

What “good” is energy efficiency?

Circus arts as research method

Data Stories workshop
Maynooth University, Ireland
September 9, 2025

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McCarthy, Alaska street performance ~2007



“The Big Commute” Anchorage, Alaska, 2009
Photo by Loren Holmes



Fairview Neighborhood Plan
2014



Seeking the Source
2015

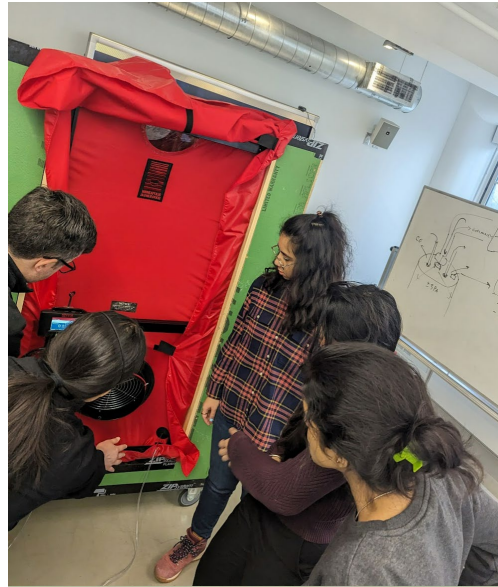


COVID Radio
2021

Spring 2024: Buffalo, New York



Nick Rajkovich's residential weatherization class



Meredith Palmer (Six Nations Tuscarora):
Race, Empire, Technology class

Rosy Simas

(Seneca Nation of Indians, Heron clan)



Rosy Simas by Tim Rummelhoff Courtesy McKnight Fellowships for Choreographers, 2016

What does it look like to embody the question: is energy efficiency always good?

**How we literally incorporate,
biologically, the material and
social world in which we live,
from in utero to death**

Krieger, 2005, p. 352
(epidemiology)

**non-conceptual, somatic, form of
knowledge**, Longo et al, 2008 (cognitive
neuroscience)

**a process and extension of a person
through such things as acting,
storytelling, deep listening, and
playing a musical instrument**

Spatz, 2017. (Humanities / theater)

**a way of describing porous, visceral, felt, enlivened
bodily experiences, in and with inhabited worlds**

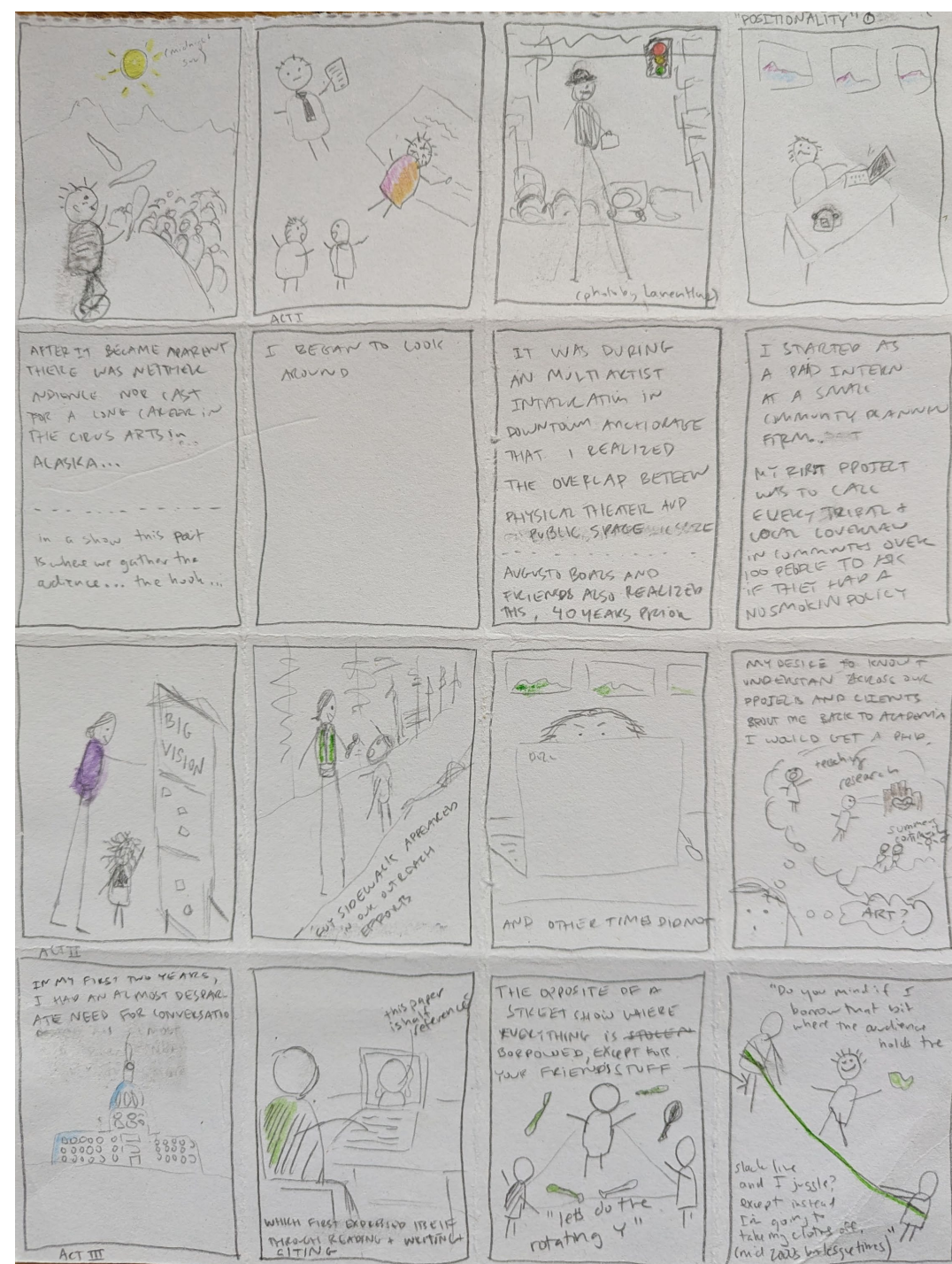
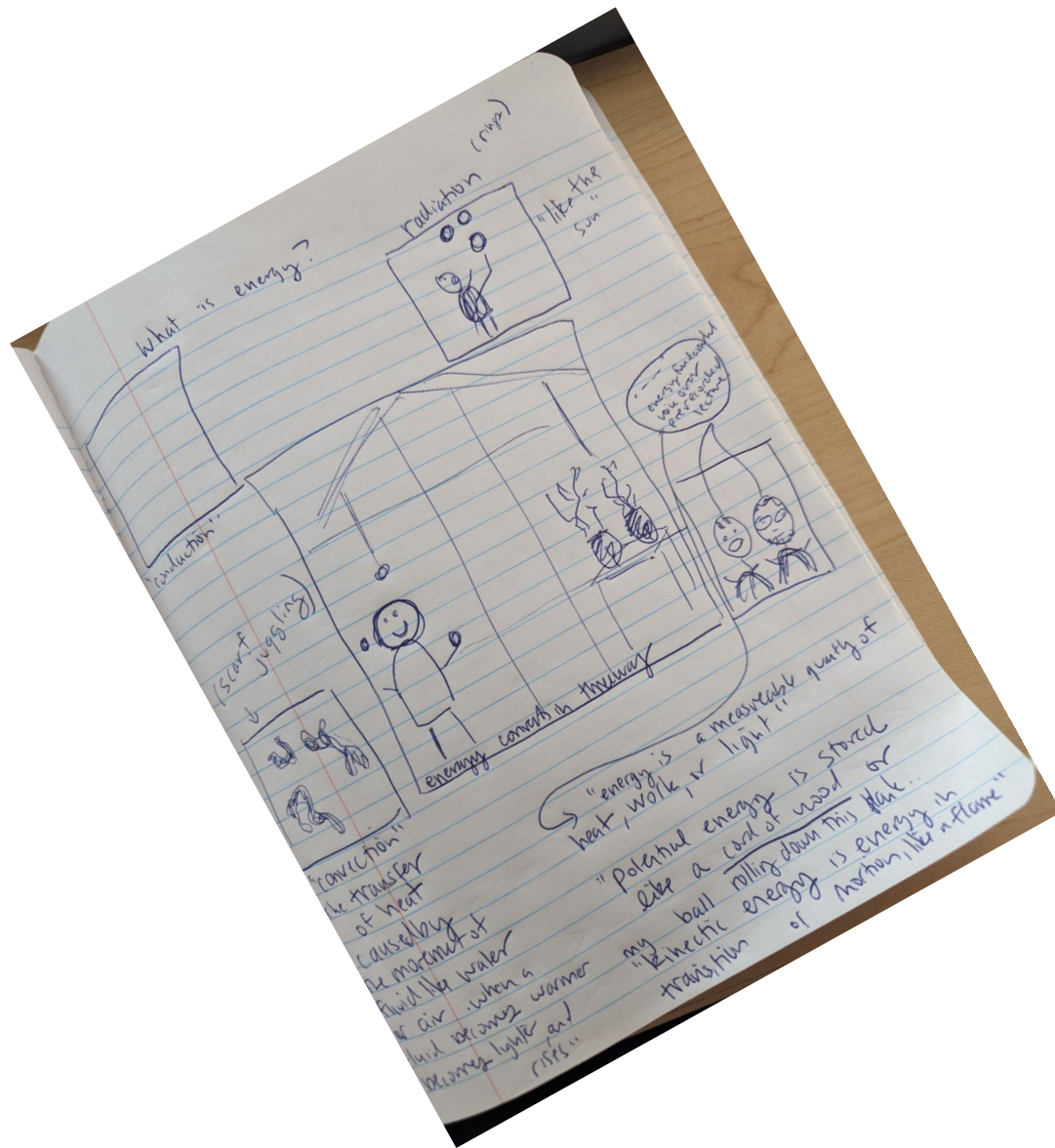
Anna Harris, 2016 (anthropology)

**Attention into the cultural and
performative** Giardina & Newman,
2011 in Lange 2020 (planning)

Circus show?

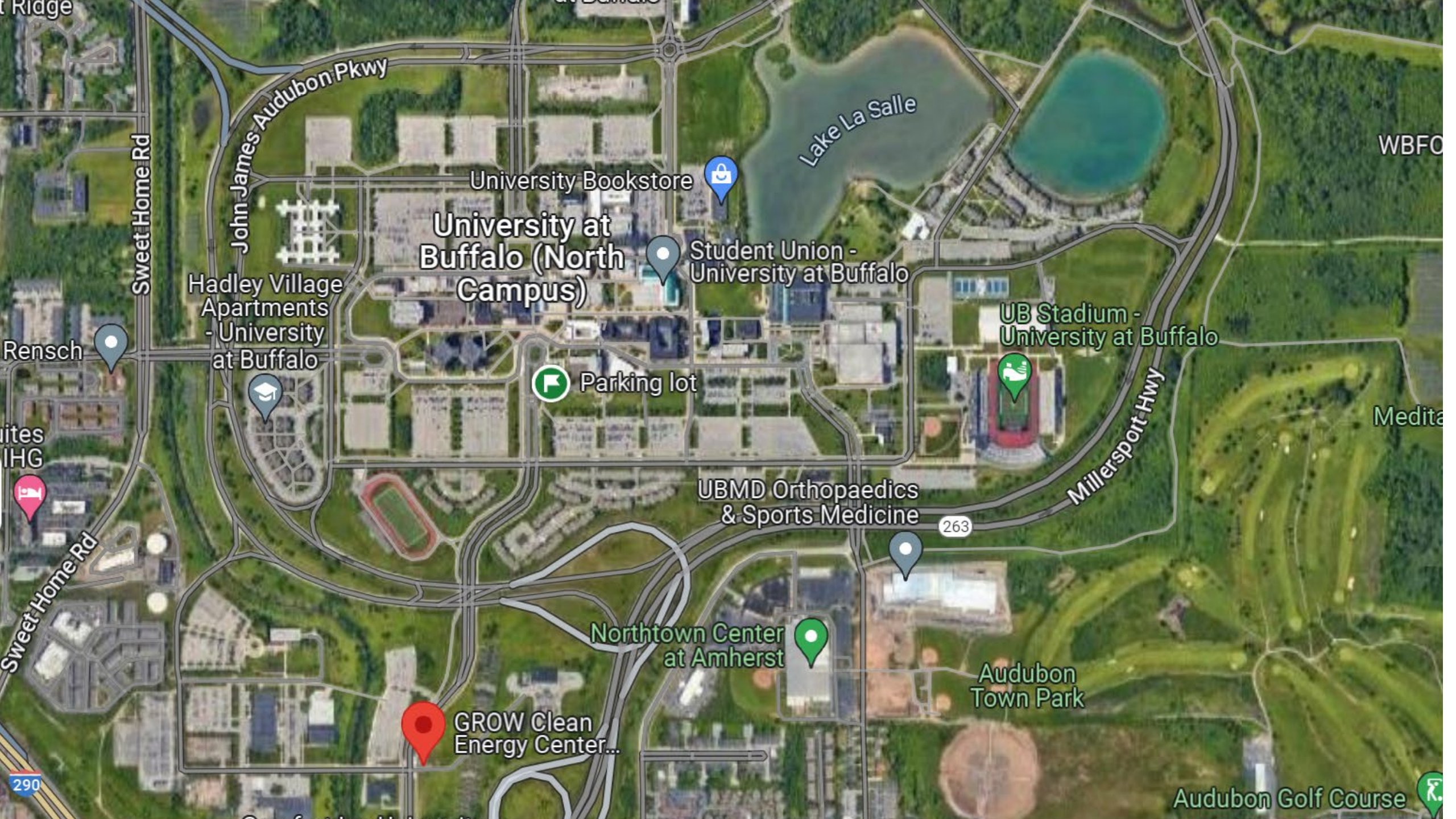


Graphic novella?



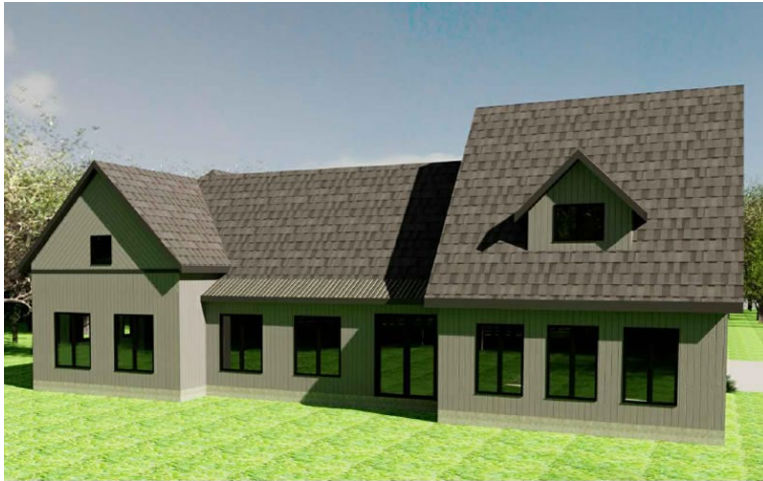
Circus arts mini-residency





$$\frac{45,000 \text{ kBtus}}{3,000 \text{ sf}} = 15 \text{ EUI}$$

Passive house



2 people in one unit
7.5 EUI per person

$$\frac{246,450 \text{ kBtus}}{3,000 \text{ sf}} = 82 \text{ EUI}$$

Buffalo double



7 people live in two units
11 EUI per person

$$\frac{120,000 \text{ kBtus}}{3,000 \text{ sf}} = 40 \text{ EUI}$$

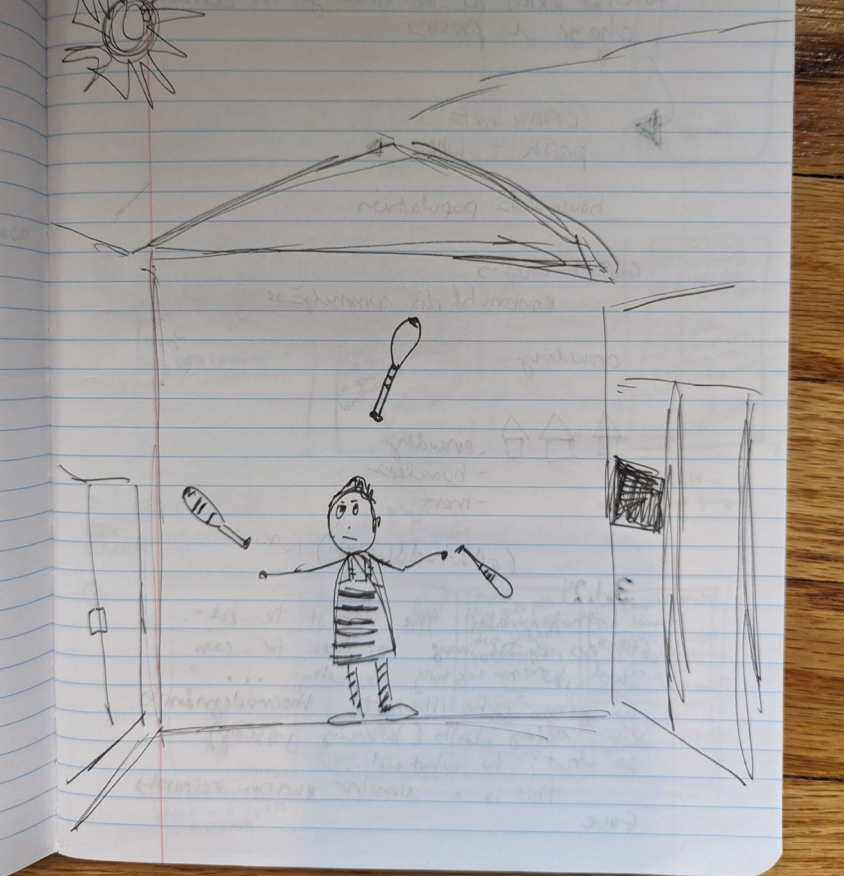
Buffalo double –
thermostat turned down



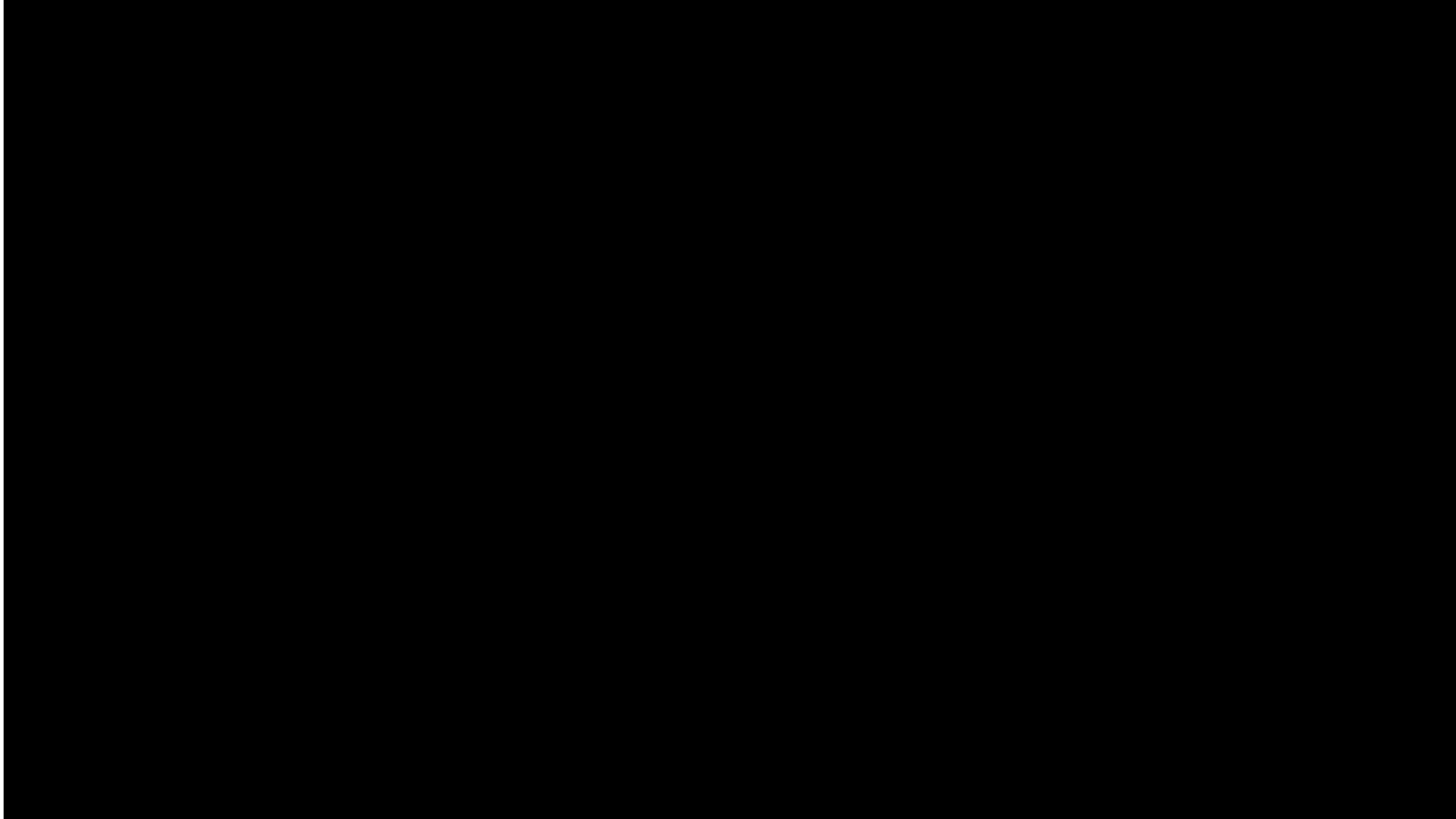
10 people live in two units
4 EUI per person

My gas bill, March 2023 – February 2024

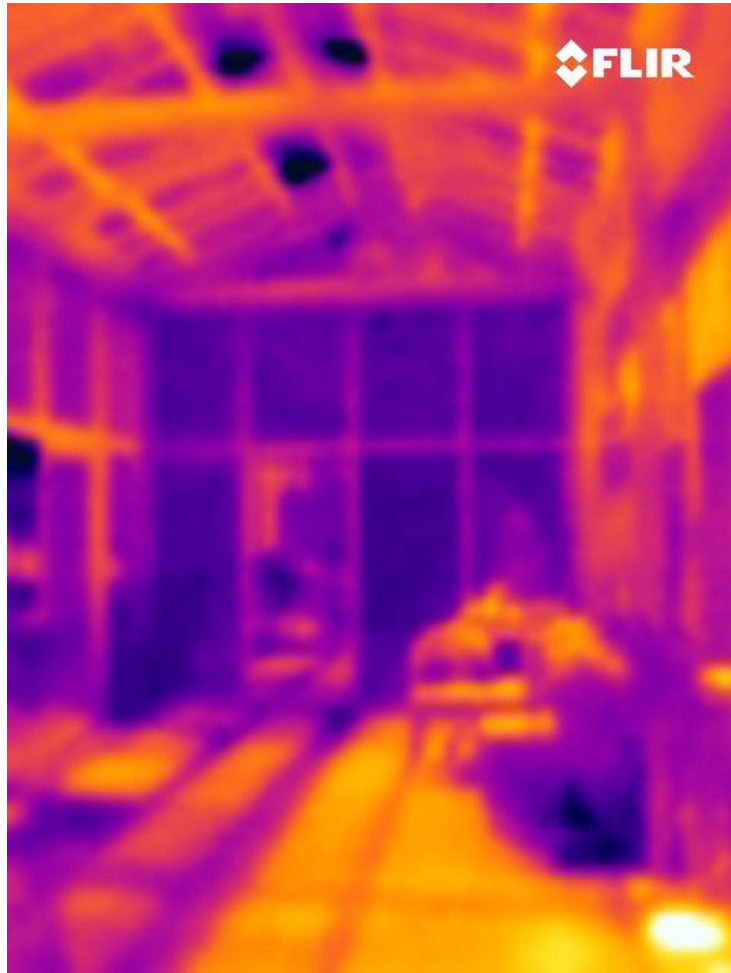
Natural Gas	Use (kBtu)*	Cost (\$)	Cost per kBTU
Mar-23	14364	157.05	\$ 0.01
Apr-23	8413.2	87.51	\$ 0.01
May-23	3180.6	46.19	\$ 0.01
Jun-23	102.6	18.78	\$ 0.18
Jul-23	513	21.27	\$ 0.04
Aug-23	1436.4	29.5	\$ 0.02
Sep-23	2052	35.09	\$ 0.02
Oct-23	5950.8	64.51	\$ 0.01
Nov-23	14877	101.61	\$ 0.01
Dec-23	16621.2	115.7	\$ 0.01
Jan-24	17544.6	123.27	\$ 0.01
Feb-24	18570.6	141.94	\$ 0.01



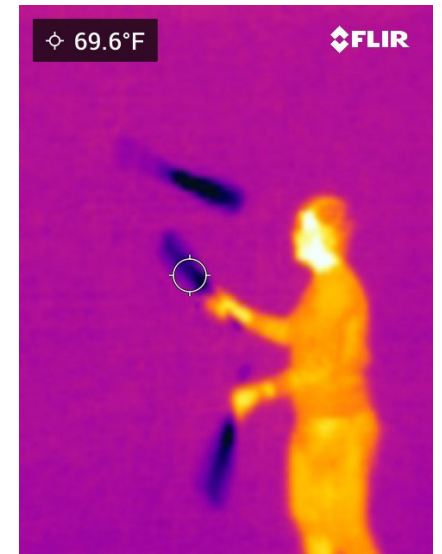
A new audience: what was the “show” I wanted for them?



An art project unfolds



An art project unfolds



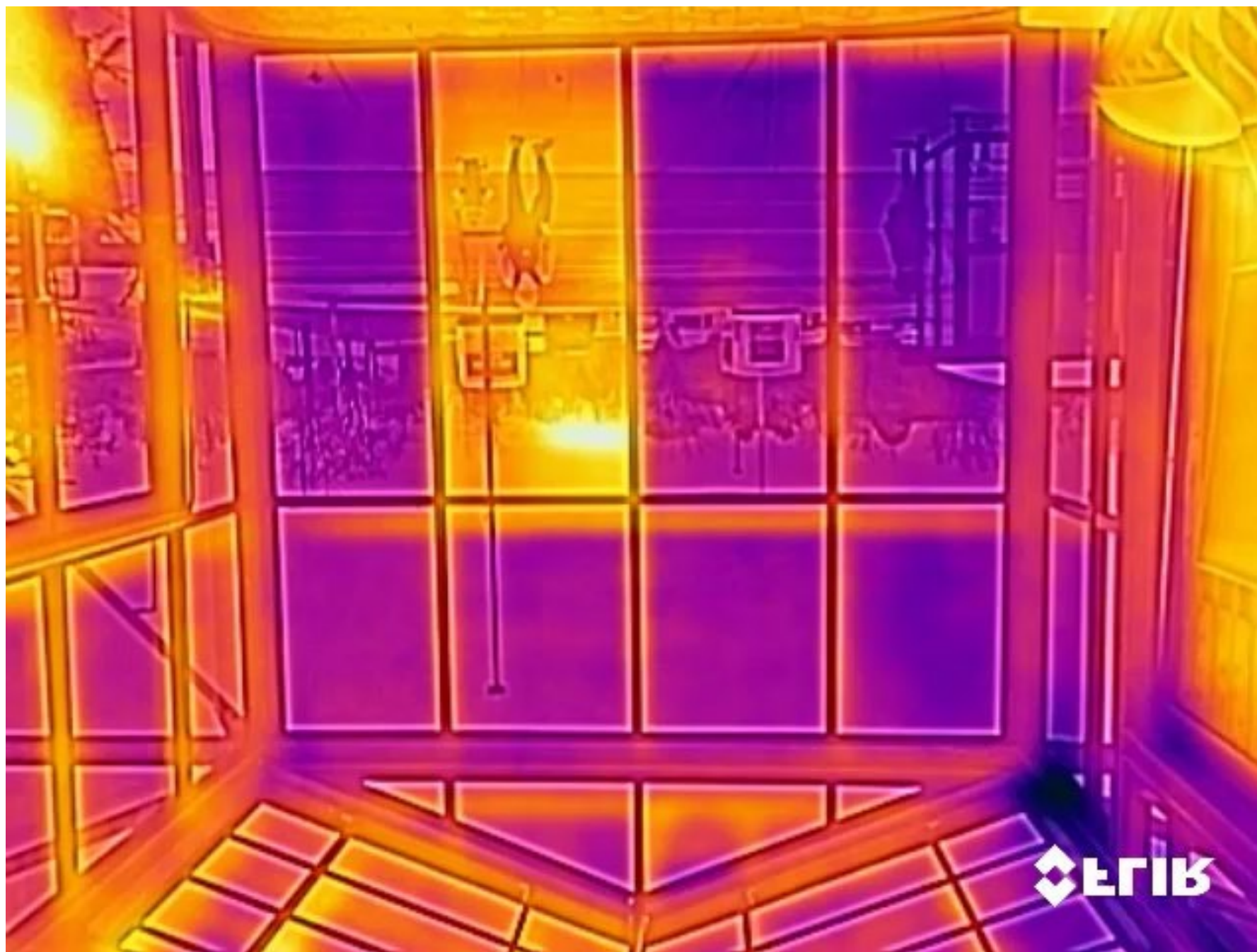




Photo courtesy of Meredith Kulwicki



Photo courtesy of Meredith Kulwicki

Forward-Looking Infrared Image (FLIR)

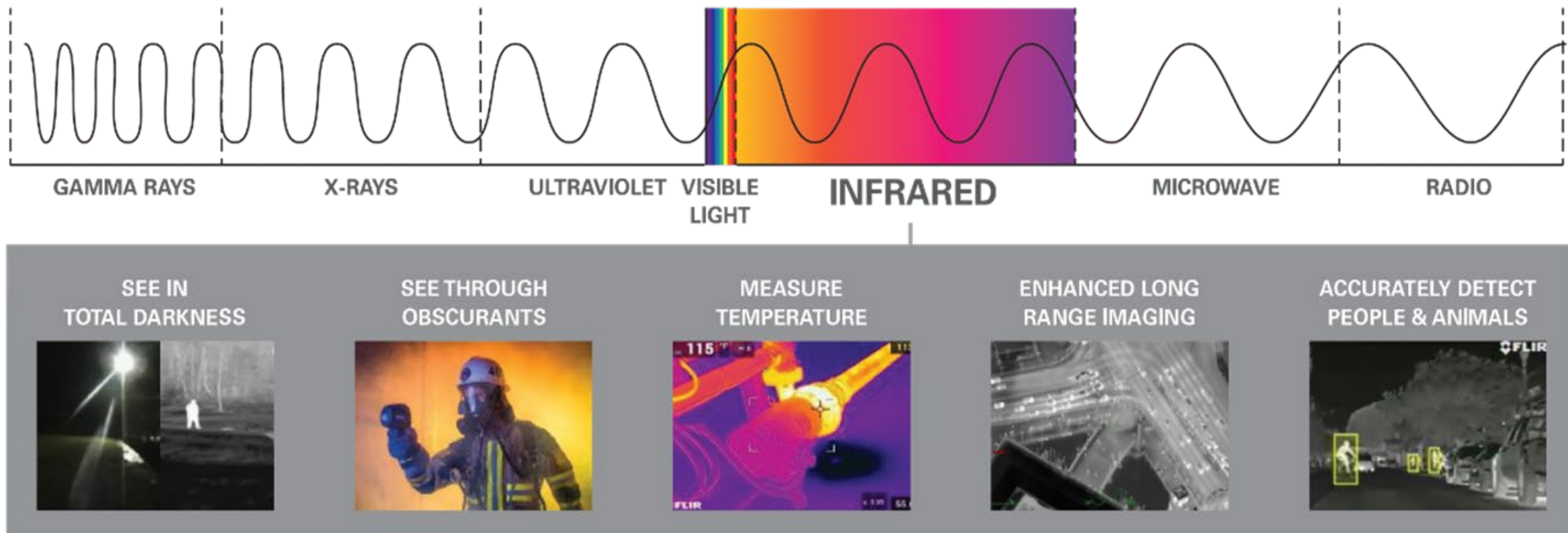
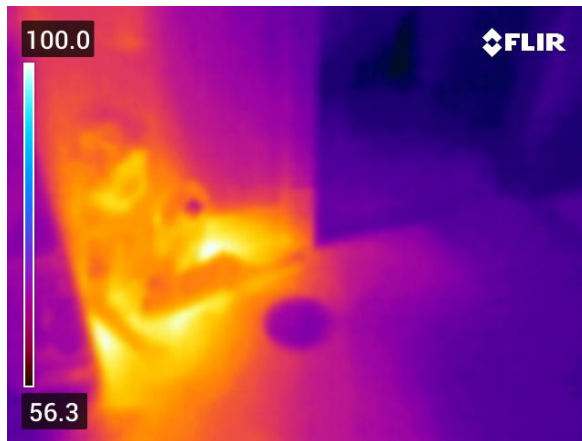
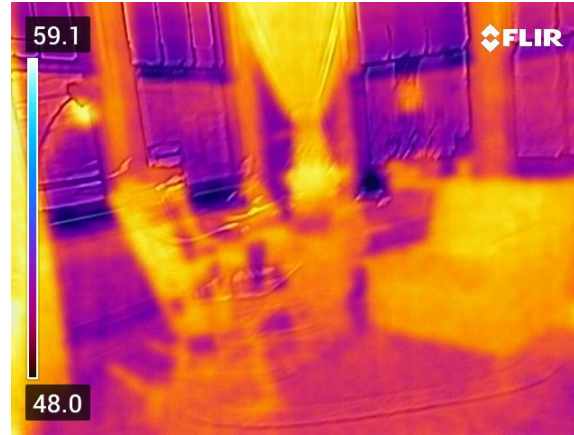


Image source: Flir 2022

“Telling the stories of an object therefore begins unpacking our own cliches, our certainties, our affects.”

What is included in a residential energy audit?





Different disciplines, similar ideas

- “Energy efficiency tells us nothing about what energy is used for or how uses of energy evolve over time” (Rinkinen, Shove, and Torriti 2019, p. 30)
- “Energy efficiency epistemologies” (Cooper, 2018)
- Queering housing design in Alaska (Nicewonger, Fritz, McNair, 2021)



What does it mean to embody my research question?



Why an arts-based research method?

- New questions: What “good” does energy efficiency actually produce, for whom, how and where?
- Clear positionality
- Anti-essentialist, nonlinear
- Relationship building
- Communicating research
- It’s joyful and life giving



Photo courtesy of Meredith Kulwicki

What's next?



Acknowledgements

Rosy Simas (Seneca), Nick Rajkovich,
Meredith Palmer (Six Nations
Tuscarora), Alissa Diamond

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