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#### **SUMMARY**

Climate impact researcher and environmental economist researching the impacts and human responses of climate change with expertise in data analysis and science communication.

Version: February 2022

#### RELEVANT PROFESSIONAL EXPERIENCE

### Princeton University, Princeton, NJ

Nov 2021-

 $Postdoctoral\ Research\ Associate\ -\ Impacts\ and\ Human\ Responses\ to\ Climate\ Change$ 

Supervisor: Michael Oppenheimer

At the Center for Policy Research on Energy and the Environment (C-PREE), my research comprises the physical modeling of extreme events in the context of applications to impacts on individuals and social systems, and econometric methods applied to assessment of human migration and other sensitivities and responses to climate change.

# Knowledge Action Network on Emergent Risks and Extreme Events (Risk KAN)

2022-2024

Risk KAN Steering Committee member

#### Climate Econometrics, Oxford

2018-

Associate (since September 2021)

Doctoral Researcher, Nuffield College/Institute for New Economic Thinking (2018–2021)

## **European Cooperation in Science and Technology**

2019-2021

Working Group Member of the EU COST Action "Drylands Facing Change" (CA16233).

### The World Bank, Washington, D.C.

2016-2018

Environmental Economist Mentor: Michael Toman

Co-lead of a diagnostic study (*Somalia Country Environmental Analysis*) on the trends and threats for the environment, and natural resources challenges. Performed data analysis on the economic implications of climate change for the *Somalia Systematic Country Diagnostic* project.

Climate change specialist on climate change impacts, agro-ecological re-zoning and supported the design of a computable general equilibrium (CGE) model for Zimbabwe. Analytical support for the Zimbabwe *Climate Change Technical Assistance Programme*. Coordinated external consultants, identified finance opportunities and co-lead on grant proposals.

### The Earth Institute, New York, N.Y.

2014-2016

Research & Teaching Assistant, Research Program on Sustainability Policy & Management

## International Monetary Fund, Washington, D.C.

2015

Fund Internship Program

#### Volkswagen AG, Wolfsburg & Berlin, Germany

2012-2013

Undergraduate Researcher, Mobility Services/ Sustainability Initiative

## **EDUCATION**

#### DPhil, Geography & the Environment, University of Oxford, Oxford

Oct 2021

Dissertation: Climate mobilities in East Africa: Methods towards attributing human mobility and extreme weather events in the era of climate change

Supervisor: Friederike Otto

The extent to which human mobility can be attributed to extreme weather events on the local level, and to anthropogenic climate change on a global level, has been largely unexplored. This thesis developed an integrated attribution method to quantify extreme weather and conflict signals in human mobility bringing together econometrics (social science) and extreme event attribution (climate science).

# MS, Sustainability Management, Columbia University, New York City

2015

Concentration: Environmental Science and Economics (GPA 3.5)

Advisors: Steven Cohen, Thomas Abdallah

*Final Project*: New Haven Farms: Pathways to Growth. Developed a growth-optimisation model for New Haven Farms (New Haven, CT).

BS, Business and Economics, Business & Information Technology School, Iserlohn	2013
Double degree, top 5% of class (equivalent to Honours)	
VISITING POSITIONS	

Visiting Scholar, Vienna University of Economics and Business	Sep 2021
Visiting Scholar, International Institute for Applied Systems Analysis	Aug 2021
Visiting Researcher, IFRC/ Red Cross Climate Centre (remotely)	Apr 2020
Visiting Researcher, Universidad Latina de Costa Rica	Feb 2013
Visiting Student, Faculty of Economics and Business, CUNY	2010

### FELLOWSHIPS & RESEARCH GRANTS

2021	WRI India (sponsored by Blackrock & Microsoft) Wave2Web hackathon	\$	30,000
	(winning team)		
2020	IIASA Young Scientist Summer Programme Fellowship	€	1,350
2020	ECI Sustainability Internship Fellowship	£	3,000
2019	Max-Planck Institute for Biogeochemistry conference stipend	€	500
2019	Ford Foundation Research Grant	\$	2,000
2018	Royal Geographical Society-IBG conference bursary	£	60
2018	Christ Church Language Study Grant, Oxford	£	250
2018	Doctoral writing grant, Environmental Change Institute, Oxford	£	350
2018-2021	Climate Econometrics Research Fellowship, Nuffield College, Oxford	£	9,000
2018-2021	Protestant Academic Foundation (German Federal Ministry of Education	€	82,200
	and Research) Doctoral Fellowship		
2015	IMF Fund Internship Program Research Grant, Washington D.C.	\$	13,500

# SELECTED HONOURS

2020	Christ Church essay competition winner to attend the Leonardo da Vinci exhibition (Paris).
2019	Modeling the World's Systems, award for best presentation, University of Pittsburgh.
2018	Royal Geographical Society (RGS) Ambassador.
2018	RGS Royal Society Mid-Term Conference Award.
2018	Galilee Institute, Study Award.
2017	Global Youth Climate Network Climate Ambassador, The World Bank.

### TEACHING EXPERIENCE

Summer School, Evangelisches Studienwerk Villigst, September 2021 (online)

Tutorial Environmental Geography, Christ Church, University of Oxford, February 2021 (online)

Tutorial Attribution Science, Mansfield College, February 2020 (cancelled due to the COVID-19 pandemic)

University of Oxford, Christ Church Geography access workshop, February 2020

The Oxford School of Climate Change, February 2020

Drought Impacts, United Nations University, March 2019

Christ Church seminar on Geographical Controversies, 01 March 2019

UNIQ Summer School, University of Oxford, July 2018 and 2019,

Teaching Assistant, Economics of Sustainability Management, Columbia University, 2015

## UNIVERSITY LEADERSHIP AND COLLEGE SERVICE

Geography undergraduate	Christ Church, Oxford	Dec 2020
admissions interviews		
Senior Common Room Liaison	Christ Church, Oxford	May – Dec 2020
Officer (GCR)		

#### LISA THALHEIMER | CURRICULUM VITAE

Global Youth Climate Network	World Bank Youth Community	2017 - 2020
(GYCN) Ambassador		
Environment & Ethics Officer	Christ Church, Oxford	Dec 2017 – May 2020
(GCR)		
Co-organiser	Bikes for the World, Washington,	2016 - 2017
-	D.C.	
Independent Contributor	State of the Planet, Columbia	2015 - 2016
	University, NY	
Graduate Consultant	Columbia Impact Investing	2015
	Initiative, Columbia University;	
	The Earth Institute Capstone	
	Project, Columbia University	
Co-organiser	Campus Symposium, Business	2009 - 2011
	and Information Techology	
	School, Iserlohn	

Reviewer for: Climate and Development; Earth's Future; International Journal of Environmental Research and Public Health; Weather, Climate, and Society.

#### **PUBLICATIONS**

h-index 3, citations 894 (Google Scholar, 02/18/22)

#### ARTICLES IN PEER-REVIEWED JOURNALS

**Thalheimer, L.,** Simperingham, E. and Jjemba, E. (accepted) 'Lessons learnt from Forecast-based financing to reduce the humanitarian impacts of disaster displacement'. *Forced Migration Review* 

**Thalheimer, L.**, Jjemba, E. and Simperingham, E. (2022) 'The role of anticipatory humanitarian action to reduce disaster displacement'. *Environmental Research Letters*. doi.org/10.1088/1748-9326/ac4292

**Thalheimer, L.**, Williams, D.S., Van der Geest, K., Otto, F.E.L., (2021). Advancing the evidence base of future warming impacts *on* human mobility in African drylands. *Earth's Future*. doi.org/10.1029/2020EF001958.

**Thalheimer, L.**, Otto, F.E.L., Abele, S.J., (2021). Deciphering Impacts and Human Responses to a Changing Climate in East Africa. *Frontiers in Climate*. doi: 10.3389/fclim.2021.692114.

Stavi, I., Paschalidou, A., Kyriazopoulos, A. P., ..., **Thalheimer, L.**, Williams, D.S., ... & Ficko, A. (2021). Multidimensional Food Security Nexus in Drylands under the Slow Onset Effects of Climate Change. *Land*, *10*(12), 1-14.

Heslin, A. and **Thalheimer**, **L.** (2020) The Picture from Above - Using Satellite Imagery to Overcome Methodological Challenges in Studying Environmental Displacement. *Oxford Monitor of Forced Migration*.

Under review/ revision

**Thalheimer, L.** (in revision). Compound impacts of extreme weather events and COVID-19 on climate mobilities. *AREA*.

*In preparation / submitted/ invited* 

Thalheimer, L., Choquette-Levy, N. and Garip, F. (invited). Multi-method evidence for when and how compound events affect human mobility. *iScience*.

**Thalheimer**, **L.**, Šedová, B., Oppenheimer, M., (in preparation). When does climate (im)mobility cause conflict? The need for an expert assessment.

**Thalheimer, L.**, Gaupp, F., Webersik, C., (in preparation). Compound vulnerabilities exacerbate systemic risks of food security in Somalia.

**Thalheimer, L.**, Muttarak, R., Crespo Cuaresma, J., Otto, F.E.L., Mechler, R., Oppenheimer, M. (in preparation). Towards attributing climate-related displacement to anthropogenic climate change.

**Thalheimer, L.**, Pretis, F., Schwarz, M. P., (in preparation). Disentangling the interaction between climate, conflict and displacement: Evidence from Somalia.

Handmer, J., **Thalheimer**, L., Nalau, J., (in preparation). Retreating from wildfire: when does emergency evacuation become permanent?

Kruitwagen, L., Ardene, C., Lees, T., **Thalheimer, L.**, (in preparation). Using Neural Hydrology to forecast water reservoir levels across India.

Working Papers

**Thalheimer, L.**, (2020) 'Towards attributing climate-related displacement in Somalia to anthropogenic climate change. IIASA YSSP Report. Laxenburg, Austria.

### PAPERS IN EDITED VOLUMES

**Thalheimer, L.**, and Webersik, C. (2020) 'Climate Change, Conflict and Migration', In Krieger, T., Panke, D. and Pregernig, M. (eds.) Environmental Conflicts, Migration and Governance, Bristol: Bristol University Press, pp. 59-82.

#### ESSAYS, REPORTS AND ISSUE BRIEFS

- Šedová, B. and Thalheimer, L. (2022). 'How Climate Change and Migration Cascade in the EU'. EuropeNow. Available at: https://www.europenowjournal.org/2022/01/30/how-climate-change-and-migration-can-cascade-in-the-eu/.
- 2. **Thalheimer, L.**, and Šedová, B (2021). 'Warum Klimamigration für die EU relevant ist'. Der Standard. Available at https://www.derstandard.at/story/2000130786948/warum-klimamigration-fuer-die-eurelevant-ist.
- 3. **Thalheimer**, **L.**, Webersik, C. and Gaupp, F. (2022). 'Systemic Risk Emerging from Compound Vulnerabilities'. Global Assessment Report on Disaster Risk Reduction (GAR2022).
- 4. Harrington, L., [...], **Thalheimer, L.,** [...], et al. (2021). 'Attribution of severe low rainfall in southern Madagascar, 2019-21'. (World Weather Attribution). Available at https://www.worldweatherattribution.org/wp-content/uploads/ScientificReport\_Madagascar.pdf.
- 5. Kreienkamp, F., [...], **Thalheimer, L.**, [...] (2021). 'Heavy rainfall which led to severe flooding in Western Europe made more likely by climate change' (World Weather Attribution). Available at https://www.worldweatherattribution.org/wp-content/uploads/Scientific-report-Western-Europe-floods-2021-attribution.pdf.
- 6. **Thalheimer, L.,** Jjemba, E. and Simperingham, E. (2020) 'Forecast-based Financing and Disaster Displacement: Acting Early to Reduce the Humanitarian Impacts of Displacement'. Available at https://www.forecast-based-financing.org/wp-content/uploads/2020/10/RCRC\_IFRC-FbF-and-Displacement-Issue-Brief.pdf.
- 7. **Thalheimer, L.** (2020) 'How COVID-19 complicates the journey for climate migrants' IIASA Nexus. Available at https://blog.iiasa.ac.at/2020/08/19/how-covid-19-complicates-the-journey-for-climate-migrants/.
- 8. Wenham, A. and **Thalheimer, L.** (2020) 'On the move: What drives Somalia's migration?'. Available at http://www.climateeconometrics.org/2020/06/30/on-the-move-what-drives-somalias-migration/.
- 9. Parks, R.M. and **Thalheimer, L.** (2020) 'The hidden burden of pandemics, climate change and migration on mental health' IOM. Available at https://environmentalmigration.iom.int/blogs/hidden-burden-pandemics-climate-change-and-migration-mental-health.
- 10. De Fontaubert, C., Hart, T., **Thalheimer, L.**, Dubow, AZ, Million, JMF, Collier, JB (2020) 'Somalia Country Environmental Analysis: Diagnostic Study on Trends and Threats for Environmental and Natural Resources Challenges' The World Bank. Available at https://openknowledge.worldbank.org/handle/10986/34058.
- 11. **Thalheimer, L.** et al. (2019) 'Policy Brief: Food Security in Drylands Under a Changing Climate' EU COST Working Group I (The Climate, Food Security and Population Nexus). DOI: 10.13140/RG.2.2.12140.72324.

12. **Thalheimer L.** (2018) 'Extreme Weather Events And Population Movement In The Era Of Climate Change' Population Geography Research Group (PGRG). Available at: https://popgeog.org/2018/06/21/extreme-weather-events-and-population-movement-in-the-era-of-climate-change/. (invited article)

### **AUDIO**

- "Will climate migration lead to conflict?", Futuremakers podcast discussion with Prof Peter Millican, 15 March 2020.
- 2. "COP 25 what happened?", Futuremakers podcast discussion with Prof Peter Millican, 19 December 2019.

### OTHER MEDIA

- 1. "Die verheerenden Folgen der Armut in Madagaskar", Frankfurter Rundschau press brief (in German), with Joachim Wille, 02 December 2021
- 2. "Madagascar's food crisis has been blamed on climate change. These scientists say that's wrong", CNN press brief, with Angela Dewan, 02 December 2021.
- 3. "SWR Aktuell Rheinland-Pfalz" (in German), TV interview with Dorit Becker, 06 November 2021.
- 4. "Europe's floods: Lessons from German tragedy", BBC interview with James Cook, 28 October 2021.
- 5. "Sustain What: Stop Debating Climate Dislocation and Start Enhancing Climate Mobility", with Andrew Revkin, online, The Earth Institute (Columbia University), 22 January 2021.
- 6. "Matching human movement to climate change", IIASA Nexus interview, 20 Nov 2020.
- 7. "What is Climate Migration?", Peril and Promise (Public Broadcasting Service), 17 July 2019.

### PLENARY & KEYNOTE TALKS

"Forecast- based Financing and Disaster Displacement", Global Protection Forum 2020, online, 10 September 2020.

"Climate displacement, humanitarian needs and Forecast-based Financing", European Geosciences Union Press Conference, online, 07 May 2020.

Conference of the Parties (COP25) Side Event - Climate Change, Displacement and Migration, Madrid, December 2019.

## SELECTED INVITED TALKS

"Climate Impacts on Conflict and Migration"

- Knowledge Action Network on Emergent Risks and Extreme Events (online, Apr 2020 & Feb 2022)
- Columbia University Managed Retreat Conference (online, Jun 2021)
- ETH Zurich 2020 EAERE-ETH European Winter School (Jan 2020)
- Herrenhausen Conference "Extreme Events Building Climate Resilient Societies", Volkswagen Foundation & Max Planck Institute for Biogeochemistry, Hanover (Oct 2019).
- Nuffield Post-Doctoral Research Seminar, Oxford (Jun 2019)
- Columbia University Correlated Extremes Workshop (May 2019)
- Econometric Models of Climate Change Conference, University of Rome (Sep 2018)
- Oxford Symposium on Population, Migration and the Environment, Oxford (Dec 2017)

"Modelling framework for attributing human mobility and climate change"

- Vienna University of Economics and Business, Institute for Macroeconomics, Vienna (09 September 2021)
- Compound weather and climate events, European Geosciences Union, Vienna (online, 28 April 2021)
- Wittgenstein Centre Colloquium, online (Jun 2020)

- "The climate impactions of the economic and demographic slowdown", with Prof Danny Dorling, The Oxford School of Climate Change, Brasenose College, Oxford (18 February 2020)
- University of Pittsburgh, Modeling and Managing Complicated Systems (MOMACS), Washington, DC (May 2019)
- University of Florida, Multidisciplinary University Research Initiative (MURI) Annual Evaluation (May 2019)
- University of London, Royal Geographic Society Mid-Term Conference, London (2018)

## "Anticipatory Action for Disaster Displacement"

- Invited expert "Training on anticipatory action in conflict situations", Global Public Policy Institute (online, Oct 2021)
- Invited expert, Institute for International Law of Peace and Armed Conflict- Lunch Lecture Series, online (May 2021)
- GIZ, German Development Agency, online (Oct 2020)
- 2019 American Geophysical Union Fall Meeting (presentation given by Alison Heslin)

#### "Food security"

- Drought Impacts and Migration, United Nations University (online, Mar 2019).
- EU COST Action (CA16233) Workshop, Arad, Israel (Feb 2019).
- "Food and Climate Migration", Oxford Food Thinkers Lunch Club (Nov 2017)

### "COVID-19"

- Wittgenstein Centre Conference 2020, online, 01 December 2020
- IIASA research seminar, online, 25 July 2020

## **OUTREACH ACTIVITIES**

- 1. Financial Times, African climate expert supporting Africa editor David Pilling (ongoing)
- 2. STAND Student Festival "Climate Migration", online, 20 October 2020
- 3. Oxford Museum of Natural History Super Science Saturday, 23 November 2019

### PROFESSIONAL AFFILIATIONS

World Weather Attribution, Euro American Geophysical Union, Roya Knowledge-Action Network on Emergent Risks and Extreme Events (Risk KAN),

European Geosciences Union, Royal Geographical Society, The Royal Academy of Dance.

## LANGUAGES

*Human*: German & English (native/bilingual); French & Spanish (advanced), Yiddish (advanced beginner) *Programming*: Python, R, FME, (Q)GIS, OxMetrics, ArcGIS StoryMaps

#### **HOBBIES**

Music (violin), ballet, bouldering, scrabble, and drawing.

# REFERENCES

### Michael Oppenheimer

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# **Felix Pretis**

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## Friederike E.L. Otto

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## Michael J. Puma

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