

# The Routledge Companion to Contemporary Art, Visual Culture, and Climate Change



Edited by T. J. Demos, Emily Eliza Scott, and  
Subhankar Banerjee

## THE ROUTLEDGE COMPANION TO CONTEMPORARY ART, VISUAL CULTURE, AND CLIMATE CHANGE

International in scope, this volume brings together leading and emerging voices working at the intersection of contemporary art, visual culture, activism, and climate change, and addresses key questions, such as: why and how do art and visual culture, and their ethics and values, matter with regard to a world increasingly shaped by climate breakdown?

Foregrounding a decolonial and climate-justice-based approach, this book joins efforts within the environmental humanities in seeking to widen considerations of climate change as it intersects with social, political, and cultural realms. It simultaneously expands the nascent branches of ecocritical art history and visual culture, and builds toward the advancement of a robust and critical interdisciplinarity appropriate to the complex entanglements of climate change.

This book will be of special interest to scholars and practitioners of contemporary art and visual culture, environmental studies, cultural geography, and political ecology.

**T. J. Demos** is Patricia and Rowland Rebele Endowed Chair in Art History and Visual Culture, and Director of the Center for Creative Ecologies, UC Santa Cruz.

**Emily Eliza Scott** is Assistant Professor of Art History and Environmental Studies at the University of Oregon.

**Subhankar Banerjee** is Lannan Foundation Endowed Chair and Professor of Art & Ecology, and Director of the Center for Environmental Arts and Humanities, University of New Mexico.

Cover image: Not An Alternative / The Natural History Museum, Photo from “Mining the HMNS: An Investigation by The Natural History Museum” exhibition at Project Row Houses, Houston, 2016. The exhibition interrogated the symbiotic relationship between the Houston Museum of Natural Sciences and its corporate sponsors, reinterpreting the Houston museum’s displays and highlighting the voices and stories that are excluded: those of the low-income Latinx communities living alongside Houston’s petrochemical complex. Community members (including Yudith Azareth Nieto, an activist of Manchester, Texas depicted in the image) were provided with dinosaurs equipped with air quality sensors, not only referencing the geological

history of petroleum documented in the HMNS (formed from organic matter dating to the Jurassic and Cretaceous periods of the Mesozoic Era), but also calling for the extinction of the present-day fossil fuel industry as a central perpetrator of climate violence and environmental injustice. Situated at the confluence of scientific research, environmental justice, and critical museum practice, the exhibition aimed to model the museum of the future—one that promotes a collective response to the challenges of the Anthropocene. (Photo: Not An Alternative / The Natural History Museum).

# THE ROUTLEDGE COMPANION TO CONTEMPORARY ART, VISUAL CULTURE, AND CLIMATE CHANGE

*Edited By*  
*T. J. Demos, Emily Eliza Scott,*  
*and Subhankar Banerjee*

 **Routledge**  
Taylor & Francis Group  
NEW YORK AND LONDON

First published 2021  
 by Routledge  
 52 Vanderbilt Avenue, New York, NY 10017  
 and by Routledge  
 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN  
*Routledge is an imprint of the Taylor & Francis Group, an informa business*  
 © 2021 Taylor & Francis

The right of T. J. Demos, Emily Eliza Scott, and Subhankar Banerjee to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*Trademark notice:* Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

*Library of Congress Cataloging-in-Publication Data*

Names: Demos, T. J., editor. | Scott, Emily Eliza, 1971- editor. | Banerjee, Subhankar, 1967- editor.

Title: The Routledge companion to contemporary art, visual culture, and climate change / edited by T.J. Demos, Emily Eliza Scott, and Subhankar Banerjee.

Description: New York : Routledge, 2021. | Includes bibliographical references and index.

Identifiers: LCCN 2020040039 (print) | LCCN 2020040040 (ebook) | ISBN 9780367221102 (hardback) | ISBN 9780429321108 (ebook)

Subjects: LCSH: Climatic changes in art. | Art, Modern--21st century--Themes, motives. | Art and social action--History--21st century.

Classification: LCC N6498.E26 R68 2021 (print) | LCC N6498.E26 (ebook) | DDC 709.05--dc23

LC record available at <https://lcn.loc.gov/2020040039>

LC ebook record available at <https://lcn.loc.gov/2020040040>

ISBN: 978-0-367-22110-2 (hbk)  
 ISBN: 978-0-429-32110-8 (ebk)

Typeset in Bembo  
 by SPi Global, India

# CONTENTS

<i>List of Figures</i>	x
<i>List of Contributors</i>	xiv
Introduction <i>T. J. Demos, Emily Eliza Scott, and Subhankar Banerjee</i>	1
<b>PART 1</b> <b>Extractivism</b>	<b>11</b>
1 Extracting the Cost: Re-membering the Discarded in African Landscapes <i>Virginia MacKenny and Lesley Green</i>	15
2 In the Frontiers of Amazonia: A Brief Political Archaeology of Global Climate Emergency <i>Paulo Tavares</i>	26
3 From Tuíra to the Amazon Fires: The Imagery and Imaginary of Extractivism in Brazil <i>Rodrigo Guimarães Nunes and Alyne Costa</i>	35
4 Describing the Indescribable: Art and the Climate Crisis <i>Lucy R. Lippard</i>	45
5 Art of the Interregnum in Canada's Chemical Valley <i>Jessica Mulvogue</i>	54

6	Road to Injustice: Ecological Impunity and Resistance in West Papua <i>Nabil Ahmed and Esther Cann</i>	64
<b>PART 2</b>		
	<b>Climate Violence</b>	<b>75</b>
7	Into the Heart of the Occupied Forest <i>Macarena Gómez-Barris</i>	79
8	The Coming War and the Impossible Art: Zapatista Creativity in a Context of Environmental Destruction and Internal Warfare <i>Alessandro Zagato and Natalia Arcos</i>	88
9	View from the Terracene <i>Sara Mameni</i>	100
10	Waste You Can't Deny: A Slow Trans-aesthetic in <i>The Blue Barrel Grove</i> <i>Sintia Issa</i>	108
11	The Perpetual Present, Past, and Future: Slow Violence and Chinese Frameworks of In/Visibility and Time in Zhao Liang's <i>Behemoth</i> <i>Connie Zheng</i>	119
12	Remembering the Land: Art, Direct Action, and the Denial of Extractive Realities on Bougainville <i>Amber Hickey</i>	129
13	Multispecies Cinema in Wretched Waters: The Slow Violence of the Rio Doce Disaster <i>Isabelle Carbonell</i>	139
<b>PART 3</b>		
	<b>Sensing Climates</b>	<b>149</b>
14	Staying with the Troubling, Performing in the Impasse <i>Sarah Kanouse</i>	153
15	A Conversation between Three Ecosexuals <i>Bo Zheng with Beth Stephens and Annie Sprinkle</i>	164

16	Climate Justice, Satire, and Hothouse Earth <i>Julie Sze</i>	173
17	Indigenous Media: Dialogic Resistance to Climate Disruption <i>Salma Monani, Renata Ryan Burchfield, Danika Medak-Saltzman, and William Lempert</i>	182
18	At Memory's Edge: Climate Trauma in the Arctic through Film <i>Lisa E. Bloom</i>	194
19	The Breathing Land: On Questions of Climate Change and Settler Colonialism <i>Heather Davis</i>	204
<b>PART 4</b>		
	<b>In/Visibilities</b>	<b>215</b>
20	Sensing Particulate Matter and Practicing Environmental Justice <i>Jennifer Gabrys</i>	219
21	Visualizing Atmospheric Politics <i>Amy Balkin</i>	230
22	Atmospheres and the Anthropogenic Image-Bind <i>Caroline A. Jones</i>	242
23	Ways of Saying: Rhetorical Strategies of Environmentalist Imaging <i>Suzaan Boettger</i>	252
24	Sublime Aesthetics in the Era of Climate Crisis? A Critique <i>Birgit Schneider</i>	263
25	Inside Out: Creative Response Beyond Periphery and Peril <i>Julie Decker</i>	274
26	Capturing Nature: Eco-Justice in African Art <i>Nomusa Makhubu</i>	283

<b>PART 5</b>	
<b>Multispecies Justice</b>	<b>295</b>
27 Doing Difference Differently As Wetlands Disappear: (A California Story) <i>Elaine Gan</i>	301
28 “With Applied Creativity, We Can Heal”: Permaculture and Indigenous Futurism at Santa Clara Pueblo <i>Rose B. Simpson in Conversation with Jessica L. Horton</i>	311
29 Decolonizing the Seed Commons: Biocapitalism, Agroecology, and Visual Culture <i>Ashley Dawson</i>	322
30 The Politics and Ecology of Invasive Species: A Changing Climate for Pioneering Plants <i>Maja Fowkes and Reuben Fowkes</i>	332
31 Multispecies Futures through Art <i>Ron Broglio</i>	342
32 Activist Abstraction: Anita Krajnc, Save Movement Photography, and the Climate of Industrial Meat <i>Alan C. Braddock</i>	353
33 Alien Waters <i>Ravi Agarwal</i>	365
34 Everything is Alive: Jason deCaires Taylor’s <i>Vicissitudes</i> <i>Inez Blanca van der Scheer</i>	376
<b>PART 6</b>	
<b>Ruptures/Insurgencies/Worldings</b>	<b>385</b>
35 The Work of Life in the Age of Extinction: Notes Towards an Art of Aliveness <i>John Jordan</i>	389
36 The Political Ecology and Visual Culture of the Pacific Climate Warriors <i>Carol Farbotko and Taufikie Kitara</i>	399

37 From Institutional to Interstitial Critique: The Resistant Force that is Liberating the Neoliberal Museum from Below <i>Emma Mahony</i>	409
38 Beneath the Museum, the Spectre <i>Steve Lyons and Jason Jones for Not An Alternative</i>	418
39 Our House Is on Fire: Children, Youth, and the Visual Politics of Climate Change <i>Finis Dunaway</i>	428
40 From The Red Nation to The Red Deal <i>A Conversation with Melanie K. Yazzie and Nick Estes</i>	437
<i>Index</i>	<b>449</b>



# FIGURES

1.1	Sammy Baloji, <i>Mémoire</i> , 2006	16
1.2	Peter Hugo, <i>Untitled, Agboghloshie Market, Accra, Ghana</i> 2010	20
1.3	Maurice Mbikayi, <i>The Dream of a Mute (Ndoto Ya Baba)</i> , 2016	22
2.1	Radar-based map of central Amazonia produced by project RADAM (Radar-Amazonia), RADAM Brasil, 1971	28
2.2	Identification of Avá-Guarani villages at the margins of the Paraná River through forensic mappings, 2020	29
2.3	Satellite image showing the changes in land-use pattern of the one of the “development” poles implemented by the military regime in Amazonia: the fish-spine pattern of deforestation was converted into a “vernacular” mode of occupation in the Amazon (UNEP), 2001	30
2.4	Identification of Bö`u, the old center of Marãiwatsédé, 2018	33
3.1	Reaction to a war cry: Tuíra and the Eletronorte executive, Brazil, 1989	36
3.2	Getúlio Vargas, Brazil, 1952	39
4.1	Flash Flood, Action organized in Santa Fe, NM for 350.org and the Santa Fe Art Institute November 20, 2010	49
5.1	Andreas Rutkauskas, <i>Oil!</i> , video installation view, 2013	58
5.2	Christina Battle, <i>BAD STARS</i> , video still, 2018	59
6.1	Environmental violence from the Grasberg mine, INTERPRT and Mike Alonzo, 2015	67
6.2	Dominika Tafor, <i>Land Grab in West Papua: Testimonies from the Ground</i> (2009–2017). Edited by INTERPRT in collaboration with Awas MIFEE. Video still Papuan Voices, 2017	68
6.3	Mama Yosepha Alomang, Fighting environmental crime in West Papua. INTERPRT/London Mining Network/Office for Contemporary Art Norway, 2018	69

## List of Figures

6.4	Trans Papua highway. INTERPRT, 2020	70
7.1	Ursula Biemann & Paulo Tavares, <i>Forest Law</i> , two-channel video installation (installation shot of José Gualinga, Sarayaku), 2014	84
8.1	Collective Zapatista painting presented in Morelia during the Comparte Festival, 2016	89
8.2	Subcomandante Marcos in La Realidad celebrating Galeano’s funeral, Chiapas, Mexico, 2014	92
8.3	Mural in the Caracol of La Realidad, Chiapas, Mexico, 2014	93
8.4	Camilo, <i>Untitled painting</i> , 2013	94
9.1	Abbas Akhavan, <i>Study for a Monument</i> , 2013	103
10.1	Jessika Khazrik, <i>Waste Eats Your Histories</i> , 2016	110
10.2	Jessika Khazrik, <i>Waste Eats Your Histories</i> (detail), 2016	111
10.3	Jessika Khazrik, <i>Two Barrels Kissing Until Their Water Meet(s)</i> , 2014	116
11.1	Zhao Liang, <i>Behemoth</i> , still, 2015	121
11.2	Zhao Liang, <i>Behemoth</i> , still, 2015	126
11.3	Zhao Liang, <i>Behemoth</i> , still, 2015	126
12.1	Taloi Havini, <i>Habitat: Konawinu</i> , still image, 2016	133
13.1	Isabelle Carbonell and Lucas Bonetti, <i>Drone of Bento Rodrigues with Map</i>	140
13.2	Isabelle Carbonell, <i>Paracatu De Baixo</i>	142
13.3	Isabelle Carbonell, <i>Walking into Mar Menor</i> , 2020	143
13.4	Isabelle Carbonell, <i>A Mule’s POV</i> , an adapted POV GoPro mount left on a mule that drinks regularly from contaminated Rio Doce waters, in Governador Valadares, Minas Gerais, Brazil, 2020	144
14.1	Allison Rowe, Emotional Labor Specialist, Climate Change Hotline, 2019	155
14.2	Nina Elder, Solastalgic Archive, installation view at the University of New Mexico, 2019	155
14.3	Sarah Kanouse, <i>My Electric Genealogy</i> , 2020	159
14.4	Sarah Kanouse, <i>My Electric Genealogy</i> , work in progress. Video projection still.	161
15.1	<i>Water Makes Us Wet—An Ecossexual Adventure</i> , still, 2017, directed by Beth Stephens and Annie Sprinkle	164
15.2	Zheng Bo, <i>Pteridophilia</i> , still, 2016–ongoing	166
15.3	Katsushika Hokusai, <i>The Dream of the Fisherman’s Wife</i> , 1814	170
15.4	Pseudocopulation performed between a scoliid wasp ( <i>dasyscolia ciliate</i> ) and an orchid, 2010	171
17.1	Skawennati, <i>Kahentéhshon Meets You-Know-Who</i> , still from <i>The Peacemaker Returns</i> , 2017	186
17.2	Skawennati, <i>Becoming the Peacemaker</i> (Iotetshèn:’en), still from <i>The Peacemaker Returns</i> , 2017	186
17.3	Lisa Jackson, Futurist Toronto in <i>Biidaaban: First Light</i> , still, 2018	188
17.4	Lisa Jackson, Language & Light in <i>Biidaaban: First Light</i> , still, 2018	188
18.1	Ashlee Cunsolo Willox, <i>Attutauniujuk Nunami / Lament for the Land</i> , still, 2013	196
18.2	Kimi Takesue, <i>That Which Once Was</i> , still, 2011	199
18.3	Kimi Takesue, <i>That Which Once Was</i> , still, 2011	200

19.1	Mierle Laderman Ukeles, <i>Evapotranspiration: This Land Lives &amp; Breathes</i> , 1988–Present	205
19.2	Mierle Laderman Ukeles, <i>Evapotranspiration: This Land Lives &amp; Breathes</i> , 1988–Present	207
19.3	Rebecca Belmore, <i>Wave Sound</i> , 2017, Banff National Park	209
20.1	Citizen Sense, Dustbox monitoring particulate matter in Southeast London, 2017	224
20.2	Citizen Sense, Urban Sensing workshop in Southeast London, 2016	225
20.3	Citizen Sense, Urban Sensing walk in Southeast London, 2016	225
21.1	Stephen “Beanie” Huhra and his donkey-drawn cart with the Banner for the Webster Society for Better Living, August 1951	232
21.2	Ben Shahn, House stained by coal dust, Pursglove Mine, Scotts Run, West Virginia, 1935	234
21.3	ArtLAB/Garcia, aerial images of land-use change at Eco Installation/Field Site base One between 2015–2018	235
21.4	Not An Alternative / The Natural History Museum	237
22.1	Left: Walter De Maria, <i>New York Earth Room</i> , 1977; and Right: Agnes Denes, <i>Wheatfield – A Confrontation: Battery Part Landfill, Downtown Manhattan – With Statue of Liberty Across the Hudson</i> , NY, 1982	244
22.2	Left: Dierk Schmidt, <i>Image Leaks</i> , 2011, and Right: <i>Seascape</i> , 2011	246
22.3	Susan Schuppli, <i>Nature Represents Itself</i> , 2018	248
22.4	Carolina Caycedo, <i>To Stop Being a Threat and To Become a Promise / Dejar de ser amenaza para convertirse en promesa</i> , 2017	249
23.1	John Gerrard, <i>Western Flag (Spindletop, Texas)</i> , 2017	255
23.2	Edward Burtynsky, <i>Oxford Tire Pile #8, Westley, California, USA</i> , 1999	257
23.3	Brandon Ballengée, <i>RIP Louisiana Parakeet: After John James Audubon</i> , 2008/14	260
23.4	Marshmallow Laser Feast, <i>Live in an Ocean of Air</i> , 2018	261
24.1	Canary Project (Susan Sayler and Edward Morris), <i>Cordillera Blanca, Peru</i> , from the series “A History of the Future”, 2008	267
24.2	Canary Project (Susan Sayler and Edward Morris), installation view of <i>Double Blind</i> , Illges Gallery, Columbus State University, Columbus, GA, 2010	268
24.3	Canary Project (Susan Sayler and Edward Morris), billboard containing photography from the series, “A History of the Future,” Columbus, GA, 2010	269
24.4	Christine Würmell: <i>Dissonanzproduktion</i> , 2009	271
25.1	Sonya Kelliher-Combs, <i>Mark, Polar Bear</i> , 2018	279
25.2	John Grade, <i>Murmur: Arctic Realities</i> , installation view, Anchorage Museum, AK, 2018	281
26.1	Maurice Mbikayi, <i>Bilele</i> , 2016	287
26.2	Lungiswa Gqunta, <i>Laun I</i> , 2016/2017	290
P5.1	Arctic Refuge—Defend the Sacred Alaska rally, Fairbanks, AK, March 7, 2018	297
27.1	Migrating shorebirds take over rice fields in between planting seasons at the Cosumnes River Preserve	302

27.2	Calrose rice varieties were released in 1948 by the Biggs Rice Experiment Station, which continues to support rice growers today	303
28.1	Rose B Simpson holding a chicken at Flowering Tree Permaculture Institute, Santa Clara Pueblo, NM, 1989	312
28.2	Rose B Simpson, <i>Directed Center</i> , 2015, installation from the exhibition <i>LIT: The Work of Rose B. Simpson</i> , Wheelwright Museum of the American Indian, NM, 2019	317
28.3	Rose B. Simpson and family performing with <i>Maria</i> (2014) at <i>Untitled #66 (Rebel Rebel)</i> , Denver Art Museum, CO, April 2014	319
28.4	Rose B. Simpson and Roxanne Swentzell at Flowering Tree Permaculture Institute, June 2020	320
29.1	Photograph from the exhibition <i>Seed: Climate Change Resilience</i> , 2019	323
29.2	Photograph from the exhibition <i>Seed: Climate Change Resilience</i> , 2019	328
29.3	Photograph from the exhibition <i>Seed: Climate Change Resilience</i> , 2019	329
30.1	Cooking Sections, <i>The Empire Remains Shop: The Next Invasive Is Native, Devaluing Property Real Estate Agency</i> , 2016	336
30.2	Bence György Pálkás and Kristóf Kelemen, <i>Hungarian Acacia</i> , 2017	337
30.3	Diana Lelonek, <i>Seaberry Slagheap</i> , 2018	339
31.1	Brydis Snæbjörnsdóttir and Mark Wilson, <i>Bird 301</i> , 2014	346
31.2	Subhankar Banerjee, <i>Caribou Migration I</i> , 2002	348
31.3	Patrick Nagatani, <i>Golden Eagle, United Nuclear Corporation Uranium Mill and Tailings, Churchrock, New Mexico</i> , 1990	350
32.1	Elli Garlin, Anita Krajnc gives water to an overheated pig on way to slaughter, 2015	354
32.2	Anita Krajnc/Toronto Pig Save, <i>Portrait Mother Earth</i> , December 31, 2012	355
32.3	Alexander Gardner, <i>Washington Navy Yard, D.C., Lewis Payne</i> , 1865	360
33.1	Ravi Agarwal, “Alien Waters” series, 2004–2006	367
33.2	Ravi Agarwal, <i>4 am.</i> , 2014	371
33.3	Ravi Agarwal, <i>Shroud</i> , 2006	373
35.1	Penelopi Thomaidi, <i>Police Descend on the Zad</i> , 2018	390
35.2	Jim Citoy’art, <i>Zad Lighthouse</i> , 2018	393
35.3	A new Zad assembly hall is carried 3 kms after the old one is destroyed by the French State, April 2008	395
36.1	Nihmei, Vanuatu: Rising for our Ancestors, 350 Pacific, 2018	401
36.2	Lutunatabua 350 Pacific Australia, 2019	405
37.1	The Precarious Worker’s Pageant, Venice, 2015	414
38.1	The Equestrian Statue of Theodore Roosevelt outside the American Museum of Natural History after it was splashed with a red liquid by the Monument Removal Brigade on October 27, 2017	419
38.2	Tribal leaders and members of the public touch a totem pole carved by Jewell James and the House of Tears Carvers during a Totem Pole Blessing Ceremony organized by the Lummi Nation in Portland, Oregon on August 24, 2016	425

## List of Figures

39.1	Frame capture from <i>A Message from the Future with Alexandria Ocasio-Cortez</i> , directed by Kim Boekbinder and Jim Batt, 2019. Illustration of Heana restoring wetlands by Molly Crabapple.	434
40.1	The Red Nation, 2020	442
40.2	Karrot Romero, <i>I used to be a Trauma Mommy but now I'm a Commie Mommy</i> , 2019	444

## CONTRIBUTORS

**Ravi Agarwal** has an interdisciplinary practice as an artist, environmental campaigner, writer, and curator. Bridging the divide between art and activism, his work draws on the semiotics of the documentary to politicize the aesthetics of contemporary India. Using photography, video, text, and installation his work poses questions about ecology and society, culture, and urbanity. He has shown widely, including at dOCUMENTA XI, the Biennials of Havana (2019), Yinchuan (2018), Kochi (2016), Sharjah (2013), and more. He has curated large public art projects such as the Yamuna-Elbe, twin city project (2011), and Embrace our Rivers, an Indo-European project (2018), and was the photography curator for the Serendipity Arts Festival 2018 and 2019. His works are held in private and public collections worldwide and he has authored and edited several books and journals. Agarwal is also the founder director of the environmental NGO Toxics Link and recipient of the UN Award for Chemical Safety and the Ashoka Fellowship ([www.raviagarwal.com](http://www.raviagarwal.com)).

**Nabil Ahmed** has researched and worked in the fields of spatial practice and environmental crime for over a decade. He is the founder of INTERPRT, a research and design studio dedicated to environmental justice. For the last five years INTERPRT's long-form investigations, which it carries out with lawyers, journalists, and civil society organizations, has focused on the accountability for nuclear testing and extractive projects in the Pacific. In particular, the group's work on West Papua has been submitted as evidence and presented in various legal and human rights contexts. His writings have appeared in *Third Text*, *Documenta Journal*, *Candide: Journal for Architectural Knowledge*, *e-flux architecture*, and Sternberg and Routledge publications, among others. He has taught and lectured internationally and is currently a postdoctoral fellow in the Faculty of Architecture and Design at Norwegian University of Science and Technology (NTNU). He has a senior advisory role with the Stop Ecocide Campaign.

**Natalia Arcos** is an independent curator, and has organized twenty exhibitions in Chile, Argentina, Portugal, Spain, France, Italy, Cuba, England, and Greece. From 2008 to 2013, she was Programming Director of the Chilean Television Channel ARTV, specializing in art. She has a degree in Theory and Art History from the University of Chile and a masters in Contemporary Art from Paris IV-Sorbonne University, where she was the first Latin American accepted into the program. From 2013 to 2020, she was a member of GIAP (Grupo de Investigación en Arte



y Política) based in Chiapas, México, where she also directed its center for artistic residencies. Arcos collaborated on the books *Los latidos del corazón nunca callan: poemas y canciones zapatistas* and *Pana una estética de la liberación decolonial*, invited by Professor Enrique Dussel. Currently, she is pursuing an MA degree in Sociology of Art at CESMECA Institute of University UNICACH, México.

**Amy Balkin** is an artist whose works address property relations, environmental justice, and equity in the context of climate change. Her projects and collaborations include *A People's Archive of Sinking and Melting* (Balkin et al.), *Public Smog*, and *Invisible-5* (Balkin, Halbur, Stringfellow, and Greenaction). Her work has been exhibited widely, including in *Hybris* (MU SAC), *DUMP!* (Kunsthal Aarhus), *Artefact* (STUK), *Sublime* (Centre Pompidou Metz), and at dOCUMENTA (13); and published in *Work of the Wind: Land* (2018), *Materiality and Situation* (Whitechapel/MIT), *Decolonizing Nature* (2016), and *Public Works* (Mills).

**Subhankar Banerjee** is an artist, writer, and conservationist. He works closely with Indigenous Gwich'in and Iñupiat community members to protect biological nurseries and to defend the human rights of Indigenous peoples in the Arctic. Editor of *Arctic Voices: Resistance at the Tipping Point* (2013), he was most recently co-host (with US Senator Tom Udall) of the *UNM Biodiversity Webinar Series* (2020), co-curator (with Josie Lopez) of *Species in Peril Along the Rio Grande* (2019), and convener of the *last oil: a multispecies justice symposium* (2018). Banerjee is Lannan Foundation Endowed Chair and a professor of Art & Ecology at the University of New Mexico, where he serves as the founding director of both the Center for Environmental Arts and Humanities, and the Species in Peril Project.

**Lisa E. Bloom** is the author of *Gender on Ice: American Ideologies of Polar Expeditions* (1993), the first critical feminist and postcolonial cultural studies book on the polar regions. Her other books include: *With Other Eyes: Looking at Race and Gender in Visual Culture* (1999) and *Jewish Identities in U.S. Feminist Art: Ghosts of Ethnicity* (Routledge, 2006). More recently, she has written extensively on the polar regions, *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis* (forthcoming, Press, 2022). The book examines aspects of feminist and environmentalist contemporary art and film in relation to new scholarship of the polar regions, bringing together issues routinely kept apart in climate change debates such as connecting gender to fossil-fuel capitalism, nationalism, and postcolonialism.

**Suzaan Boettger** is an art historian, critic, and lecturer in New York City and Professor Emerita of the History of Art at Bergen Community College, New Jersey. The author of *Earthworks: Art and the Landscape of the Sixties* (2003), Dr. Boettger's main scholarly focus is environmental and environmentalist art, about which she has contributed to a dozen books and exhibition catalogues and published numerous articles and exhibition and book reviews. Her book in process is *The Passions of Robert Smithson*.

**Alan C. Braddock** is the Ralph H. Wark Associate Professor of Art History at The College of William & Mary. He has taught courses on the history of art, ecology, and environmental justice at various institutions since 2004. Author of *Thomas Eakins and the Cultures of Modernity* (2009), he has also co-edited three books examining American art and ecology: *A Keener Perception: Ecocritical Studies in American Art History* (with Christoph Irmscher, 2009); *A Greene Country Town: Philadelphia's Ecology in the Cultural Imagination* (with Laura Turner Igoe, 2016); and *Nature's*

*Nation: American Art and Environment* (with Karl Kusserow, 2018), recipient of the Alfred H. Barr Jr. Award from the College Art Association. Braddock is developing two new monographs, *Gun Vision: The First Avant-Garde in American Painting* and *Implication: An Ecocritical Dictionary for Art History*, as well as a Getty anthology on global art history and ecology (with Alexa Sekyra and James Nisbet).

**Ron Broglio** is Director of Desert Humanities and Associate Director of the Institute of Humanities Research at Arizona State University. His research focuses on how philosophy, art, and literature can help us rethink our relationship to the environment. Broglio is best known for his essays and books on nonhuman phenomenology and animal studies, including *Technologies of the Picturesque*, *Beasts of Burden*, *Surface Encounters*, and *Animal Revolution* (forthcoming, 2021). He has curated and produced a number of art exhibitions on contemporary environmental art.

**Renata Ryan Burchfield** (Cherokee Nation) is currently a fifth-year PhD candidate at the University of Colorado, Boulder. She holds a Master of Arts in literature and cultural theory with an emphasis on Indigenous film and new media from the University of Oklahoma. Her work focuses on process and performative sovereignties within Indigenous creative cultural production. For Burchfield, Indigenous studies are inherently an interdisciplinary undertaking and as such her research is at the crossroads of story and technology. Her dissertation project, "Weaving Sovereign Webs," is concerned with how Indigeneity and Indigenous sovereignty are expressed through various modalities of creative expression and how this lends itself to real-world effects for Indigenous communities.

**Esther Cann** is Programmes and Operations Manager at the Globe Community Project in London, which works to promote cohesion through creativity among diverse communities. She worked on human rights in Indonesia and West Papua for over ten years, both with London-based human rights organisation TAPOL, and with Peace Brigades International in Wamena, West Papua. She has also undertaken editing, translation, and project development work for the Asian Human Rights Commission, the Minority Rights Group, and the London Mining Network. Cann holds a Masters in Conflict Resolution from the University of Bradford.

**Isabelle Carbonell** is an award-winning sci-fi documentary filmmaker and PhD candidate at the University of California Santa Cruz. Her work lies at the intersection of expanded documentary, environmental justice, and the Anthropocene, while striving to develop new visual and sonic approaches and methods to rethink documentary filmmaking. Imbued in all her work is the connection between the slow violence of environmental disaster, bodies of water, and the future.

**Alyne Costa** holds a PhD in philosophy from the Pontifical Catholic University of Rio de Janeiro (PUC-Rio), where her research focused on the Anthropocene and ecological collapse. She is an adjunct professor of philosophy at PUC-Rio and post-doctoral fellow at the Science and Culture Forum of the Federal University of Rio de Janeiro, where, apart from her research, she develops projects in popular science and social engagement around climate change. Author of *Guerra e Paz no Antropoceno [War and Peace in the Anthropocene]* (2017). Her doctoral thesis "Cosmopolítica da Terra: Modos de Existência e Resistência no Antropoceno [Cosmopolitics of the Earth: Modes of Existence and Resistance in the Anthropocene]" was awarded the CAPES 2020 Prize for best thesis in philosophy.

**Heather Davis** is an assistant professor of Culture and Media at Eugene Lang College, The New School. Her current book project, *Plastic Matter*, argues that plastic has transformed the world due to its incredible longevity and range, as it has also transformed our understandings and expectations of matter and materiality. She is a member of the Synthetic Collective, an interdisciplinary team of scientists, humanities scholars, and artists, who investigate and make visible plastic pollution in the Great Lakes. Davis has written widely for art and academic publications on questions of contemporary art, politics, and ecology, and has lectured internationally. She is the co-editor of *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (2015) and editor of *Desire Change: Contemporary Feminist Art in Canada* (2017).

**Ashley Dawson** is Professor of Postcolonial Studies in the English Department at the Graduate Center/City University of New York and the College of Staten Island. He is the author of numerous books, including *People's Power: Reclaiming the Energy Commons* (2020), *Extreme Cities: The Peril and Promise of Urban Life in the Age of Climate Change* (2017), and *Extinction: A Radical History* (2016). A member of the Social Text Collective and the founder of the CUNY Climate Action Lab, he is a long-time climate justice activist.

**Julie Decker**, PhD, is the Director/CEO of the Anchorage Museum in Alaska, which is a leading center for scholarship, engagement, and investigation of Alaska and the North. Decker's career has been focused on the people and environment of Northern places and building projects and initiatives that are in service to local and global communities. Before becoming Director/CEO, Decker served as the Museum's Chief Curator. She has a doctorate in art history, a master's degree in arts administration, and bachelor degrees in visual design and journalism. She has curated and designed numerous exhibitions, taught classes, and authored and edited numerous publications on subjects ranging from contemporary art and architecture of the North to many aspects of the Arctic environment and histories.

**T. J. Demos** is Patricia and Rowland Rebele Endowed Chair in the Department of the History of Art and Visual Culture, University of California, Santa Cruz, and Director of its Center for Creative Ecologies. He writes widely on the intersection of contemporary art, global politics, and ecology and is the author of numerous books, including *Beyond the World's End: Arts of Living at the Crossing* (2020), *Decolonizing Nature: Contemporary Art and Political Ecology* (2016), and *Against the Anthropocene: Visual Culture and Environment Today* (2017). In Spring 2020, he was a Getty Research Institute Fellow, and has directed the Mellon Sawyer Seminar research project *Beyond the End of the World* during 2019–21. Demos has also curated several exhibitions, including *Rights of Nature: Art and Ecology in the Americas* at Nottingham Contemporary (2015); *Specters: A Ciné-Politics of Haunting* at Madrid's Reina Sofia Museum (2014); and *Beyond the World's End* at the Museum of Art and History, Santa Cruz (2019).

**Finis Dunaway** is professor of history at Trent University, where he teaches US history, visual culture, and environmental studies. His books include *Seeing Green: The Use and Abuse of American Environmental Images* (2015), which received the John G. Cawelti Award from the Popular Culture Association/American Culture Association and the History Division Book Award from the Association for Education in Journalism and Mass Communication. His next book, *Defending the Arctic Refuge: A Photographer, an Indigenous Nation, and a Fight for Environmental Justice*, will be published in 2021.

**Nick Estes** is Kul Wicasa from the Lower Brule Sioux Tribe. He is an Assistant Professor of American Studies at the University of New Mexico, the author of *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Resistance* (2019), and the host of *The Red Nation Podcast*.

**Carol Farbotko** is a cultural geographer with research interests in climate change adaptation, migration, and the politics of climate risk. She holds a PhD from University of Tasmania, Australia and works as a Research Scientist at the Commonwealth Scientific and Industrial Research Organisation, Australia. She also holds adjunct positions with University of Sunshine Coast and University of Tasmania.

**Maja Fowkes and Reuben Fowkes** are art historians, curators, and co-directors of the Postsocialist Art Centre (PACT) at University College London and founders of the Translocal Institute for Contemporary Art. Their publications include *Art and Climate Change* (forthcoming, 2021), the edited volume *Ilona Németh: Eastern Sugar* (forthcoming, 2021), *Central and Eastern European Art Since 1950* (2020), a special issue of *Third Text* on "Actually Existing Worlds of Socialism" (2018), and Maja Fowkes's *The Green Bloc: Neo-Avant-Garde and Ecology under Socialism* (2015). Their curatorial projects include the Anthropocene Reading Room, the Danube River School, the group show *Walking without Footprints*, and a trilogy of exhibitions on the revolutions of 1956, 1968, and 1989. They are co-founders of the Environmental Arts and Humanities Initiative at Central European University Budapest. They lead the collective research programme *Confrontations: Sessions in East European Art History*. [www.translocal.org](http://www.translocal.org).

**Jennifer Gabrys** is Chair in Media, Culture and Environment in the Department of Sociology at the University of Cambridge. She leads the Planetary Praxis research group, and is Principal Investigator on the ERC-funded project, *Smart Forests: Transforming Environments into Social-Political Technologies*. She also leads the Citizen Sense and AirKit projects, which have both received funding from the ERC. She is the author of *How to Do Things with Sensors* (2019); *Program Earth: Environmental Sensing Technology and the Making of a Computational Planet* (2016); and *Digital Rubbish: A Natural History of Electronics* (2011). She is co-editor of "Sensors and Sensing Practices," with *Science, Technology & Human Values* (2019); "Environmental Data," with *Big Data & Society* (2016); and *Accumulation: The Material Politics of Plastic* (2013). She also co-edits the "Planetarities" book series. Her work can be found at [planetarypraxis.org](http://planetarypraxis.org) and [jennifergabrys.net](http://jennifergabrys.net).

**Elaine Gan's** transdisciplinary practice combines methods from the arts, humanities, and sciences to research and engage more-than-human socialities. Through writing, drawing, and interactive media experiments, Gan explores historical materialisms and temporal coordinations that emerge between organic, machinic, and cinematic assemblages. Gan teaches at New York University's graduate program in Experimental Humanities & Social Engagement and leads the Multispecies Worldbuilding Lab, a podcast that raises critical awareness about climate change through interviews, sound compositions, and field recordings that listen for untranslatable voices of worlds otherwise (<http://multispeciesworldbuilding.com>). Gan is co-editor of *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (2017) and is presently writing about rice, realism, and change. Gan lives in the grand old cities of New York and Manila (<http://elainegan.com>).

**Macarena Gómez-Barris** is a writer and scholar focusing on extractive economies, authoritarianism, queer decolonial theory, artistic imaginaries, and political violence. She is author of *The Extractive Zone: Social Ecologies and Decolonial Perspectives*, which theorizes social life through five extractive scenes of ruinous capitalism upon Indigenous territories (2017). She is author of *Beyond the Pink Tide: Art and Political Undercurrents in the Américas* (2018). She is also author of *Where Memory Dwells: Culture and State Violence in Chile* (2009). She is working on three new book projects, *Latchkey*, a work of fiction, *At the Sea's Edge*, a scholarly book, and *Decolonial Ecologies*, which rewrites global environmental history from the perspective of decolonial movements. Macarena is founder and Director of the Global South Center and Chairperson of Social Science and Cultural Studies at Pratt Institute in Brooklyn, New York.

**Lesley Green** is Professor of Anthropology and Director of Environmental Humanities South at the University of Cape Town, and currently a Cheney Visiting Research Fellow at the School of Earth and Environment at Leeds, working to build stronger social science and humanities engagement with earth and life sciences. A former Fulbright Scholar at the Science and Justice Research Center at the University of California at Santa Cruz, Mandela Fellow at Harvard, and Rockefeller Humanities Fellow at the Smithsonian, her research focuses on understanding and strengthening justice-based environmental governance in Southern Africa. A particular interest is in the relationship between science and democracy. She is the editor of *Contested Ecologies: Dialogues in the South on Nature and Knowledge* (2013), co-author of *Knowing the Day, Knowing the World* (2013), and author of *Rock | Water | Life: Ecology and Humanities for a Decolonising South Africa* (2020).

**Amber Hickey** is a visiting assistant professor of American Studies at Colby College. They specialize in Contemporary Art and Activism with focuses on Environmental Justice Movements, Indigenous Visual Culture, and Military Aesthetics. Hickey has recent and forthcoming publications in the special issue of *World Art* on Indigenous Futurisms (summer 2019), *Aperture* (summer 2020), the *Journal of Aesthetics and Protest* (issue 11, summer 2020), *Violence and Indigenous Communities: Confronting the Past, Engaging the Present* (2021), and the *Journal of Transnational American Studies'* special issue on "Molecular Intimacies of Empire" (2021). They are cofounder (with Laura Sachiko Fugikawa) of the American Studies Program's Critical Indigenous Studies Initiative. Hickey is involved with the Maine Poor Peoples' Campaign and, before moving to Maine, was a longtime volunteer worker with the Interference Archive in Brooklyn, a volunteer-run archive and gallery that focuses on the connections between cultural production and social movements.

**Jessica L. Horton** is an associate professor of modern and contemporary art history at the University of Delaware. Her research and teaching emphasize the centrality of Native North American art to a global story of modernity. Her first book, *Art for an Undivided Earth: The American Indian Movement Generation* (2017), traces the impact of Indigenous spatial struggles on artists working internationally since the 1970s. Her second book-in-progress, *Earth Diplomacy: Indigenous American Art and Reciprocity, 1953–1973*, examines how artists revitalized longstanding Indigenous cultures of diplomacy in the unlikely shape of Cold War tours, translating Native political ecologies across two decades and four continents. Her research is supported by the Clark Art Institute, the Warhol Foundation for the Visual Arts, the Getty Research Institute, the Social Sciences Research Council, the Center for Advanced Study in the Visual Arts, and others.

**Sintia Issa** is a feminist writer and educator from Beirut who likes to think with and about visual culture. A PhD candidate in visual studies at UC Santa Cruz where she also teaches, her inter-disciplinary research engages with activist visual happenings and artistic practices dealing with the infrastructure, materiality, and politics of waste in Lebanon. She is also an editor of *The Public Source*, a Beirut-based, worker-owned, agitational, independent media and essayistic platform. She trained as an art historian at the University of Toronto, worked with Beirut Art Center and the Lebanese American University, and was part of the graduate workers' wildcat strike at UC Santa Cruz last year.

**Caroline A. Jones** is a Professor of Art History and Associate Dean for Strategic Initiatives in MIT's School of Architecture and Planning. She studies modern and contemporary art, with a particular focus on technological modes of production, distribution, and reception, and interrogations of science. Her most recent publications include *The Global Work of Art* (2016); *Sensorium: Embodied Experience, Technology, and Contemporary Art* (as solo editor, 2006); *Eyesight Alone: Clement Greenberg's Modernism and the Bureaucratization of the Senses* (2005/08); and the co-edited volumes *Picturing Science, Producing Art* (1998), and *Experience: Culture, Cognition, and the Common Sense* (2016). Curatorial interventions include (at MIT's List Visual Art Center) *Sensorium* (2006), *Video Trajectories* (2007), *Hans Haacke 1967* (2011), and a forthcoming bio-art show *Symbionts: Contemporary Art and the Biosphere* (forthcoming, 2022). With Peter L. Galison, she is collaborating on a book about seeing and unseeing the Anthropocene.

**John Jordan** has been labelled a "Domestic Extremist" by the UK police, and "a magician of rebellion" by the French press; he likes spaces in-between of all sorts, especially between art and activism, culture and nature, the masculine and feminine. With many accomplices, he has intervened in museums, squats, international theatre festivals, climate camps, has choreographed carnivalesque riots, and written BBC radio plays. Co-founder of *Reclaim the Streets* and the *Clown Army*, Jordan co-edited and co-authored *We Are Everywhere: The Irresistible Rise of Global Anticapitalism* (2003), *The User's Guide to Demanding the Impossible* (with Gavin Grindon, 2009), and the film/book *Les Sentiers de L'utopie* (with Isabelle Fremeaux, 2011). Since 2004, with Isabelle Fremeaux, he has co-facilitated the *Laboratory of Insurrectionary Imagination*, infamous for fermenting disobedience on bicycles, throwing snowballs at bankers, launching a rebel raft regatta to shut down a power station, and refusing to be censored by the Tate Modern. They currently inhabit the Zone à Défendre (Zad) of Notre-Dame-des-Landes ([www.labo.zone](http://www.labo.zone)).

**Sarah Kanouse** is an interdisciplinary artist and critical writer examining the political ecology of landscape and space. Migrating between video, photography, and performative forms, her research-based creative projects shift the visual dimension of the landscape to allow hidden stories of environmental and social transformation to emerge. Her solo and collaborative creative work—most notably with Compass and the National Toxic Land/Labor Conservation Service—has been presented through the Haus der Kulturen der Welt, Documenta 13, the Museum of Contemporary Art–Chicago, Krannert Art Museum, Cooper Union, Smart Museum, and numerous academic and artist-run venues. Her writings on landscape, ecology, and contemporary art have appeared in *Acme*, *Leonardo*, *Parallax*, and *Art Journal* and numerous edited volumes. A 2019–2020 fellow at the Rachel Carson Center at Ludwig Maximilians Universität, she is Associate Professor of Media Arts in the Department of Art + Design at Northeastern University.

**Taukiei Kitara** is a Tuvaluan Indigenous knowledge holder and community leader currently living in Brisbane, Australia. He is the President of the Tuvalu Community in Brisbane and is a

committee member for the Pacific Island Council for Queensland in Australia. He is currently studying for his Masters in Global Development at Griffith University. He is a qualified high school teacher and taught for five years, before moving into community development. He worked for eight years at the Tuvalu Association of NGOs in the role of Community Development Officer, providing training to communities on project development, climate change awareness raising and capacity building. He was the founding member of Tuvalu Climate Action Network and represented Tuvalu civil society at several international climate change Conference of Parties, including Copenhagen in 2009.

**William Lempert** is an Assistant Professor of Anthropology at Bowdoin College in Brunswick, Maine. He has conducted over two years of ethnographic fieldwork since 2006 in the Kimberley region of Northwestern Australia with Indigenous media organizations. Through collaboration on production teams, he aims to understand the stakes of Aboriginal self-representation embedded within the dynamic process of filmmaking. His research engages the paradoxical relationship between the production of films that vividly imagine hopeful and diverse Indigenous futures, and the broader defunding of Aboriginal communities and organizations. This ethnographic research informs his current work on how critical engagements with settler-colonial histories and Indigenous futurisms can reimagine the rise of virtual reality and the current era of outer space colonization.

**Lucy R. Lippard** is a writer, activist, and sometime curator, co-founder of various activist artists groups (including Ad Hoc Women Artists Committee, Heresies, Printed Matter, PADD, and Artists Call Against US Intervention in Central America). Since 1966, she has published twenty-five books on contemporary art and cultural studies, most recently *Undermining: A Wild Ride through Land Use, Politics, and Art in the Changing West* (2006) and *Pueblo Chico: Land and Lives in Galisteo Since 1814* (2020). She lives in a New Mexico village where she edits the monthly community newsletter, serves on the Water Board, and is active in community planning and land use issues.

**Virginia MacKenny** is an Associate Professor in Painting at Michaelis School of Fine Art, University of Cape Town. A practicing artist she has received a number of awards, including the Volkskas Atelier Award (1991), an Ampersand Fellowship in New York (2004), and a Donald Gordon Creative Arts Award (2011). A critic and curator, she writes on contemporary South African art and is interested in painting, gender, and deep ecology. Her research on artists in Southern Africa is focused on those concerned with environmental issues, climate change, and interconnected social justice conversations. In 2014 she was one of the founding members for UCT's interdisciplinary Environmental Humanities postgraduate programme. Her solo exhibition, *At Sand's Edge*, at the Barnard Gallery, culminated 2017, and spoke to the current socio-political and environmental disruptions in South Africa.

**Emma Mahony** is the Course Leader for the BA in Visual Culture at the National College of Art and Design, Dublin, where she has worked as a lecturer since 2009. From 2001 to 2008 she was an Exhibition Curator for the Hayward Gallery, London. She has published widely on contemporary art and curatorial studies as a contributor to peer reviewed journals, including: *Anarchist Studies Journal*, *FIELD A Journal of Socially-Engaged Art Criticism*, *Performance Research*, *Curator: The Museum Journal*, and *Museum & Society*. She is an editor of *Art & the Public Sphere* journal. She is currently a principal investigator on the MSC H2020 RISE transdisciplinary research action, Spatial Practices in Art and Architecture for Empathetic EXchange (SPACEX)

2021–25. Through secondments between 27 academic and cultural organisations, SPACEX will map and analyse the ways in which spatial practices instigate public exchange and promote empathetic ways of living together in urban space.

**Nomusa Makhubu** is an Associate Professor in Art History and Deputy Dean of Transformation in Humanities at the University of Cape Town. She was the recipient of the ABSA L'Atelier Gerard Sekoto Award in 2006 and the Prix du Studio National des Arts Contemporain, Le Fresnoy in 2014. She received the American Council of Learned Societies (ACLS) African Humanities Program fellowship award and was an African Studies Association (ASA) Presidential fellow in 2016. In 2017, she was also a UCT-Harvard Mandela fellow at the Hutchins Centre for African and African American Research, Harvard University. Recognising the need for mentorship, collaborative practice, and socially responsive arts, she founded the Creative Knowledge Resources project. She co-edited a *Third Text* special issue: "The Art of Change" (2013) and co-curated with Nkule Mabaso the international exhibition, *Fantastic*, in 2015, and *The Stronger We Become* in 2019 at the 58th Venice Biennale in Italy.

**Sara Mameni** is Assistant Professor in the Department of Ethnic Studies at UC Berkeley. An art historian specializing in contemporary transnational art and visual culture in the Arab/Muslim world, Mameni has an interdisciplinary research profile in queer theory, critical race theory, post-humanist aesthetics, the anthropocene, and the socio-ecological age of petroleum. Mameni has published articles in *Resilience*, *Signs*, *Women & Performance*, *Al-Raida Journal*, *Fuse Magazine*, *Fillip Review*, and *Canadian Art Journal*, and has written for exhibition catalogues in Dubai, Sharjah, and Istanbul.

**Danika Medak-Saltzman** (Turtle Mountain Chippewa) is assistant professor in the Department of Women's and Gender Studies and a faculty affiliate of the Native American and Indigenous Studies Program at Syracuse University. Her work focuses on Native histories, Indigenous feminisms, race, and representation, transnational Indigeneity, Indigenous critical theory, comparative settler-colonialisms, Indigenous futurisms, and visual culture—including film, and cultural production. She also examines the transnational movement of American colonial policies—particularly in the case of Japan—which is a subject explored in her forthcoming book, provisionally titled *Specters of Colonialism: Native Peoples, Visual Cultures, and Colonial Projects in the U.S. and Japan*. Her articles have appeared in *American Quarterly*, *The Journal of Critical Ethnic Studies*, *Studies in American Indian Literature*, *Verge: Studies in Global Asia*, and *Critical Asian Studies*. Medak-Saltzman is co-editor of the "Critical Race, Indigeneity and Relationality" book series.

**Salma Monani** is Chair and Associate Professor at Gettysburg College's Environmental Studies department. She has published extensively on explorations of film and environmental justice, Indigenous ecomedia, and is co-editor of three anthologies. She is currently working on a monograph: *Indigenous Eocinema: Decolonizing Media Landscapes*.

**Jessica Mulvogue** is currently a postdoctoral researcher in the Collaborative Research Centre *Otium: Boundaries, Chronotopes, Practices* at the University of Freiburg, Germany. She completed her PhD in Cinema and Media Studies at York University, in Toronto, Canada. She writes on experimental and immersive media, interactive documentary, and art and the environment.

**Not An Alternative** (est. 2004) is a collective that works at the intersection of art, activism, and theory. Cited in *The New York Times* and ArtNet's "Best in Art" round-ups, Not An Alternative's



work has taken place in museums worldwide, including Guggenheim, PS1/MOMA, Queens Museum, Brooklyn Museum, Tate Modern, Victoria & Albert Museum, and Museo del Arte Moderno. The collective's latest, ongoing project is The Natural History Museum (NHM, 2014–), a traveling museum that highlights the socio-political forces that shape nature. Founded on the belief that museums offer resources, infrastructure, and symbolic and narrative power that can be marshalled in the context of the climate emergency, NHM aims to unleash the power of museums, motivating them to act not as shrines to a civilization in decline, but as defenders of the common and hubs of engagement for the future. NHM collaborates with Indigenous communities, environmental justice organizations, scientists, and museum professionals to create new narratives about our shared history and future, with the goal of educating the public, measurably influencing public opinion, and inspiring collective action.

**Rodrigo Guimarães Nunes** is professor of modern and contemporary philosophy at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio). His work explores the borders between ontology and politics, investigating how issues in one field can shed light on or change our understanding of the other. He is the author of *Organisation of the Organisationless. Collective Action After Networks* (2014) and *Neither Vertical Nor Horizontal. A Theory of Political Organisation* (2021), as well as several articles in academic journals and media outlets such as *The Guardian*, *Al Jazeera*, and *Folha de São Paulo*. As an organizer and popular educator, he has been involved in various political initiatives over the years. He holds a PhD from Goldsmiths, University of London.

**Birgit Schneider** is professor for Knowledge Cultures and Media Environments in the Department of European Media Studies at the University of Potsdam, Germany. She studied art and media studies as well as media art and philosophy in Karlsruhe, London, and Berlin. After initially working as a graphic designer, she worked from 2000 to 2007 at the research department “The Technical Image” at Humboldt University in Berlin, where she received her doctorate. Since 2009, she has held research fellowships at the European Media Studies Department of the University of Potsdam as well as in Munich, Weimar, and Cambridge, UK. In 2010 she represented the Chair of History and Theory of Cultural Techniques at the Bauhaus University Weimar. Her current research focuses on images and perceptions of nature, ecology, and climate change, diagrams, data graphics, and maps, as well as images of ecology.

**Emily Eliza Scott** is an interdisciplinary scholar, artist, and former park ranger focused on contemporary art and design practices that engage pressing (political) ecological issues, often with the intent to actively transform real-world conditions. A joint professor in History of Art and Architecture & Environmental Studies at the University of Oregon, she holds a PhD in contemporary art history from UCLA. Her writings have appeared in edited volumes and journals (e.g., *Art Journal*, *Third Text*, *Avery Review*, *Cultural Geographies*) in multiple disciplines; and she is coeditor of *Critical Landscapes: Art, Space, Politics*, (2015). Her monograph-in-progress, *Uneven Geology: Notes from the Field of Contemporary Art*, examines current aesthetics practices that trace environmental violence as it is writ into land, air, and water. She has also been a core participant in two long-term, collaborative art projects: the Los Angeles Urban Rangers (2004–) and World of Matter (2011–2017). Her work has been supported by Creative Capital, Mellon Foundation, Graham Foundation, ACLS, Smithsonian American Art Museum, Nevada Museum of Art, Switzer Foundation, and others.

**Rose B. Simpson** hails from an arts and Permaculture environment at Santa Clara Pueblo, New Mexico. Still residing on her ancestral homelands, Simpson explores ways to deconstruct gender roles, cultural stereotypes, and social ideologies through many avenues of creative expression, from sculpture to farming, writing, and parenting her small daughter. Her ceramic and mixed media sculpture has been exhibited internationally and is in museum collections throughout the country, including the Denver Art Museum and SFMoMA. Simpson earned her BFA from the Institute of American Indian Arts, an Honors MFA in Ceramics from the Rhode Island School of Design, and an MFA in Creative Non-Fiction also from IAIA. She is on the Board of Directors of Flowering Tree Permaculture Institute, Tewa Women United, and the New Mexico School for the Arts. Her sculpture is represented by Jessica Silverman Gallery in San Francisco and Chiaroscuro Contemporary Art in Santa Fe.

**Beth Stephens and Annie Sprinkle** have been life partners and 50/50 collaborators on multimedia art projects for 19 years. Currently, they do art/life experiments imagining the “Earth as lover” and aim to make the environmental movement more sexy, fun, and diverse. *Water Makes Us Wet*, their documentary about water, premiered at documenta 14 and screened at NY MoMA. Their new book, *Assuming the Ecosexual Position—The Earth as Lover*, will be published by the University of Minnesota Press (2021). Stephens is Director of E.A.R.T.H. Lab at UCSC, where she is a professor. Beth has a PhD in Performance Studies, and Annie, a former sex worker, has a PhD in Human Sexuality. Based in California, they are currently working on a new documentary about fire.

**Julie Sze** is Professor and the Founding Chair of American Studies at UC Davis. Sze's first book, *Noxious New York: The Racial Politics of Urban Health and Environmental Justice* (2006), won the 2008 John Hope Franklin Publication Prize, awarded annually to the best published book in American Studies. Her second book is called *Fantasy Islands: Chinese Dreams and Ecological Fears in an Age of Climate Crisis* (2015). She is editor of *Sustainability: Approaches to Environmental Justice and Social Power* (2018). Her most recent book, *Environmental Justice in a Moment of Danger* (2020), is part of the “American Studies Now: Critical Histories of the Present” series. She has written or co-authored 50 peer-reviewed articles and book chapters and has given talks in Sweden, China, Abu Dhabi, Canada, Germany, France, and Italy.

**Paulo Tavares** is an architect, researcher, writer, and educator based in South America. His work has been featured in exhibitions and publications worldwide, including Harvard Design Magazine, the Oslo Architecture Triennale, the Istanbul Design Biennial, and the São Paulo Biennial. He is the author of the books *Forest Law* (2014), *Des-Habitat* (2019), and *Memória da Terra* (2020). Tavares runs the design agency autonoma, a platform dedicated to urban research and intervention, and co-curated the Chicago Architecture Biennial 2019.

**Inez Blanca van der Scheer** is a PhD student at the University of Amsterdam. She works at the Stedelijk Museum of Amsterdam and is the researcher/curator of Hama Gallery as of 2020. She co-founded University of Colour in 2015, an activist collective against the coloniality of European higher education.

**Melanie K. Yazzie**, PhD, is Assistant Professor of Native American Studies and American Studies at the University of New Mexico. She specializes in Navajo/American Indian history, political ecology, Indigenous feminisms, queer Indigenous studies, and theories of policing and

the state. She also organizes with The Red Nation, a grassroots Native-run organization committed to the liberation of Indigenous people from colonialism and capitalism.

**Alessandro Zagato** is Latin America's regional representative for the Artists at Risk Connection program of PEN America. He has a PhD in Sociology from Maynooth University, Ireland. He has worked as a researcher for the European Research Council project "Egalitarianism: Forms, Processes, Comparisons" led by Professor Bruce Kapferer at the University of Bergen, Norway. Since 2013 he has lived in San Cristóbal de Las Casas (Chiapas, Mexico), where he founded the "Research Group in Arts and Politics" (*Grupo de Investigación en Arte y Política* – GIAP) and the associated "Casa Giap," a residency center for international artists and researchers. He is author of *After the Pink Tide: Corporate State Formation and New Egalitarianisms in Latin America* (2020), and *The Event of Charlie Hebdo: Imaginaries of Freedom and Control* (2015) among several other publications.

**Bo Zheng** lives and works in Lantau Island, Hong Kong. Committed to multispecies vibrancy, he investigates the past and imagines the future from the perspectives of marginalized communities and marginalized plants. He creates weedy gardens, living slogans, and eco-queer films to cultivate ecological wisdom beyond the Anthropo-extinction event. His projects are included in the Liverpool Biennial 2021, the Yokohama Triennale 2020, Manifesta 12, the 11th Taipei Biennial, and the 11th Shanghai Biennial. He taught at China Academy of Art from 2010 to 2013, and currently teaches at the School of Creative Media, City University of Hong Kong, where he leads the Wanwu Practice Group. His website is zhengbo.org.

**Connie Zheng** is a Chinese-born artist, writer, and filmmaker based in Oakland, California. Her work examines diverse manifestations of propaganda, possibilities for expanding the language of climate apocalypse, and the racialization of contamination narratives, as told through visual and text-based forms. She has exhibited her visual work and short films throughout the US and has published scholarly writing in the *Journal of Urban Cultural Studies*. She is currently a PhD student in Visual Studies at the University of California, Santa Cruz.

## INTRODUCTION

*T. J. Demos, Emily Eliza Scott, and Subhankar Banerjee*

This book addresses the intersection of contemporary art, visual culture, and climate breakdown. It gathers a range of leading and emerging voices, drawn from a diversity of disciplinary and geographical vantage points, and provides new cutting-edge ecocritical research. With it, we hope to contribute to an increasingly urgent, multidisciplinary research formation and to intervene critically and productively in the ongoing development of the environmental arts, humanities, and social sciences. It is true that a growing number of artistic and exhibition practices, activist mobilizations, and scholarly publications within art history and visual studies have engaged climate transformation—one of the most pressing and encompassing subjects facing global society today—in newly relevant ways in recent years. In many cases, this pioneering work has not only drawn attention to the perceptual, affective, entangled, and sociopolitical dimensions of climate breakdown and all it entails, from global warming's melting polar ice, regional droughts, and wildfires to habitat fragmentation, deforestation, and ocean, air, and ground pollution; from zoonotic diseases such as the recent coronavirus pandemic to the biodiversity crisis including manifold species extinctions; from forced migrations and displacements to the disproportionate impacts on frontline communities with the least resources for adaptation. It has also helped to imagine and thereby contribute to the construction of new worlds of imagination—seemingly against all odds—inspiring and resulting from material practices beyond the destructive impacts of petrocapi-talism and extractivism. In doing so, the arts offer a crucial lens onto, and sometimes protagonist of, environmental transformation. They provide a vital site of intervention, complementary and alternative to the earth sciences, engineering, design, and economics, which have popularly defined climate-change discourse and policy. Yet unlike within the fields of the environmental humanities, or literary ecocriticism, there is still no major compilation volume that assembles ecocritical writing at the intersection of contemporary art and climate change, offering a generative and much needed platform for the formation of future scholarship and practice.<sup>1</sup>

This book helps to fill that void. It thereby asserts the importance of including art and visual culture within the discussion of ecological matters of concern, in order both to critically assess the representational politics of climate transformation as they have recently unfolded and currently exist, and to highlight creative and experimental practices beyond the techno-scientific, apocalyptic, positivistic and/or spectacular media and pop-cultural image systems through which climate breakdown is so often experienced and visualized. International in scope, the



## 18

## AT MEMORY'S EDGE

## Climate Trauma in the Arctic through Film

Lisa E. Bloom

“Native survivance is an active sense of presence over historical absence, deracination and oblivion.”

—Gerald Vizenor, *Survivance: Narratives of Native Presence*  
(Omaha: University of Nebraska Press, 2008)

This article addresses a critical polar visual culture and film not just as an illustration of planetary demise and a call for action, but as a challenge to our imagination. Much of this work brings into being new forms of seeing, feeling, and knowing that are connected to the crisis of visualization in the Arctic's fast-changing landscapes. Critical polar aesthetics here engages with not only the altered perceptual habits and the complex temporal and historical disjunction introduced by climate change, but also the serious psychological consequences.<sup>1</sup> In a moment when the Anthropocene and the climate crisis should now be considered as important as gender, race, class, and nationalism, this article presents an intersectional feminist approach to research in this area. Here I broaden the work done on memory and its aesthetics to address what it means to ethically witness the accelerating social and psychic impact of a warming Arctic through a cultural inquiry into these issues without sentimentalizing or spectacularizing suffering.

This work builds on research from my first book *Gender on Ice: American Ideologies of Polar Expeditions* (1993), and more recent articles and my current book project tentatively titled *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis* (forthcoming, Duke University Press, 2021).<sup>2</sup> *Gender on Ice* was one of the first critical visual cultural books on the Arctic and Antarctic written from a feminist and postcolonial perspective. It first raised the issue of how the polar regions were represented as an imperial frontier to plunder, “a tabula rasa where people, history, and culture vanish.”<sup>3</sup> As such, they were once seen as ideal blank sites for the strategic development of distinctive forms of white manhood, technology, colonialism and nationalism during the late-nineteenth and early twentieth century during the so-called heroic age of polar exploration from 1870 to 1930. Little did I know that over two decades later after the writing of *Gender on Ice*, the impending catastrophe of the climate crisis would force me to return to the topic with a new set of questions and sense of urgency in the current moment in which nonetheless older themes of imperialism, nationalisms, economic exploitation, and Indigenous survival persist but in radically transformed local, national as well as planetary contexts.

The article is written as a contribution to the work in Arctic visual culture and film studies, growing fields that have yet to address climatically concerned aesthetic practices, especially from intersectional feminist perspectives.<sup>4</sup> It introduces two innovative short films on the Arctic by women filmmakers that call forth new forms of representation produced in a world beset by uncertainty. Both focus on affect and push the viewer to imagine a different way of seeing, feeling, knowing, and “weathering even unsurvivable circumstances,” in Dianne Chisholm's words.<sup>5</sup> Both put into focus what Anishinaabe cultural theorist Gerald Vizenor calls “an aesthetics of survivance.” Survivance as a critical term in Native American studies refers to an insistence on the ongoing nature of active survival in which Native American peoples go beyond merely subsisting in the ruins of tribal culture after ethnic genocide to actively refashion memory for the contemporary era. Though the term “aesthetics of survivance” was not first defined to respond to the climate crisis, it can be used to articulate the central place of creative storytelling in visual form in Indigenous knowledge to address climate trauma that like ethnic genocide also involves mobilizing images in order to transform and resist dominant structures to prevent a kind of forgetting.

The films addressed in this article are made by women in collaboration with members of Indigenous communities who have taken up film and television to give voice and form to unfolding climatic issues about the precarious world they inhabit. Each explores the mix of shared private and public histories and memories of its subjects who include women and children in order to keep alive the memory of a people that are no longer “at home” in the Arctic in the way they once were. Traumatic experiences here are represented in a range of forms, as the first film is a more accessible interview-based documentary, while the second is science-fictional, experimental and non-narrative. Each are chosen to spark cross-cultural conversations in an international context in order to imagine the future for memory in an increasingly precarious world.

*Attutauniujuk Nunami/Lament for the Land* (2013) by Ashlee Cunsolo Willox in collaboration with the Inuit communities of Nunatsiavut, Labrador, Canada provides a striking example of how recognizing suffering from global warming in the Arctic can serve as a necessary first step towards the amelioration of that suffering by breaking the isolation imposed on both individuals and communities around the world in local and regional contexts. The second by Kimi Takesue, *That Which Once Was* (2011), makes us imagine a future defined by a warming planet through its focus on how two characters from the Canadian Arctic and the Caribbean adjust to their new conditions. It is a fictional experimental film set in the future, in 2032, when millions of people will be driven from their homes due to the effects of climate breakdown. Broadening the conversation on “climate trauma,” a term first used by E. Ann Kaplan in her book *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction* (2016), both films encompass Indigenous and minority peoples' perspectives, using a range of media in order to create a sense of possibilities for themselves amidst the ongoing destruction of their environment by anthropogenic climate change.<sup>6</sup>

#### Changing Indigenous Physical and Psychological Realities of the Arctic: *Attutauniujuk Nunami/Lament for the Land* (2013), by Ashlee Cunsolo Willox and the Communities of Nunatsiavut

*Attutauniujuk Nunami/Lament for the Land* (2013) is a documentary that includes short clips from a set of interviews conducted with 24 Inuit residents in the five communities of the Inuit Land Claim Settlement Region of Nunatsiavut, Labrador, Canada formed in 2005.<sup>7</sup> These are remote coastal communities that are inaccessible except by plane or boat since there are no paved roads in or out. In all of these areas, the Inuit of Nunatsiavut, Labrador continue to rely on the land

and the sea for their livelihood and culture and remain active hunters, fishermen and trappers (Figure 18.1).

The film documents the overwhelming sense of loss and distress that the residents are experiencing from accelerated global heating as air temperatures are already over two or three degrees above normal. It is an English-language film made by a Settler woman academic from Southern Canada, in collaboration with many Inuit and health professionals from the region. The film documents the psychological effects of ecological loss amongst the Inuit and is available on the internet for anyone with a connection ([www.lamentfortheland.ca](http://www.lamentfortheland.ca)). Ashlee Cunsolo Willox writes: "It was meant to share Inuit voices as far and wide as possible, and it was made with Inuit,

to tell Inuit stories, and to connect with other Northern Indigenous peoples."<sup>8</sup> The film presents a portrait of a community that is still strong and vibrant, but as the climate crisis worsens the community has to process losses, human distress, and feeling associated with depending on essential ecosystems that are degrading over time. In the context of the film, the people interviewed are experiencing intense feelings of grief as people suffer climate-related losses to valued species, ecosystems, and land. All rely on the ice, the cold and the snow for part of their livelihood and the strong connection to the land connects family, kin and the community.

The film poses the problem of memory, particularly for her audience of Indigenous viewers who have to process enormous losses, human distress, and feelings associated with depending on essential ecosystems that are degrading over time.

In the first half of the film, the expansive landscape of sea, snow, and ice surrounding their communities is presented at length with voiceovers expressing how the ecological spirit of the land is central to their philosophy and practice of life. Life for the older interviewees, they tell us is an extension of living off the land. Myrtle Groves explains that "hunting, fishing and picking berries is our identity. It is just our way of life. It is how we grew up... We are [now] worried that we are losing it." For her and her community, the land is both a home and a resource, where the human species is seen as merely one aspect of a vibrant ecology.

As the climate crisis worsens, it is unthinkable in this context for them to imagine being severed from the environment. The visuals shift from sweeping shots of the outdoors to indoor settings where many people are being interviewed as they talk about how the change to the landscape is now more rapid and noticeable. "The snow melts so fast... It is more difficult to go out on snowmobiles as the ice now is really dangerous." Their concern about not being able to predict the weather anymore is connected with a sense of serious loss and grief. They have trouble reconciling their past relationship to the land and the present and do not know how they or their children and grandchildren will cope in the future. Consequently, they have doubts about whether they can change with the times and live without their former relationship to the environment: "Knowing how to survive on the land, gave me a sense of confidence and self-awareness... [Now] we are not who we were anymore and are losing control over our life."

Since the focus is on everyday life, the film supplies images of the community members at work on the land and at home. But what is different from *That Which Once Was*, the film I discuss last, is not so much the imagery but the portrayal of "ecological grief" experienced by these communities when its member's bodies and minds lose their close relation to nature and to the land itself. The film includes the Inuit sharing that "dependence on alcohol has gone through the roof... There are more addictions, both alcohol and drugs." It makes visible the network of Inuit researchers, community members, and mental health professionals that have joined forces to confront climate change and support Inuit wellbeing and flourishing. Previous research conducted in Nunatsiavut, Labrador by the filmmaker and other colleagues indicate that changes in climate amplify previous traumas and lead to increased incidences and prevalence of alcohol use, drug addiction, suicide, and domestic violence.<sup>9</sup> Given the legacy of colonialism in the Inuit territories, the film presents a system of health care that departs from an earlier regime that dates back to the colonial past that includes forced resettlements in response to the tuberculosis epidemic of the 1950s, and the evacuation of Inuit to Southern sanitariums and residential schools. Anthropologist Lisa Stevenson, in her 2014 book *Life Beside Itself: Imagining Care in the Canadian Arctic* on this topic, explains that care up until the early 1980s didn't consider who the patient was, or their quality of life, just that that the patient would be kept alive.<sup>10</sup> This has changed once the growing legal recognition in Canada of the rights of Indigenous peoples in 1982 brought to the fore new public organizations that enabled the Inuit to be responsible for administering their own health services and municipal organizations.<sup>11</sup> *Attutauuijuk Nunami/Lament for the Land*

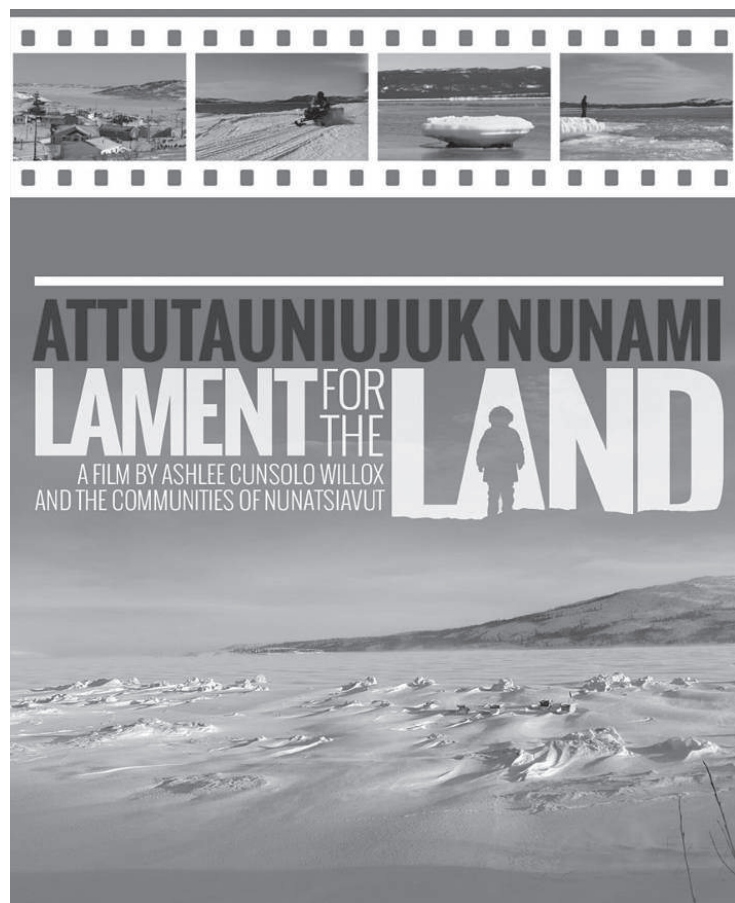


Figure 18.1 Ashlee Cunsolo Willox, *Attutauuijuk Nunami / Lament for the Land*, still, 2013  
Source: Courtesy of the Filmmaker

represents the significant changes in mental health care policy instituted by the mostly Inuit mental health workers who are grappling in nuanced ways with the identity and culture of the community as they face the current challenges from climate trauma.

For Cunsolo Willox, the climate emergency has altered the Inuit idea of themselves and diminished their sense of a future that has similar environmental conditions as the past. She turns to filmmaking in an attempt to grasp the psychological life of the Inuit and communicate the grief she sees as a natural response to ecological loss, and one that may become more common worldwide as climate impacts worsen. The film leaves the future of memory in doubt and while it presents the community as adrift, the mental health professionals she interviewed recognize the need for community, empathy, and caring in these precarious times.<sup>12</sup>

### Dystopian Futures and the Reconstruction of Memory: Kimi Takesue's *That Which Once Was* (2011)

Whereas the first documentary represents the accelerated violence of climate change that is happening in our time, the science-fictional world created in Kimi Takesue's film *That Which Once Was* (2011) suggests the next stage of catastrophe.<sup>13</sup> It is in this film that the complex relationship between the collapse of the natural world and the disintegration of the social contract is completed and memory now has to be constituted from absence. "That Which Once Was" (2011), by filmmaker-scholar Kimi Takesue, is an experimental dystopian film made for a US public television series titled *FutureShocks*. She is an award-winning filmmaker working in documentary, narrative, and experimental genres. Her films have screened at more than two hundred film festivals and museum internationally, including Sundance, Locarno, New Directors/New Films, London's ICA, Shanghai Museum of Contemporary Art and the Museum of Modern Art (NYC) and have aired on PBS, IFC, Comcast, and the Sundance Channel. Though this film was made for television, it embodies the ambition of a more experimental cinema willing to take up some of the more challenging questions about memory and loss in the context of the climate crisis.

*That Which Once Was* explores the ethics of an intimate style of filmmaking and is a meditation on the emotional experience of dislocation. It brings together two protagonists from the Arctic and the Caribbean, who are now climate migrants literally displaced from their countries of origin to live in an institutional context supervised by social workers located in a US urban center. Set in 2032, the film raises interesting questions about human memory at a time when she imagines that many of the world's most vulnerable people will be displaced.

In the first half of the film, there is little sense of positive, secure human possibilities. The film begins with a hazy out-of-focus image of ocean waves crashing on a beach somewhere in the Caribbean. This is followed by a soothing song in Spanish in the background, as children from the Caribbean are calmly playing with large balloons in an urban classroom in the US (Figure 18.2).

Up till now, the scene appears almost idyllic but the sad isolated faces of the children belie that fact and then the camera shifts and we notice a close-up of the numbers on the arms of each child that resemble inmate identification numbers tattooed onto prisoners interned at German concentration camps in Europe in the 1940s. These tattoos remind us of the tremendous scale of the prisoner population then and now. This is reinforced when we hear on the radio news that "a hurricane swept over Bangladesh killing tens of thousands and leaving many more homeless," and we see an eight-year-old boy sitting alone absorbing this disturbing news as he plays nervously with an old fish decoy that resembles a real fish that is one of his few remaining possessions from home.



Figure 18.2 Kimi Takesue, *That Which Once Was*, still, 2011

The boy, however, becomes increasingly agitated and seems to be reliving some prior traumatic event triggered by both the distressing news report and the strong breeze from a large dirty fan nearby that the camera presents in a detailed close-up. When the boy is calmer, one of the female mental health practitioners, sits beside him and gently asks: "What do you remember? He replies: 'Nothing.' She then asks: 'Tell us about home. What was it like?' He responds: 'I don't remember.'"

Memory in this film first functions as a disabling force because of the huge contrast between what was and what is now, and because traumatic loss overwhelms the boy. The eight-year-old is an almost ghost-like human being who is at first diminished as he has lost all cultural moorings. As the film evolves, the child takes more of an interest in his life when he eventually befriends an older Indigenous man who is a climate refugee himself displaced from Nunavut, Canada. But unlike the young boy, who has lost all memory, the older man sculpts in ice and has retrieved what he has lost through making his art. His ice sculptures capture one of the subtle points of the experimental film: for most ordinary people caught up in large public climate disasters, their presence is constituted from the importance of the fragments of memory they can find and hold on to. In this case, the older Indigenous refugee takes up the traditional work of oral storytelling in visual form and uses the dynamic potential of ice sculpture to create a sense of lively presence from what is absent. This is what Indigenous literary theorist Gerald Vizenor calls "survivance." Vizenor uses the term to explain how Native literary and linguistic traditions continue to flourish in contemporary media despite and in response to colonialism's systemic suppression of oral culture. For Vizenor, "Native survivance is an active sense of presence over historical absence... Native survivance is a continuance of stories."<sup>14</sup> The ice sculpture would be in his terms "an aesthetics of survivance" that enables him to revive oral traditions and preserve the collective stories and memories of his past in his art (Figure 18.3).

The boy is only able to establish trust and share a form of his own memories with the older man in turn once he understands the importance of his own ice sculptures. This is established when he posts above his bed a gift of a photograph of an iceberg given to him by the Inuk man which he places next to the old fish decoy, one of the only possessions given to him from his deceased father. It is only near the end of the film that the past and present are brought together



Figure 18.3 Kimi Takesue, *That Which Once Was*, still, 2011

through these lost objects. At that point the boy twists free from his depression by re-establishing his connection to both the natural and human world and begins recovering his lost memories to move toward renewal. Throughout the film, art and recognizing the need for intergenerational and cross-cultural friendships continue to be shown as critical to native survivance in a future defined in an increasingly precarious warming world.

The climate devastation to come will impact everyone, but far from equally. Women, children, and minorities will be affected first and suffer the most. Indeed, as exemplified in both films discussed, such groups are already undergoing loss in both their environment and in terms of their sense of self. But they are addressing how to mitigate against future tragedies through working within their own communities. In *Attutauniujuk Nunami/Lament for the Land*, grief is a natural response to ecological loss, and one that may become more common worldwide as climate impacts worsen. In *That Which Once Was* “survivance” and resilience is stressed. The characters in the second film are also dealing with an experience of extreme alienation, confined within an institutional space after being displaced entirely from home. The film ends with the insistence that the community will adapt and this resonates with the first film about the importance of the need for community and empathy.

Both films reveal new perspectives from filmmakers and their partners who are making connections between Indigenous histories, representational practices, and the growing environmental threats in the modern Arctic. In doing so these films create an alternative visual archive and cinematic language formed by women filmmakers representing Inuit aesthetics and traditions that are being disrupted as their life is rapidly changing as a result of accelerated global warming. Through eyewitness testimony, *Attutauniujuk Nunami/Lament for the Land* demonstrates how the Indigenous people of the Arctic are experiencing the violence of climate breakdown and the way it diminishes their way of life and can ultimately lead to these communities’ relocation that is the subject of *That Which Once Was*. Both films are attuned to the actual changing physical, cultural, and psychic reality of the Arctic. Social media is seen in *Attutauniujuk Nunami/Lament for the Land* as an essential form for networking and transmitting vital knowledge between different knowledge systems and across languages, and thus instrumental in helping the Inuit community’s capacity to maintain itself amidst an impossible, but still livable situation through

resiliency and adaptation. *That Which Once Was* raises important questions about the future for Indigenous memory in a situation where people living in some of the more vulnerable parts of the world are negatively impacted from sea-level rise. The film makes a distinction between the construction of an eternal image of the past, “that which once was,” and how the experience of the past can produce something unique through the conditions of the present that could create “an active sense of native presence over absence” in Gerald Vizenor’s terms.<sup>15</sup> Kimi Takesue follows Gerald Vizenor and what E. Ann Kaplan calls a kind of “memory of the future,” that is what future there is for memory as these fictional humans find themselves in a social world in an increasing state of deterioration

### Justifiable Fears and Sensible Hopes: Living with an Uncertain Future and an Unreliable Natural Environment

“False hopes and groundless fears can be of dreadful deadly consequences. And yet justified fears when combined with sensible hopes can open new possibilities and thereby help mobilize change for the better.”

—(Matthew Sparke, quoted in  
*Climate Terror: A Critical Geopolitics of Climate Change*)

In September 2016 the Earth passed the threshold of 400 ppm of CO<sub>2</sub> in the atmosphere permanently (the safe level of carbon dioxide in the atmosphere is 350 parts per million).<sup>16</sup> This much-publicized climate event announcing the arrival of a new atmosphere that we have to contend with coincided with the Science and Security Board moving the “doomsday clock” of the *Bulletin of the Atomic Scientists* to two and a half minutes to midnight in January of 2017, to caution “that the probability of global catastrophe is very high, and the actions needed to reduce the risks of disaster must be taken very seriously.”<sup>17</sup> Since 2017, the clock was reset 30 seconds ahead in January of 2018 to two minutes to midnight and it has remained there in 2019.<sup>18</sup> Climate breakdown here joins the other two alarmist categories, of “nuclear” and “biosecurity” according to the Indian writer Sanjay Chaturvedi and his co-writer Timothy Doyle. Matthew Sparke is quoted above in their book *Climate Terror* to argue that geographical grounds of fear and hope need to be critically reexamined.

This article, and my forthcoming book, *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis* (Duke University Press, 2021) that it draws from, argues that art and film is important to counter the discourse of “climate terror” to break with the paralyzing effects of fear alone that can hinder any renewal of human and non-human life through a change in private and public behavior or through a radical environmental social movement on the climate emergency that is building internationally. The films that I just discussed provide examples of ways we can deepen our imaginations to engage with our anxieties and work towards more constructive outcomes that take seriously the irreparable damage to our world.

The polar regions are scarcely the only sites where we can document the unraveling of planetary systems, but they are important since they bring into relief how social and ecological systems function within large global networks, and “produce a sense of place intrinsically linked to other places.”<sup>19</sup> As such, art, film, and activist art work that embodies a different, more personal and local relation to these sites takes into account what Ursula Heise calls a form of “eco-cosmopolitanism,” which is “an attempt to envision individuals and groups as part of planetary “imagined communities” of both human and nonhuman kind.”<sup>20</sup> This is akin to the making of collective identities from the “imagined communities” of nationalism studied by Benedict Anderson. But it deliberately emphasizes a less abstract “we” that is different from



“global humanity;” referencing local communities that are the most vulnerable and highlighting other kinds of counter-responses besides technological ones to productively engage with climate emergencies.

But this form of eco-cosmopolitan response has suffered some serious setbacks. Even though the latest warnings on global warming continue to be dire, they have not been dire enough. With the rise of right-wing nationalism in tandem with an ideological masculinity that drives violence against women and Indigenous people around the world, one nation after another refuses to respond and even worse seems to be moving in the wrong direction as the doomsday clock indicates. The United States, which has the world's largest economy and is the second-largest emitter of carbon dioxide, has taken the lead in turning its back on the fight and instead of lowering emissions is promoting fossil fuels.<sup>21</sup> And by choosing cabinet appointments of climate deniers and captains of oil, Donald Trump has emboldened other countries to do the same. A case in point is the president of Brazil, Jair Bolsonaro, who opened up the Amazon to deforestation, mining, and agribusinesses and is putting the Ecuadorian rainforest as well as the Indigenous populations living there at heightened risk.<sup>22</sup> Both Bolsonaro's scramble to further exploit the Amazon combined with his administration's level of abandonment and total lack of care for the Indigenous Amazonians during a pandemic can be compared to Trump's war on the Indigenous in Alaska and his relentless assault on Alaska's Arctic land and seas.<sup>23</sup>

At the same moment the planet is at growing risk, older far right-wing nationalist and imperialist populist narratives are also rising up from the nineteenth- and twentieth-century soil of colonialism like ghosts, and once again have clear genocidal implications for both the planet, and the Indigenous communities who call it home. In dark times, *Lament of the Land* and *That Which Once Was* conjure both the hope and difficulty of how art and film can be used for thinking about climate breakdown and its impact on cultural memory can contribute to cross-cultural solidarity and to the creation of new forms of community.

## Notes

- 1 A special thanks to Diane Chisolm for providing insightful feedback on my book manuscript at an early stage and for introducing me to *Attutaumiujuk Nunami/Lament for the Land* by Ashlee Cunsolo Willox, and to Subhankar Banerjee for his encouragement and support during a critical stage in both my book project and article and for recommending *That Which Once Was* by Kimi Takesue.
- 2 See Lisa Bloom, Elena Glasberg and Laura Kay, eds., “New Poles: Old Imperialism?” Issue 7.1. Fall, 2008. The special issue is in the online journal, *The Scholar and the Feminist Online* 71, a web journal published by the Barnard Center for Research on Women. See: [http://sfonline.barnard.edu/ice/intro\\_01.htm](http://sfonline.barnard.edu/ice/intro_01.htm) It was the starting point for some of my current research. Also see Lisa Bloom and Elena Glasberg, “Disappearing Ice and Missing Data: Visual Culture of the Polar Regions and Global Warming,” in *Far Fields: Digital Culture, Climate Change, and the Poles*, eds., Andrea Polli and Jane Marsching (London: Intellect Press, 2012), 117–142.
- 3 Lisa Bloom, *Gender on Ice: American Ideologies of Polar Expeditions* (Minneapolis: University of Minnesota Press, 1993), 2.
- 4 Also see Zacharias Kunuk and Ian Mauro's 2010 documentary film “Qapirangajug: Inuit Knowledge and Climate Change,” discussed in my forthcoming Duke University Press book titled *Critical Polar Aesthetics: Reimagining the Arctic and Antarctic at a Time of Climate Crisis*.  
The film was made with a similar structure as *Lament for the Land*—interviews with a set of residents of Nunavut but is an invaluable document that is more activist oriented. It is the first Inuktitut language film on the topic. Produced for Isuma TV, it is available online at: [www.isuma.tv/inuit-knowledge-and-climate-change/movie](http://www.isuma.tv/inuit-knowledge-and-climate-change/movie)
- 5 Diane Chisolm, “The Enduring Afterlife of ‘Before Tomorrow’: Inuit Survivance and the Spectral Cinema of Arnait Video Productions,” *Études/Inuit/Studies* 40 (1) 2016, 214.

- 6 E. Ann Kaplan responds to scholarship such as Rob Nixon's “slow violence,” in his book *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2013), and theorizes that such violence is accompanied by its own psychological condition, what she terms “Pretraumatic Stress Disorder.” See Kaplan, *Climate Trauma: Forseeing the Future in Dystopian Film and Fiction* (New Brunswick: Rutgers University Press, 2015), 1–22.
- 7 *Attutaumiujuk Nunami/Lament for the Land* (2013), by Ashlee Cunsolo Willox for the communities of Nunatsiavut is 25 minutes long and available to view online at [www.youtube.com/watch?v=yi7QTyHERjY](http://www.youtube.com/watch?v=yi7QTyHERjY); Accessed: June 8, 2019.
- 8 Ashlee Cunsolo Willox, private correspondence, December 9, 2019.
- 9 Cunsolo Willox, et al., “Climate Change and Mental Health: an exploratory case study from Rigolet, Nunatsiavut, Canada,” *Climatic Change*, November 2013, Volume 121, Issue 2, 255.
- 10 See Lisa Stevenson, *Life Beside Itself: Imagining Care in the Canadian Arctic* (Berkeley: University of California Press, 2014), 92.
- 11 For more on the shifting culture of care in Arctic Canada, see Stevenson, *Life Beside Itself*, pp. 21–48.
- 12 On mental health issues in the Alaskan Arctic see: Rosemary Ahtuanguaruak, “Arctic Oil is Destroying our Health and Culture” in Subhankar Banerjee, ed., *Arctic Voices: Resistance at the Tipping Point* (Seven Stories Press, 2013), 311–319.
- 13 *That Which Once Was* (2011) is available to view online at: [www.pbs.org/video/futurestates-that-which-once-was/](http://www.pbs.org/video/futurestates-that-which-once-was/).
- 14 Gerald Vizenor, *Survivance: Narratives of Native Presence* (Lincoln: University of Nebraska Press, 2008), 1.
- 15 Vizenor, *Survivance*.
- 16 The 410 parts per million threshold was reached a little more than a year later with much less fanfare than breaching the 400 PPM threshold. See Kahn, 2017.
- 17 On January 25, 2018, the atomic clock was moved again to two minutes to midnight, the closest since 1953 during the height of the Cold War. See Bulletin of the Atomic Scientists, 2018.
- 18 J. Mecklin, “A New Abnormal: It is still 2 minutes to midnight,” 2019 Doomsday Clock Statement, Science and Security Board, *Bulletin of the Atomic Scientists*: <https://thebulletin.org/doomsday-clock/>
- 19 Ursula Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford: Oxford University Press, 2008), 56.
- 20 Heise, *Sense of Place and Sense of Planet*, 61.
- 21 For a history of how high-level scientists with extensive political connections ran effective campaigns to mislead the public and deny well-established scientific knowledge over four decades in the United States, see: Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (London: Bloomsbury Press, 2010)
- 22 Sue Branford, “NGOs charge Brazil's Bolsonaro with risk of Indigenous ‘genocide’ at UN”: <https://news.mongabay.com/2020/03/ngos-charge-brazils-bolsonaro-with-indigenous-genocide-at-un/>
- 23 Subhankar Banerjee and Lois Epstein, “The Fight For Alaska's Arctic Has Just Begun,” in *Technosphere Magazine*, November 6, 2018. <https://technosphere-magazine.hkw.de/p/The-Fight-for-Alaskas-Arctic-Has-Just-Begun-sY912LkjkUnQGKKn7QkyHt>