

COAL CITY



ANNENBERG FELLOWSHIP REPORT

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DHRUV RUNGTA

ALIGNMENT WITH FIELD OF STUDY

I had a truly incredible learning experience during my AFIRE fellowship in Mongolia, one that directly aligned with, and ultimately deepened, my field of study. At my project's core was the lived complexity of coal in Mongolia: it is the cheapest and most accessible fuel due to the country's vast domestic supply, and it burns hotter and longer than alternatives like animal dung or wood. In the brutal winters (it was -30 degrees when I was there), coal, at least today, is not optional.



Visiting an active coal mine on the outskirts of Ulaanbaatar.

Without it, people can't survive the frigid cold. Yet the same fuel that sustains life is also causing widespread harm. Severe air pollution has driven alarming rates of lung cancer, asthma, and other respiratory illnesses, disproportionately affecting children and the elderly. While in Mongolia, I worked closely with People In Need to understand how they navigate this tension in practice. Their work focuses on helping households transition to cleaner electric furnaces through a carefully designed subsidy program, with priority given to vulnerable populations such as single-parent and elderly households. Even this solution, however, is far from straightforward. The electricity powering these furnaces is still generated by coal—albeit at centralized plants with scrubbers, making it cleaner than direct household burning. Power outages are common and can place families in dangerous situations when electric heating fails in subzero temperatures. Additionally, electric heating remains significantly more expensive, raising concerns about long-term affordability and equity.

Grappling with these layered trade-offs, such as economic necessity, climate change, public health, energy infrastructure, and development is precisely what my Program II is preparing me to do. By engaging directly with stakeholders, I was able to interrogate these challenges beyond abstraction.

This experience powerfully complemented my PII coursework, such as my Energy Economics and Climate Change and Society classes, bringing what I learned from textbooks to life, and elucidating the complexities of these issues in the real world.

SKILLS AND KNOWLEDGE LEARNED

- **Intersection of Culture and Ecology/Environment:** I gained insight into how Mongolia's ecology has shaped centuries of nomadic culture, from livestock-based livelihoods (necessary to survive in the frigid cold) to communal living practices, and how these relationships have been reshaped by being a Soviet satellite for 70 years, and in the last 20 years faced rapid globalization, leading to a highly unique culture.
- **Cross-Cultural Interviewing:** I strengthened my ability to conduct respectful, effective interviews across language and cultural barriers, adapting my approach to build trust and elicit nuanced perspectives from community members and NGO staff.
- **Energy Systems & Urban Infrastructure:** I was exposed to the full lifecycle of coal in an urban context: mining, transportation, combustion, and electricity generation. This deepened my understanding of how energy engineering and city planning directly intersect with public health and environmental outcomes. (See Photo Above)



This was the first coal furnace I visited, and it powered roughly 100 homes. The air in the room was incredibly hot and ashy. In this photograph a worker prepares to 'feed the fire' with the pile of coal below.

- Mongolian Ecology: I developed a foundational understanding of Mongolia's ecosystems and native species through site visits and institutions such as the Natural History Museum, learning about species like the Pallas's cat, snow leopard, and Eurasian elk and how they are adapted to extreme climatic conditions.
- Policy & Solution Analysis: By observing People In Need's electric furnace subsidy program, I learned to evaluate real-world policy interventions, including trade-offs related to cost, reliability, equity, and emissions, beyond theoretical models.
- Technical Photography in Extreme Conditions: I developed advanced technical photography skills by working in low-light, subzero, and highly polluted environments, requiring precise control of exposure, focus, and even special equipment care techniques.
- Artistic Photojournalism: Under Professor Sim's guidance, I pushed beyond my traditional documentary photography style to use visual abstraction as commentary. I learned how to create images that were purposefully ambiguous so that they invited reflection and a deeper look.
- Narrative Storytelling Across Mediums: I strengthened (and am continuing to work on as I create the final product) my ability to synthesize visual imagery, data, interviews, and research into a cohesive and engaging final product that communicates the complexities of the environmental and social issues I covered.



MENTORSHIP

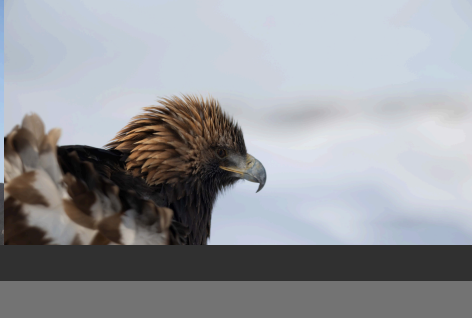
I am really thankful to the many mentors who supported this project, including my primary mentor, Chris Sims of Duke's Center for Documentary Studies, Susie Post-Rust of Duke's Center for Documentary Studies, and Tamir Mend of People in Need.

Professor Sims served as my main project mentor throughout my AFIRE experience and played a central role in pushing the project to a higher level. Before departing for Mongolia, we met several times to prepare, covering a wide range of topics. He challenged me to hone my photographic style and identity, helped me navigate complex questions of consent (particularly when photographing children) and advised me on practical considerations such as preparing to work in extreme cold. We also met after my return from Mongolia, and I am currently enrolled in the Center for Documentary Studies Capstone course with him. Over the remainder of the semester, we will continue processing these images and working collaboratively to develop the final project, which will take the form of either an online webpage or a physical exhibition at the Juanita Kreps Gallery at the Center for Documentary Studies.

Professor Sims has been instrumental in advancing my interdisciplinary growth. As a Climate Fellow with experience in cross-disciplinary photography work himself, he had the perfect background to mentor me. He encouraged me to think more like an artist and less like a traditional photojournalist, placing greater emphasis on color, composition, and abstraction (using visual symbols to represent complex ideas) to inspire reflection. He also pushed me to integrate disciplines I had not previously centered in my work, such as public health and ethics, strengthening the project and complementing my interests in environmental economics, ecology, and sustainable development.

PII CONTRIBUTIONS

1. I will host a skills share for PII students. I'll go over how to use DSLR cameras, and some tips on how to start viewing the world as a photojournalist. It will be a roughly 45 minute crash course.
2. I am working to publish the photo essay for an international audience. The NGO has connections at NPR, and we are working to create a piece that can be pitched to the goats and soda section of NPR.



**THANK
YOU
FOR
READING!**

