of Retraction in Epistemic Networks" (w/ C. O'Connor & A. Geil)
- "If Gradualism is the Correct Approach to Language Origins..."
- "Polysemy, Role Asymmetry & the Evolution of Compositional Signals"
- "Power by Association" (w/ C. O'Connor)
- "Selfish Emergent Communication" (w/ M. Noukhovitch, A. Courville)
- "What Russell Can Denote"
- "Reference by Proxy and Truth-in-a-Model"

CONFERENCE  
PRESENTATIONS

Refereed Talks

12. "Selfish Emergent Communication"  
(M. Noukhovitch, T. LaCroix, and A. Courville)  
**EvoLang XIII: Evolution of Language International Conferences**  
Brussels, Belgium, 14–17 April 2020.
11. "Biology and Compositionality: Empirical Considerations for Emergent-Communication"  
**Neural Information Processing Systems (NeurIPS) 2019**  
**Workshop on Emergent Communication**  
Vancouver, Canada, 8–14 December 2019.

10. “Learning from Learning Machines”  
(T. LaCroix and Y. Bengio)  
**Canadian Society for Epistemology**  
Montréal, Québec, 14–16 November 2019.
9. “Accounting For Role-Asymmetries In the Evolution of Compositional Signals”  
**Canadian Philosophical Association**  
Vancouver, Canada, 1–4 June 2019.
8. “Using Logic to Evolve More Logic: Composing Logical Operators via Self-Assembly”  
**Society for Exact Philosophy**  
Toronto, Canada, 17–19 May 2019.
7. “Using Logic to Evolve More Logic: Composing Logical Operators via Self-Assembly”  
**American Philosophical Association, Pacific Division**  
Vancouver, Canada, 17–20 April 2019.
6. “Less is More: Degrees of Compositionality for Complex Signals”  
**Philosophy of Science Association**  
Seattle, USA, 1–4 November 2018. *Symposium Contribution.*
5. “Reference by Proxy and Truth-in-a-Model”  
**Western Canadian Philosophical Association**  
Calgary, Canada, 26–28 October 2018.
4. “On The Role of Power in the Evolution of Inequitable Norms”  
(T. LaCroix & C. O’Connor)  
**L’Association Canadienne de Philosophie**  
Montréal, Québec, 4–7 June 2018.
3. “The Role of Power in the Evolution of Inequitable Norms”  
(T. LaCroix & C. O’Connor)  
**Latin American Association for Analytic Philosophy, and**  
**Colombian Conference on Logic, Epistemology, and Philosophy of Science**  
Villa de Leyva, Colombia, 16–18 May 2018.
2. “On Salience and Signaling in Sender-Receiver Games”  
**Western Canadian Philosophical Association**  
Regina, Canada, 13–15 October 2017.
1. “Signalling Games & Their Models”  
**Colombian Conference on Logic, Epistemology, & Philosophy of Science**  
Bogotá, Colombia, 17–19 February 2016.

#### Commentor

3. “A Pragmatic-Semiotic Defence of Bivalent Logic” CPA/ACP 2019 Annual Congress,  
University of British Columbia, Vancouver, Canada, 1–4 June 2019.
2. “Responsibility for Saying and Asserting” (Henry Schiller) CPA/ACP 2018 Annual  
Congress, Université du Québec à Montréal, Montréal, Canada, 4–7 June 2018.
1. “Simplicity and A Priori Probability Principles” (Noa Latham) CPA/ACP 2018 An-  
nual Congress, Université du Québec à Montréal, Montréal, Canada, 4–7 June 2018.

ACADEMIC  
EXPERIENCE

**Teaching Assistant**
*University of California, Irvine*

Inductive Logic, Simon Huttegger Department of Logic and Philosophy of Science (31) Department of Philosophy (31)	Spring 2018
Introduction to Linguistics, Arunima Choudhury Department of Linguistics (3)	Winter 2018
Acquisition of Language, Lisa Pearl Department of Linguistics (51) Department of Cognitive Sciences (56)	Fall 2017
Inductive Logic, Simon Huttegger Department of Logic and Philosophy of Science (31) Department of Philosophy (31)	Spring 2017
Probability and Statistics for Economics I, Kent Johnson Department of Economics (15A)	Winter 2017

*Simon Fraser University*

Critical Thinking (PHIL xx1), Jillian McIntosh	Spring 2016
Critical Thinking (PHIL xx1), Jillian McIntosh	Fall 2015
Critical Thinking (PHIL xx1), Jillian McIntosh	Spring 2015
Introduction to Ethics (PHIL 120W), Evan Tiffany	Fall 2014

**Guest Lectures**
*University of California, Irvine*

“Language and Cognition” *Acquisition of Language* (Linguistics/Psychology), 1 Dec. 2017.

**Research Assistant**
*University of California, Irvine*

Social Dynamics and Diversity in Epistemic Communities Cailin O'Connor (NSF Grant 1535139)	2017 – 2019
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*Simon Fraser University*

Constructing Questions for Critical Thinking Jillian McIntosh	Spring 2015
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*University of British Columbia*

Aristotle's Earlier Logic John Woods	Summer 2014
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GRANTS AND  
FELLOWSHIPS

**Research Awards**

*Social Sciences and Humanities Research Council*, Joseph-Armand Bombardier Canada Graduate Scholarships, Simon Fraser University (CAD 17,500), 2015-2016

*Social Sciences and Humanities Research Council*, Joseph-Armand Bombardier Canada Graduate Scholarships, University of British Columbia (CAD 17,500), DECLINED, 2014-2015

## Academic Awards

*University of California, Irvine*

Justine Lambert Graduate Prize in the Foundations of Science, for “On Salience and Signaling: Partial Pooling, Learning, and Focal Points” (USD 1000), 2018.

Social Science Merit Fellowship (USD 257,818), 2016–2022

*Simon Fraser University*

Graduate Fellowship (CAD 6250), 2015

## PROFESSIONAL SERVICE

**Referee.** *British Journal for the Philosophy of Science*; *Inquiry: An Interdisciplinary Journal of Philosophy*; EvoLang XIII: Evolution of Language International Conferences (2020); The Vancouver Summer Philosophy Conference (2019).

**Symposium Organiser.** “Evolutionary Explanations of Compositional Communication” Philosophy of Science Association 2018 Biennial Meeting, November, 2018.

**Chair.** The Vancouver Summer Philosophy Conference (19–23 August 2018, Vancouver, CAN); F-SEW: Formal Social Epistemology Workshop (25–26 May 2018, Irvine, USA); The Western Canadian Philosophical Association 54th Annual Meeting (13–15 October 2017, Regina, CAN); The Ninetieth Annual Meeting of the American Philosophical Association, Pacific Division (30 March – 3 April 2016, San Francisco, USA).

## SPECIALISED TRAINING

*Concordia University*

Sexual Violence Awareness & Prevention Training Fall 2019

*University of California, Irvine*

Sex Offense Prevention Training Fall 2017

Teaching Assistant Professional Development Program Fall 2016

*Simon Fraser University*

TA/TM Day: Teaching Orientation Program 2014–2016

## LANGUAGES

English (native), French (intermediate)

## TECHNICAL CAPACITIES

**Mathematics:** ODEs / PDEs, Linear Algebra, Multivariate / Vector Calculus

**Logic:** Set Theory, Modal Logic, Predicate Logic

**Programming Languages:** Python, Java, Javascript

**Markup:** L<sup>A</sup>T<sub>E</sub>X, HTML, CSS

**Computation and Graphing:** R, MatLab, Excel

## AFFILIATIONS

Canadian Philosophical Association  
American Philosophical Association

Philosophy of Science Association  
Society for Exact Philosophy

*Last updated: December 6, 2019*