Epistemic Justice and Civilian Testimony in the Gaza Conflict (2023–2024)

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Presentation Outline

A structured overview of the research presentation on epistemic justice and civilian testimony.

Research Agenda

- Introduction and Theoretical Framework
- Motivation, Objectives & Literature Review
- Methodology and Data Analysis
- Results and Empirical Findings
- Discussion, Contributions, and Conclusion

02

Introduction & Theoretical Framework

Setting the stage for the study of testimonial credibility in conflict zones.

Problem Domain & Current State

- **Context:** Gaza conflict from October 2023 onward provides a critical case study of structural violence and media suppression.
- **Current State:** Civilian testimony functions within compromised environments where traditional verification mechanisms are unreliable.
- **Key Challenge:** Truth claims are negotiated under conditions where survival itself becomes an act of bearing witness (Zelizer, 2021).
- **Research Gap:** Limited empirical analysis of how structural power asymmetries systematically deny credibility to Palestinian civilian accounts.

Motivation & Research Objectives

1

Core Motivation

To understand how civilian testimony is validated or silenced within environments of structural violence and media suppression during intense conflict.

2

Key Research Questions

1. How is testimonial credibility constructed or denied? 2. What contextual factors foster/hinder epistemic trust? 3. How does infrastructure targeting shape testimony?

3

Expected Impact

Provide empirical evidence for structural epistemic injustice and reveal patterns of communicative resilience amid systematic suppression.

Theoretical Framework: Epistemic Injustice

Fricker's Epistemic Injustice (2007)

- ✪ Testimonial Injustice: Prejudice causes a hearer to give a deflated level of credibility to a speaker's word.
- ✪ Hermeneutical Injustice: Structural prejudice in shared resources for social interpretation puts someone at a disadvantage.
- ✪ Structural Injustice: Systemic, not merely individual, denial of credibility due to power asymmetries.

Application to Gaza Conflict

- ✪ Palestinian civilian accounts are systematically subjected to doubt and dismissal.
- ✪ Targeting of communication infrastructure creates hermeneutical barriers.
- ✪ International media frameworks often fail to protect the epistemic rights of affected populations, constituting structural injustice.

Related Work & Literature Review

✪ **Previous Approaches:** Studies on media framing of conflict (e.g., Philo & Berry, 2011), digital witnessing (Andén-Papadopoulos, 2014), and humanitarian communication.

✪ **Limitations of Existing Methods:** Often qualitative, case-study based, lacking longitudinal quantitative analysis of credibility patterns.

✪ **How This Work Differs:** Integrates large-scale dataset analysis (ACLED) with qualitative narrative coding to reveal systematic, structural patterns of epistemic injustice.

✪ **Theoretical Extension:** Applies and extends Fricker's framework to a contemporary, high-intensity conflict with digital documentation.

03

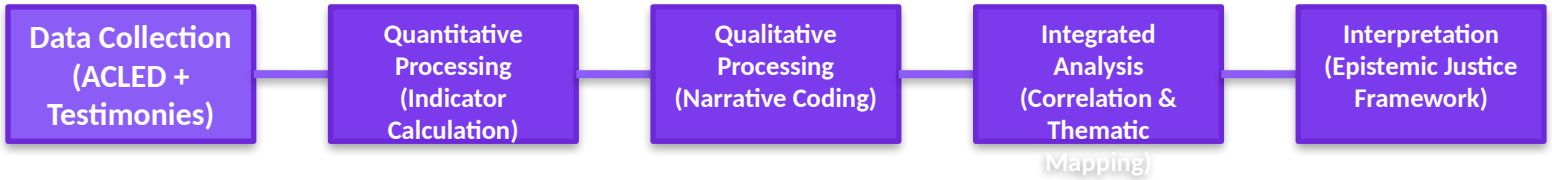
Methodology & Data Analysis

A mixed-methods approach combining quantitative trend analysis with qualitative narrative coding.

Research Design & Data Sources

- **Research Approach:** Mixed-methods design following Creswell (2018), integrating statistical indicators with thematic analysis.
- **Primary Data Source:** ACLED (Armed Conflict Location & Event Data) Palestine-Israel Conflict Dataset (Oct 2023 - Apr 2024).
- **Supplementary Data:** Thematic coding of civilian testimonies from verified social media uploads, NGO reports, and journalist dispatches.
- **Tools & Technologies:** R and Python for statistical analysis; NVivo for qualitative coding; data visualization libraries (ggplot2, Matplotlib).

Methodological Framework & Key Constructs



Algorithm & Analysis Details

- **Mixed-Methods Algorithm:** Sequential explanatory design. Quantitative analysis identifies patterns; qualitative analysis explains them.
- **Temporal Analysis:** Monthly calculation of key indicators (Civilian Targeting Index, Humanitarian Access Frequency, Media Visibility Score).
- **Correlation Analysis:** Pearson's r used to measure relationships between quantitative indicators (e.g., CTI vs. Infrastructure Destruction).
- **Narrative Coding:** Thematic analysis of testimonies for empathic tone, verification claims, and mentions of infrastructural barriers.

Experimental Setup & Key Metrics

Metric	Description	Calculation Method
Civilian Targeting Index (CTI)	Normalized measure of events targeting non-combatants.	Events with 'civilian' tag / Total conflict events per period.
Humanitarian Access Frequency (HAF)	Measure of aid access and movement.	Reports of aid delivery / Total days in period.
Media Visibility Score (MVS)	Proxy for communication infrastructure functionality.	Volume of verified testimonial uploads from Gaza.
Empathic Tone Index (ETI)	Qualitative measure of emotional resonance in testimony.	Sentiment & empathy coding of narrative samples (0-1 scale).
Infrastructure Destruction Rate (IDR)	Measure of damage to built environment.	Events tagged 'infrastructure' / Total conflict events.

Constraints & Assumptions

1

Data Limitations

Reliance on ACLED dataset, which may have inherent limitations in real-time conflict documentation and potential reporting biases.

2

Temporal Scope

Focus on specific time period (October 2023 to April 2024). Findings may not be generalizable to other phases of the conflict.

3

Verification Context

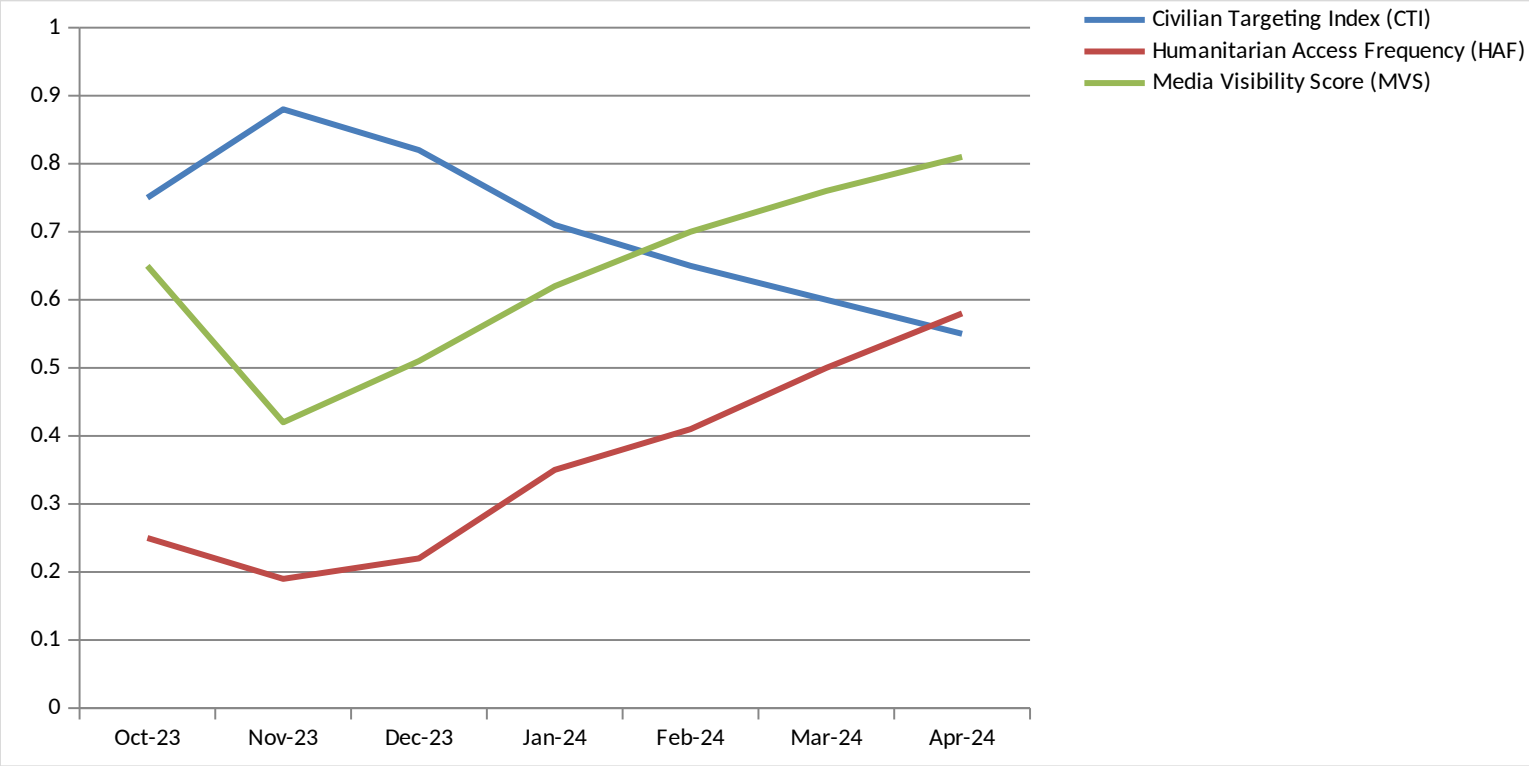
Operates within a context of compromised traditional verification mechanisms (journalist access, official investigations).

04

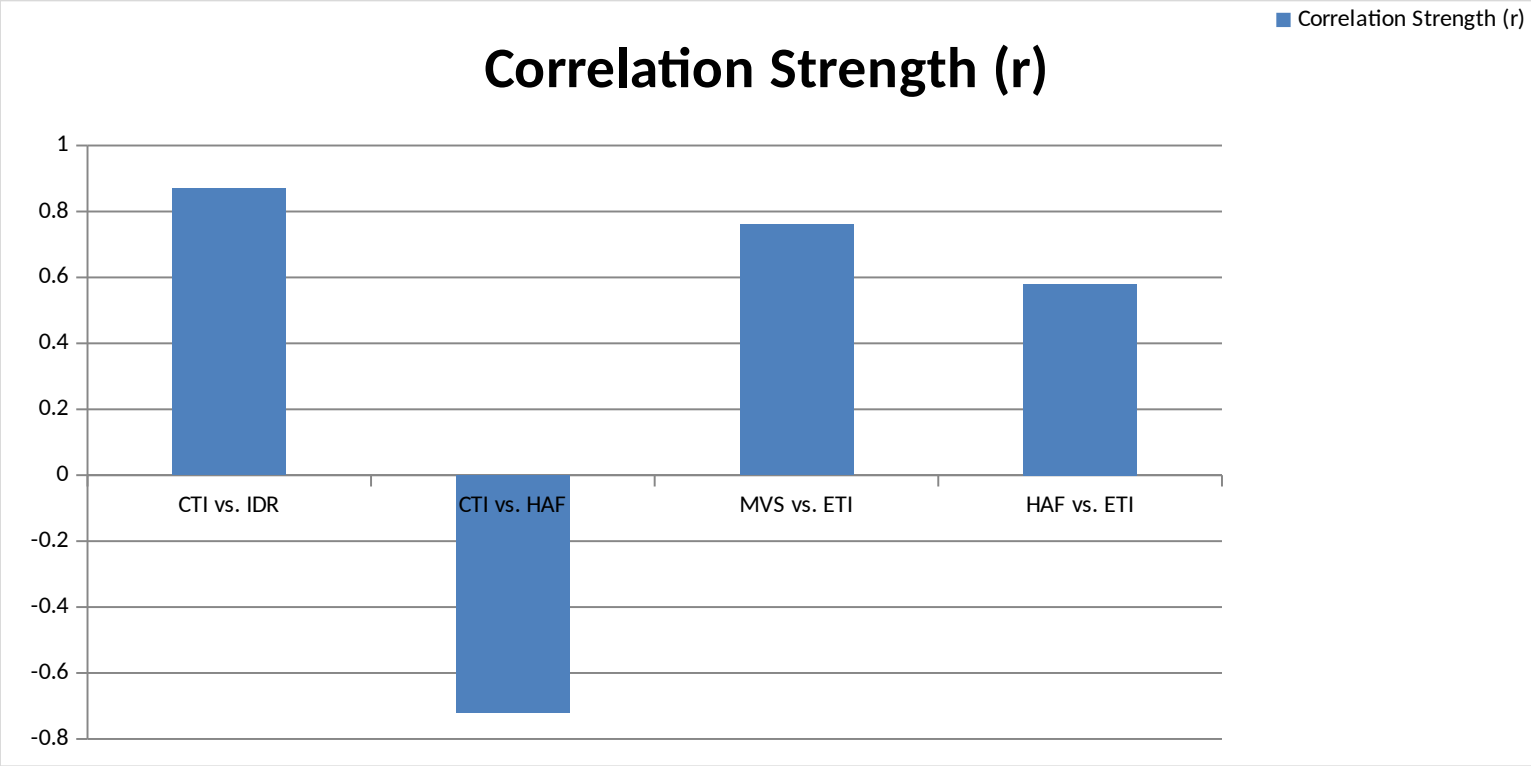
Results & Empirical Findings

Quantitative and qualitative insights into patterns of violence, access, and testimony.

Temporal Trends in Key Indicators



Correlation Analysis Between Indicators



Key Quantitative Findings

✪ **Peak Violence & Low Access:** CTI peaked at 0.88 in Nov 2023, coinciding with the lowest HAF (0.19), demonstrating the inverse relationship between violence intensity and humanitarian/epistemic conditions.

✪ **Systematic Co-occurrence:** Strong positive correlation (r = 0.87) between Civilian Targeting Index and Infrastructure Destruction Rate indicates violence against civilians systematically coincides with damage to communication networks.

✪ **Visibility-Emotion Link:** Positive correlation (r = 0.76) between Media Visibility Score and Empathic Tone Index suggests that when documentation is possible, testimonies carry stronger emotional resonance.

✪ **Recovery Pattern:** MVS showed gradual recovery from Jan 2024 onward, reaching 0.81 by April, indicating adaptive documentation efforts despite ongoing constraints.

Qualitative Insights & Thematic Analysis

Themes from Civilian Testimonies

✪ Collective Verification: Multiple parallel uploads of the same event create a distributed trust architecture, countering claims of fabrication.
✪ Infrastructural Testimony: Testimonies explicitly mention destroyed hospitals, schools, and communication towers as evidence.
✪ Emphasis on Precise Location & Time: Narratives include hyper-local details to establish veracity within a compromised information landscape.
✪ Appeals to Shared Humanity: Frequent use of familial terms and descriptions of daily life to bridge empathic gaps.

Implications for Epistemic Justice

✪ Distributes epistemic authority away from institutional gatekeepers.
✪ Makes the destruction of epistemic capacity itself a documented fact.
✪ Represents an adaptive 'forensic' turn in civilian witnessing under duress.
✪ Attempts to overcome hermeneutical injustice by framing experience in universally relatable terms.

Mechanisms of Credibility Construction/Denial

Mechanisms Fostering Credibility	Mechanisms Denying Credibility
Collective Verification (multiple sources)	Institutional Gatekeeping (foreign media framing)
Forensic Detail (time, location, damage)	Algorithmic Demotion (social media content moderation)
Empathic Resonance (shared human experience)	'Fog of War' Rhetoric (systematic doubt)
Adaptation to Infrastructure Loss (offline-to-online chains)	Asymmetric Verification Demands (higher burden on Palestinian sources)

05

Discussion & Contributions

Interpreting findings, stating contributions, and outlining future directions.

Interpretation of Key Findings

✪ **Empirical Evidence for Injustice:** The strong correlation patterns (CTI vs. HAF: r = -0.72) provide quantitative evidence of the structural conditions that suppress testimony.

✪ **Distributed Trust Architecture:** Civilian responses to infrastructural targeting reveal a resilient, peer-to-peer system for testimonial validation, challenging top-down credibility models.

✪ **Humanitarian-Empathic Link:** The positive correlation between HAF and ETI (r = 0.58) indicates that physical access for aid correlates with improved conditions for empathic connection, a key factor in testimonial justice.

✪ **Institutional Framing as Barrier:** Analysis confirms that foreign media gatekeeping and algorithmic content management systematically distort the reception of Palestinian accounts.

Key Contributions Summary

1

Empirical Analysis

First large-scale empirical analysis of testimonial credibility patterns in the Gaza conflict using the ACLED dataset, moving beyond anecdotal evidence.

2

Demonstrating Structural Injustice

Quantifies structural epistemic injustice through correlational indicators linking violence, access, and testimonial visibility.

3

Collective Verification Model

Identifies and conceptualizes 'collective verification mechanisms' as a distributed trust architecture that emerges under suppression.

4

Humanitarian-Empathy Nexus

Reveals and measures the correlation between humanitarian access and empathic resonance in testimonial content (r = 0.58).

Limitations & Future Work

Current Limitations & Challenges

- ✪ Dataset Scope: Reliance on ACLED; potential under-reporting in high-intensity periods.
- ✪ Temporal Bound: Analysis limited to a 7-month period; longer-term trends unknown.
- ✪ Qualitative Sample: Narrative coding based on available testimonies, which are themselves a product of filtering.
- ✪ Causality: Correlations are demonstrated, but establishing direct causality requires further research.

Future Work & Extensions

- ✪ Framework Extension: Apply and refine the epistemic injustice framework to other contemporary conflict zones with similar digital witnessing.
- ✪ Trust Architecture Study: Deeper investigation of distributed, peer-to-peer verification networks in conflict.
- ✪ Broader Application: Apply the mixed-methods methodology to other conflicts (e.g., Ukraine, Sudan, Myanmar).
- ✪ Policy Integration: Develop guidelines for humanitarian and media institutions to mitigate structural epistemic injustice.

Conclusions

- Civilian testimony in Gaza operates within a quantifiable structure of epistemic injustice, where violence and access restrictions systematically suppress credible voice.
- A resilient 'distributed trust architecture' emerges through collective verification, challenging traditional gatekeeping models of credibility.
- Empathic resonance in testimony is statistically linked to humanitarian access, highlighting the material basis of epistemic justice.
- The research provides an empirical model for analyzing testimonial credibility in conflict, with applications beyond the Gaza context.

Thank You!

For questions: research@barsetshire.edu

Project Archive: github.com/ej-gaza-testimony