

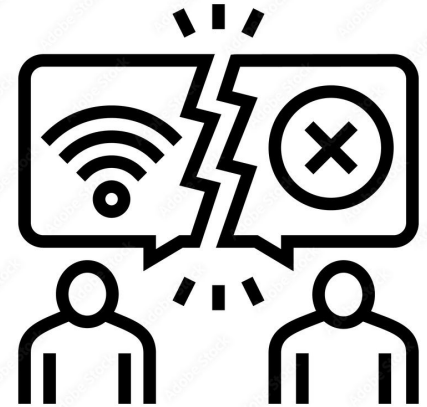
"It's like another world": Intra-Rural Digital Divides and Public Libraries as Rural Assets

Rebecca M. Jonas



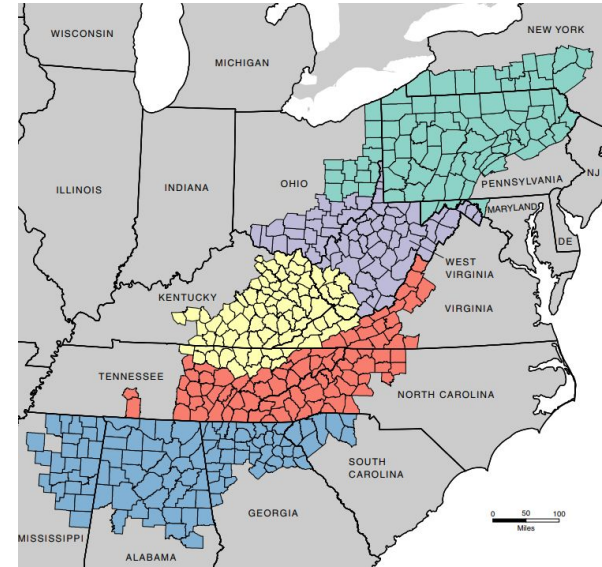
Reconceptualizing the “digital divide”

- Typically constructed as dichotomous
 - Rural/Urban
 - Counter-perspectives, e.g., Hardy et al., 2019;
- Obscures smaller-scale divides between grouped residents
 - Intra-rural (Kahn & Burrell, 2021), intra-urban
- Without visibility, intra-rural divides increase as rural-urban divides close
 - Most privileged communities benefit, at expense of less advantaged locales



Studying intra-rural digital divides in rural Appalachia

- Rural Appalachian context
 - Systemically disadvantaged region of the eastern US
- Study designed and run in collaboration with local public libraries
 - Key community digital access points (Kozubaev & DiSalvo, 2021)
- Identifying presence and impacts of intra-rural digital divides
- Assets-based approach to mitigate observed divides (Hardy et al., 2018; Pei & Nardi, 2019; Wong-Villacres et al., 2020)
 - Recognizing community capacity to resolve community issues



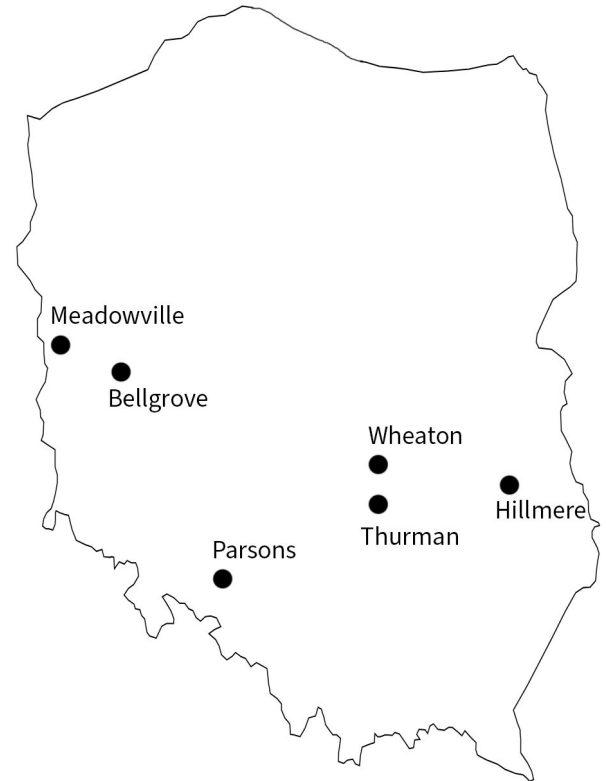
Assets-based approaches to intra-rural digital divides

RQ1: What disparities are present in computer and internet access, use, skills, and perception between different communities within the same rural county?

RQ2: How can local assets be leveraged to resolve intra-rural digital divides in rural Appalachia?

Multi-sited ethnographic methodology

- Six towns in one rural county in Appalachia
 - County population ~30,000 (density, ~30/mi)
 - Town populations from 900 - 4,000
- February - August 2023
- 30 participants
- Structured research activities hosted at public libraries. Unstructured observations and interviews conducted throughout county



“That’s at the west end of the county. It’s like another world”



Public library in Bellgrove, west end town of <900 people



Public library in Wheaton, an east end town. It is the largest town and county seat of Fairmont County, <4,000 people

West vs. East divides

“As far as on the tech side, that's a big impediment because the broadband communication is so poor that our internet throttles, and even if you go to a new web page, it'll come out and say, 'You can't find the page.' ... And then I'll have to refresh it. **It's just about on par with dial-up.**” - M1, Meadowville



“I guess I feel like **I was having the normal teen experience**, downloading things off of LimeWire and getting on MSN Messenger.” - H30, Hillmere/Wheaton



Broader experiences of digital divides

- Even on the east end, internet was spotty
- Coffee shop on east end with pay-to-access WiFi

“I was a programmer for about six months, just totally freelance, and you pick up work here and there. And I would come out and try to find somewhere to set up, and the [Mystic Mug] was always where I landed. I mean, [laughter] but I'd have to go get two more hours of internet all the time.” - W20, Wheaton



Librarians as champions of digital equity

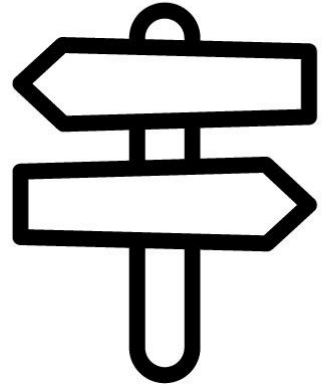
- Digital equity, at intra-rural and broader levels
 - In 2021, west end WiFi <1 Mbps, east end 10-30 mbps
 - Now, all library Wifi 80-100 Mbps

“All the libraries are not like the people in the community...We collaborate. We have meetings where we discuss and improve each of our things and talk. Yeah, libraries are I guess like doctors and nurses. We work together. Not against each other. We work together.” - T23, Thurman



Library staff promote intra-rural community

“[My patrons] don't feel comfortable at a big library asking the questions. I think they feel more like that they don't equal...But the Fairmont County Library, they got some amazing workers up there...I wouldn't be embarrassed to ask them anything. And that's what I portray to my patrons...make yourself feel comfortable enough to ask something if you need to, and I guarantee you, you'll be retreated with respect. - P15, Parsons



Public libraries as community assets

- Public libraries are built on values of **equality and equal access**, but intra-rural digital divides can undermine these values
- All patrons (should) receive equivalent services
- In my communities, this value holds at the inter-library level
- Library staff leverage the library community to promote community equity

Public libraries promote material equity

- Library staff applied for grants that benefit all libraries
- Results: equivalent updated hardware, equivalent updated WiFi
- Promotes digital equity, however, still constrained to public use
- Libraries have limited resources to leverage this role



Public libraries promote social cohesion

- Digital equity at local libraries can reduce feelings of unfairness and resentment among residents
- Promoting activities and resources between libraries promotes community building, social cohesion



Thank you!

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Hardy, J., Wyche, S., & Veinot, T. (2019). Rural HCI research: Definitions, distinctions, methods, and opportunities. *Proceedings of the ACM on human-computer interaction*, 3(CSCW), 1-33.

Kahn, Z., & Burrell, J. (2021). A sociocultural explanation of Internet-enabled work in rural regions. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 28(3), 1-22.

Pei, L., & Nardi, B. (2019, May). We did it right, but it was still wrong: Toward assets-based design. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-11).

Wong-Villacres, M., Gautam, A., Roldan, W., Pei, L., Dickinson, J., Ismail, A., ... & Yip, J. (2020, October). From needs to strengths: Operationalizing an assets-based design of technology. In *Companion Publication of the 2020 Conference on Computer Supported Cooperative Work and Social Computing* (pp. 527-535).

Kozubaev, S., & DiSalvo, C. (2021, May). Cracking public space open: design for public librarians. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).

Thank you!

- Intra-rural digital divides perpetuate hidden digital inequity
- Intra-rural digital divides exist within, but apart from, broader digital divides
- Rural public libraries mitigate material and social rural divides

I am on the job market seeking a tenure-track faculty position

rejonas@ucsc.edu
rebeccajonas.com

