

# Show your work! Three qualitative methodologies to revise and reimagine quantitative work as communication design

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## ABSTRACT

Panelists outline three qualitative methodologies: stasis networks, interlocking surveillance, and rhetorical platform analysis. Each methodology guides researchers and practitioners to identify and resolve different types of issues with the communication design of quantitative work, such as conflicts that emerge during the interpretive labor or how to assess and act against harmful policies that impact the data digital platforms collect and use.

## CCS CONCEPTS

• **Ethnographic studies;** • **Empirical studies in visualization;** • **Field studies;**

## KEYWORDS

qualitative, methodology, critical data studies, communication design

## ACM Reference Format:

Chris A. Lindgren, Morgan C. Banville, and Elena Kalodner-Martin. 2023. Show your work! Three qualitative methodologies to revise and reimagine quantitative work as communication design. In *The 41st ACM International Conference on Design of Communication (SIGDOC '23)*, October 26–28, 2023, Orlando, FL, USA. ACM, New York, NY, USA, 2 pages. <https://doi.org/10.1145/3615335.3623019>

## 1 INTRODUCTION

Due to the rapid growth of the data professional industry [1] and shifting policies and provisions of big data [2, 3], this panel offers three portable qualitative methods—stasis networks, interlocking surveillance, and rhetorical platform analysis—to recognize and reimagine the data process-to-product pipeline as a rhetorical, communicative process. Technical and professional communication (TPC) has been developing methodologies to study and conduct data collection, interpretation, and design of data [4–6]. Each panelist extends such methodologies to account for the situated contexts and decisions that professionals make in relation to a fluctuating and dynamic data infrastructure. Because TPC is known for advocacy and change [7], each speaker proposes a method/ology that examines how to identify and cope with the complexity of reconciling competing definitions and uses of metrics (Lindgren and

Banville), as well as the ideological forces that drive data and platform precarity (Kalodner-Martin). Takeaways include three guiding methodologies and approaches to better understand, adapt, and cope with the precarity and situatedness of data work.

## 2 IDENTIFYING RECURRENT CONFLICTS AND ISSUES DURING QUANTITATIVE WORK WITH STASIS NETWORKS

Lindgren provides a qualitative methodology to identify recurrent issues that occur across quantitative work: stasis networks (SNs). The SN methodology addresses the following question: What conflicts do data professionals encounter and create more often than others, and during what practices (processing, analysis, visualization, etc.)? Stasis networks qualitatively trace connections between three types of nodes called MAPS: mediating artifacts (MA), practices (P), and types of rhetorical moves called stases (S).

The “stases” [8, 9] tracked in SNs are 5 ways that professionals communicate their decision-making and positions on an issue by discussing: (1) if there is an issue (conjecture); (2) what may have caused the issue; (3) how to define the issue; (4) an issues’ significance or importance (quality); and (5) how to proceed next (translative). The networks [10] in SN map where MAs (texts, tools, aspects of data like metrics, a visual’s color palettes, etc.) and practices (Ps) intersect with stases. Lindgren explains how Table 1 served as a guiding tool to qualitatively map the MAPS nodes and identify hotspots where conflicts emerged, such as data professionals’ work to define, analyze, and represent metrics that would yield an interesting and ethical data story.

## 3 DATA AS ADVOCACY: INTRODUCING INTERLOCKING SURVEILLANCE AS A METHODOLOGICAL FRAMEWORK

Banville extends scholarship regarding surveillance technologies [11], such as biometrics, by introducing a methodological framework: interlocking surveillance (IS). The IS framework guides professionals through an intersectional [12] approach to data collection, coding, and analysis by recognizing and confronting power imbalances maintained over the observed audience, who are often not informed of such collection. The goal of the methodological framework is to call attention to the ways technical communicators may make suggestions and intervene in processes to advocate (for patients and users), create awareness (through accessible language and materials), and communicate transparency (about data collection and practices). The following IS heuristic assesses “sites” of surveillance [11] by accounting for the collection of visible and invisible data derived from those being observed [13]:

- What are the intended purposes of the technology?



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*SIGDOC '23, October 26–28, 2023, Orlando, FL, USA*  
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ACM ISBN 979-8-4007-0336-2/23/10.  
<https://doi.org/10.1145/3615335.3623019>

**Table 1: Example of a stasis network table that maps the stases - conjecture (CO), Definition (D), Cause (CA), Quality (Q), and Translative (T) - across Practices (P) and Mediating Artifacts (MA).**

	CO	D	CA	Q	T	P1	...	MA1	...
CO	-								
D		-							
C			-						
Q				-					
T					-				
P1						-			
...							-		
MA1								-	
...									-

- How does the corporation justify its standard usage?
- How does it categorize people and into what categories (and for what purpose)?
- How does the corporation justify its technological usage?
- How are people informed about the capabilities, data collection, and more?
- Is the technology poised for efficiency purposes, or implemented during a time of “urgency”?

The framework is applied to a specific case example situated in healthcare during the presentation. Technical communicators are in unique positions to analyze and inform audiences of the varying degrees that surveillance is applied to bodies using interlocking surveillance as a framework. Banville argues that technical communicators and surveillance scholars can apply IS to inform decision-making processes into sites of resistance and advocacy [7].

#### 4 OUR UNSTABLE DATA: METHODOLOGIES FOR ADDRESSING PLATFORM PRECARIETY

Kalodner-Martin calls for the interrogation of ideologies that drive data and platform precarity [3, 13]. Platform precarity is the inherently unstable nature of digital infrastructure environments, such as social media networking sites. Existing scholarship has already examined how platform precarity affects interactions between users, demonstrating that platforms are “sites for rhetorical action but also determine the contours of that action” [14]. Kalodner-Martin shifts this focus on user interaction toward the platforms and the data they collect and use, since sudden changes to a platform’s design can exacerbate precarity for users.

Situated in a critical interface analysis of health communication practices on social media sites, Kalodner-Martin grounds a discussion of platform precarity in two key examples: intensified political pressure to ban and restrict access to TikTok due to perceived threats to national security and recent changes to the Twitter/X timeline and API following Elon Musk’s platform purchase. These policies have the potential to intensify power imbalances between those who are institutionally-authorized to share medical knowledge and those who are not, which can exacerbate medical information and care disparities for those already vulnerable to silencing, dismissal, and harm in clinical settings. She argues that addressing platform precarity through rhetorical platform analyses

is critical for contextualizing user experiences on these sites and for revealing and rejecting how that platform infrastructure is deeply embedded—often in obscure ways—in hegemonic values, relations, and discourses [15] that contribute to inequity and injustice [16].

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