



“A picture is worth a thousand words”: Exploring visual communication of risk in Flint Water Crisis

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Yeqing Kong | NC State University

Agenda





INTRODUCTION

Background

Flint Water Crisis

Infrastructure, Economy, Health, and Politics



In April 2014, an ill-fated decision to switch water sources triggered a series of governance and infrastructure failures that contaminated drinking water in Flint, Michigan's seventh largest city, with high levels of lead.

Environmental injustice

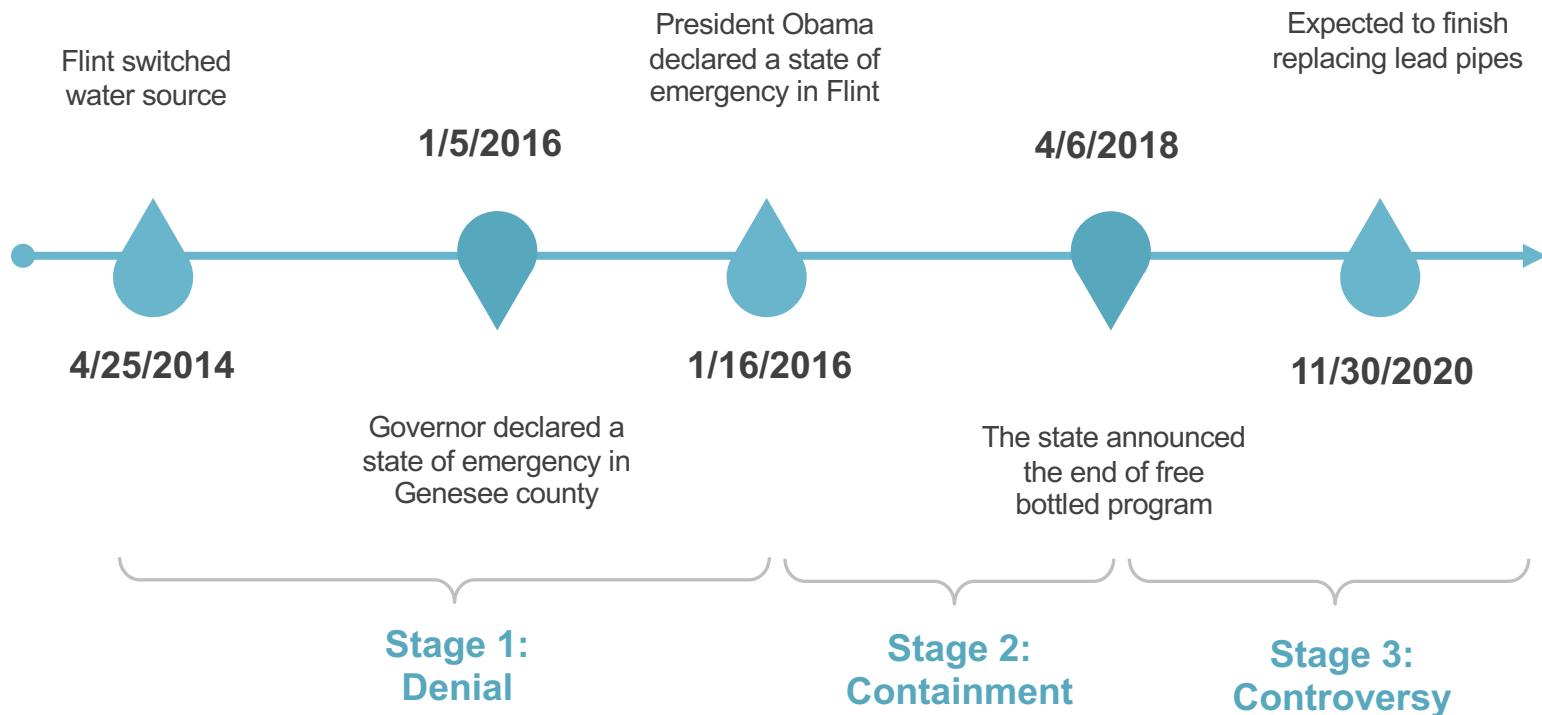


The Michigan Civil Rights Commission Report (2017)

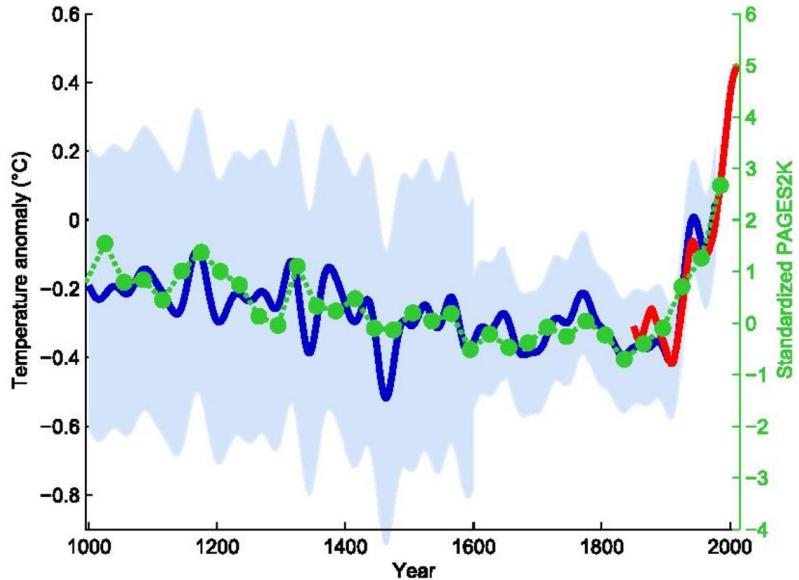
“deeply embedded institutional, systemic and historical racism”



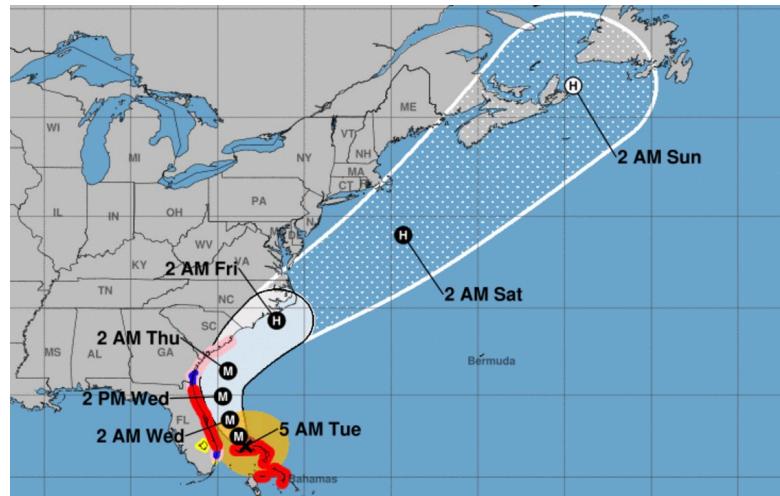
Timeline



Visual risk communication



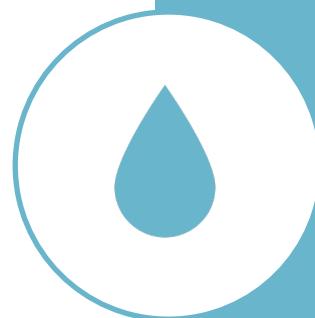
Hockey stick graph



Hurricane cone of uncertainty

Research questions

1. How do the visuals portray Flint Water Crisis?
2. What is the role of visuals in communicating risks?
3. How are the visuals circulated in digital spaces and what are the consequences?





METHODS

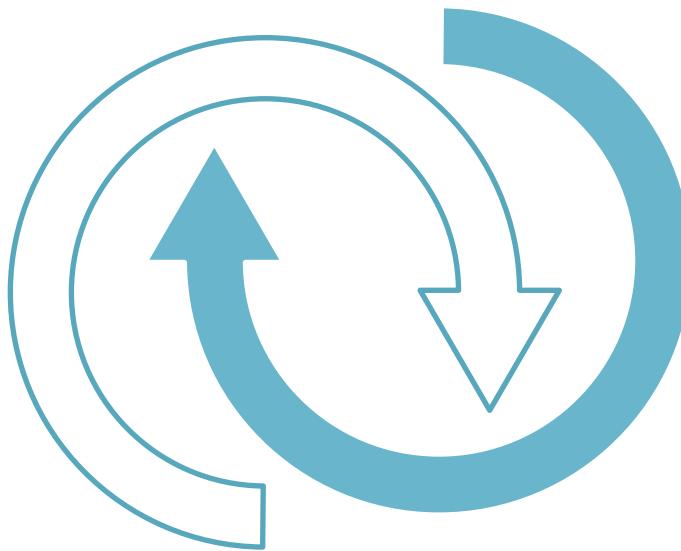
Sampling design

- **Data source:** government websites, online news, social media, NGO websites
- **Search terms:** Flint water OR Flint water crisis
- **Time frame:** 4/25/2014 – 4/6/2018
- **Sample size:** 200 images
- **Data storage:** Zotero
- **Unit of analysis:** each image

Data analysis

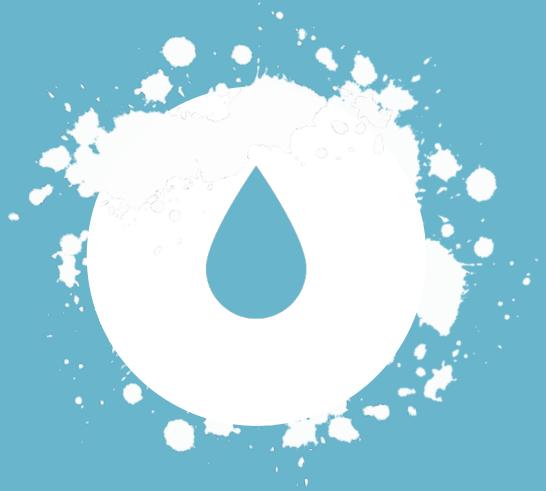
Visual Content analysis

- Assess the nature of visual content in the media



Iconographic tracking

- Follow the multiple transformations that an image undergoes during circulation (Gries, 2013, 2015)



RESULTS

RQ1 & 2: Visual themes

1. Contaminated water sample
2. Flint water infrastructures
3. Citizen protests
4. Distribution of bottled water
5. Mapping affected area
6. Household usage
7. Lead testing results
8. Community guidelines

Contaminated water sample



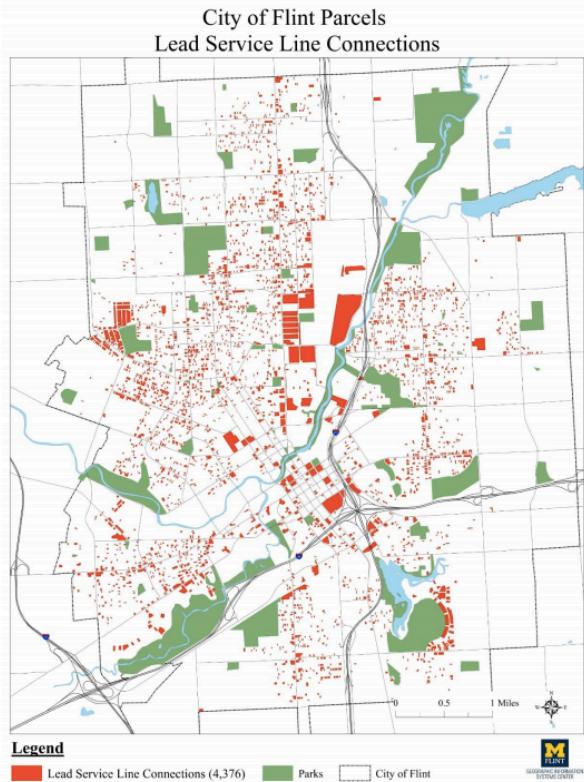
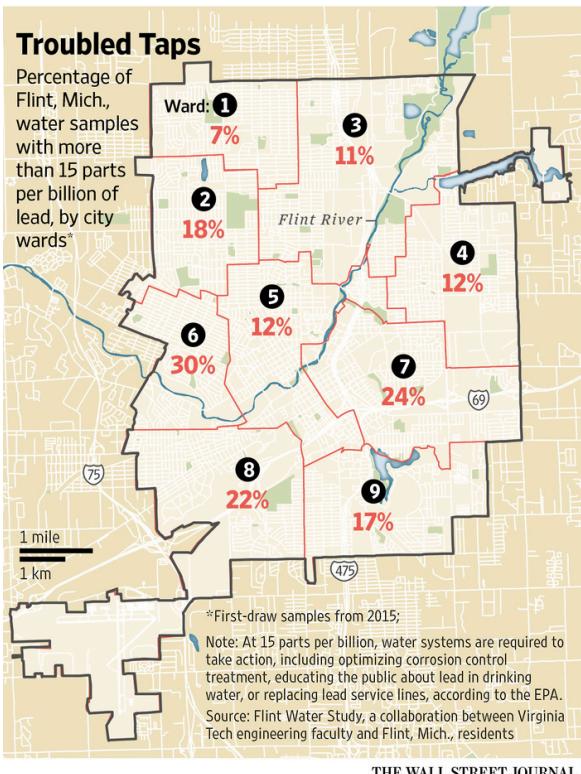
Flint water infrastructures



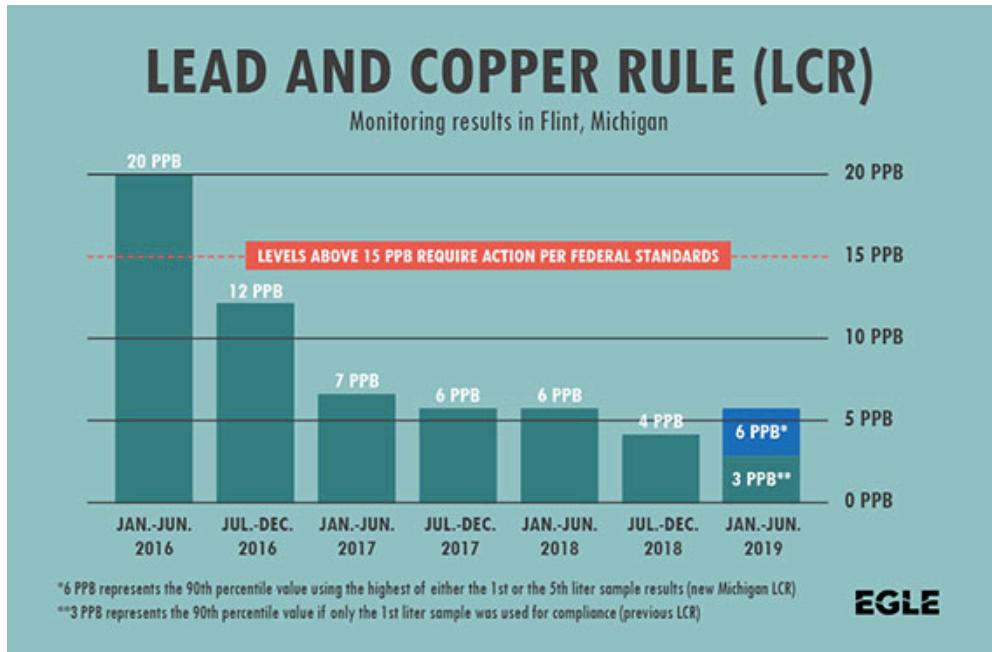
Citizen protests



Mapping affected area

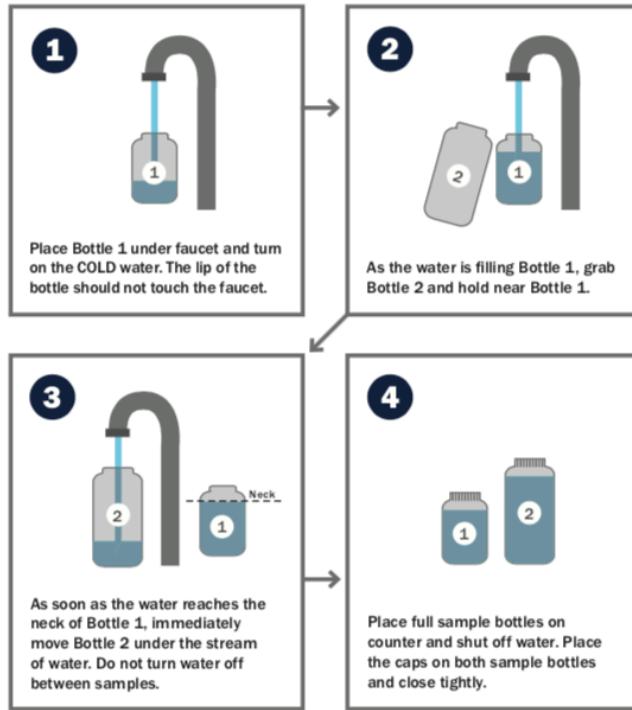


Lead testing results



Source: <https://www.michigan.gov/flintwater/>

Community guidelines



RQ3: Circulation of visuals

Closed system

vs.

Open system

Less circulation

More circulation

Genre ecologies framework (Spinuzzi & Zachry, 2000)

Closed vs. open system



Flint Water Crisis @helpflint · Feb 5

2112 Days and counting.... #FlintWaterCrisis #helpflint



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DISCUSSION

Implications

Theoretical

- Explore frameworks to extend the existing conversations of social justice to the realm of visual communication and visual literacy

Methodological

- Experiment with inventive research methods that combine qualitative and quantitative insights

Practical

- Incorporate more contextual information about the data and notable design choices

Limitations

- Limited sample size
- Focused on a specific local case
- Focused on digital media
- No ethnographic evidence

Future research directions



Examine the
non-digital
visual content
circulated in the
community



Analyze the visual
discourses of
environmental
injustice across
the nation/globe



Investigate the
audience reception
of visual content
through user
research

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Thank you

Any questions?

Email: ykong2@ncsu.edu

Twitter: [@YeqingKong](https://twitter.com/YeqingKong)

Website: www.yeqingkong.com