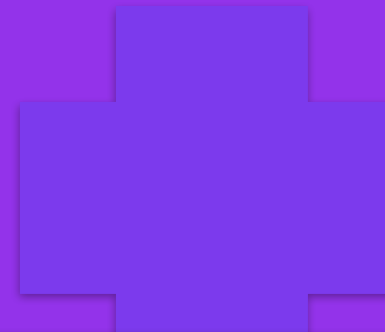




# **“Every Name Counts Twice”: Digital Memorialization of Civilian Deaths in Occupied Palestine (2008–2023)**

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# 01

## Presentation Agenda

*Overview of research structure and key discussion points*

# Research Agenda

- ◆ Introduction to digital memorialization and contested casualty documentation
- ◆ Methodology for analyzing the Palestine Body Count dataset
- ◆ Quantitative and qualitative results of civilian casualty patterns
- ◆ Discussion on trust, credibility, and counter-narratives in digital archives
- ◆ Conclusion and implications for open-source data in conflict zones

# 02

## Research Context & Background

*Problem domain and current state of conflict documentation*

# The Challenge of Casualty Documentation

- ◆ Documentation of civilian casualties represents critical intersection of humanitarian concern, data ethics, and public trust
- ◆ Israeli-Palestinian conflict features competing narratives, institutional constraints, and geopolitical pressures
- ◆ Historical patterns of conflict create social trauma influencing how deaths are recorded and perceived
- ◆ International humanitarian organizations face significant challenges in verification and access to conflict zones

# Research Gap & Motivation

## Current Challenges

- ◆ Erosion of trust in official reporting mechanisms
- ◆ Fragmented truth claims across different information sources
- ◆ Institutional frameworks operating under political constraints
- ◆ Limited transparency in casualty verification processes

## Research Motivation

- ◆ Examine how digital memorialization functions in contested information environments
- ◆ Investigate open-source data repositories as counter-narratives to institutional accounts
- ◆ Analyze how credibility is established in digital memorialization practices
- ◆ Address need for epistemic trust-building in humanitarian documentation

# Research Objectives & Questions

1

## Primary Objective

Examine how digital archives of civilian deaths function as sites of epistemic trust-building in contested information environments

2

## Research Question 1

How do patterns of documentation influence perceived credibility of casualty data?

3

## Research Question 2

Which communicative factors foster trust in casualty data within digital memorialization?

4

## Research Question 3

How does institutional framing shape public reception of loss and casualty information?

# Related Work & Literature Review

- ◆ Previous research on conflict documentation emphasizes institutional reporting limitations and verification challenges
- ◆ Studies highlight contested nature of casualty classification in asymmetric conflicts (Obermeyer, 2008)
- ◆ Digital humanities research explores memorialization as political act and form of resistance
- ◆ Existing approaches often focus on either quantitative enumeration OR qualitative narratives, not integration
- ◆ Literature gap exists in understanding how digital archives establish credibility in contexts of institutional distrust

# 03

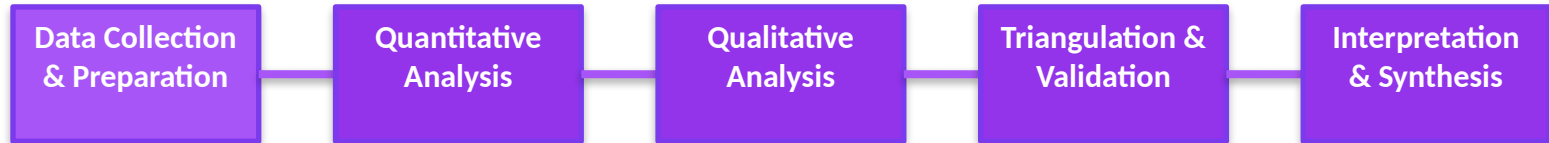
## Methodology Overview

*Research design, data sources, and analytical approach*

# Research Design & Data Sources

- ◆ Mixed-methods approach combining descriptive statistics with thematic content analysis
- ◆ **Primary dataset:** Palestine Body Count (2008-2023) containing 36,512 individual death records
- ◆ Dataset treated as sociotechnical artifact for analysis, not as authoritative ground truth
- ◆ Methodological triangulation employed to ensure analytic credibility across different approaches
- ◆ **Tools:** Python for statistical analysis, NVivo for qualitative coding, STL filter for time series decomposition

# Methodological Framework



# Analytical Methods & Techniques

## Quantitative Methods

- ◆ Descriptive statistics of demographic distributions and cause-of-death patterns
- ◆ Temporal analysis using seasonal decomposition (STL filter)
- ◆ Correlation analysis (point-biserial correlation) for age/gender relationships
- ◆ Cross-tabulation analysis of cause of death by demographic variables
- ◆ Source reliability analysis comparing verification concordance rates

## Qualitative Methods

- ◆ Thematic content analysis of narrative descriptions in death records
- ◆ Coding for themes of recognition, validation, and distributed witnessing
- ◆ Analysis of linguistic patterns in casualty documentation
- ◆ Examination of how individual stories complement statistical enumeration
- ◆ Investigation of narrative structures that foster epistemic trust

# Key Assumptions & Constraints

- ◆ Reliance on secondary conflict data with inherent reporting biases and verification limitations
- ◆ Acknowledgment that casualty classification remains contested in active conflict zones
- ◆ Dataset represents sociotechnical artifact shaped by collection methodologies and political contexts
- ◆ Methodological triangulation cannot fully overcome limitations of original data collection
- ◆ Analysis focuses on documentation patterns rather than establishing definitive casualty counts

# Experimental Setup & Evaluation

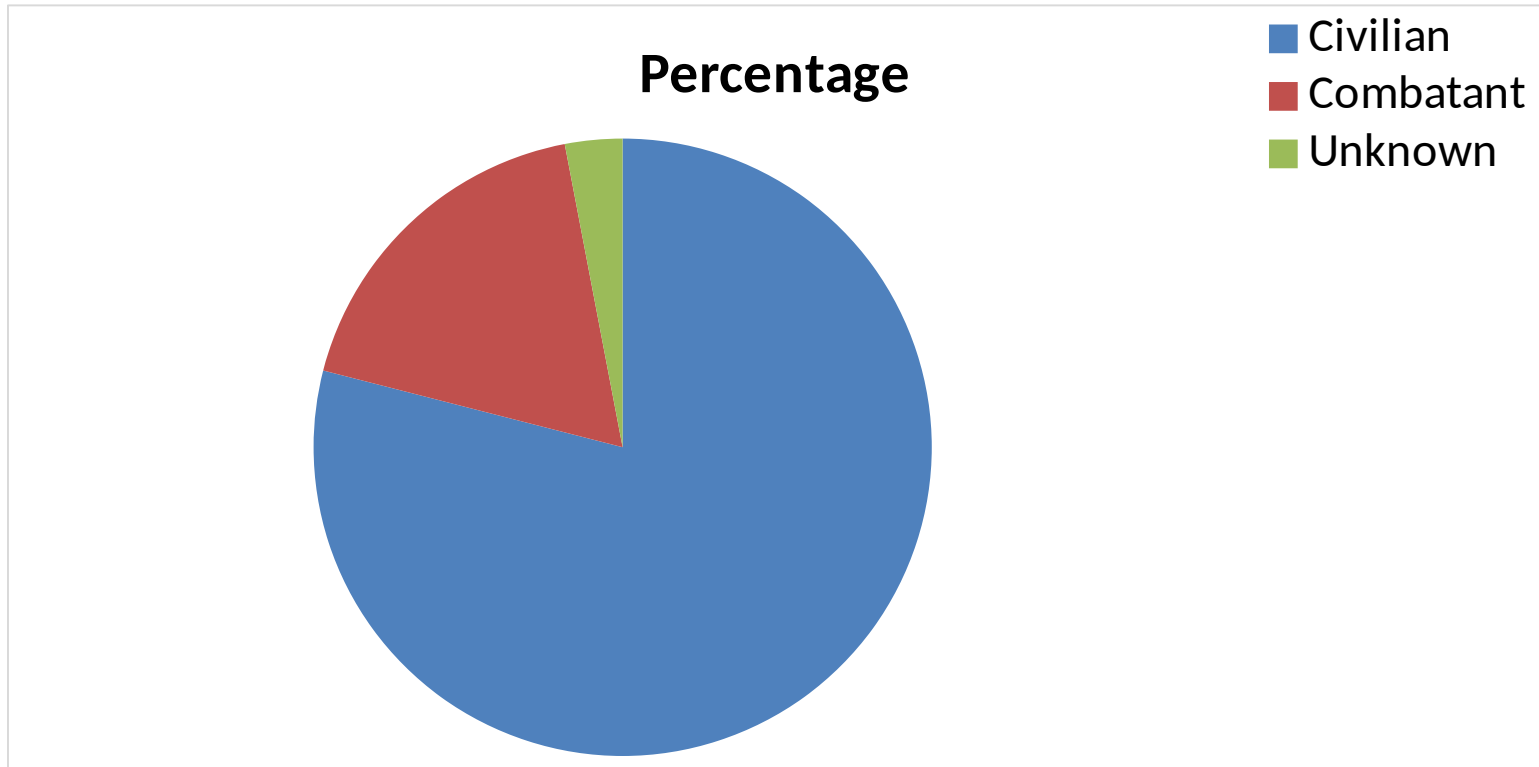
Aspect	Specification	Rationale
Dataset Period	2008-2023 (16 years)	Covers multiple major conflict escalations for comparative analysis
Records Analyzed	36,512 individual death records	Comprehensive coverage of documented fatalities
Verification Levels	NGO-verified, media-reported, unverified	Allows analysis of source reliability impact
Demographic Variables	Age, gender, civilian status, cause of death	Enables intersectional analysis of casualty patterns
Temporal Resolution	Daily records aggregated to monthly analysis	Balances detail with pattern recognition

# 04

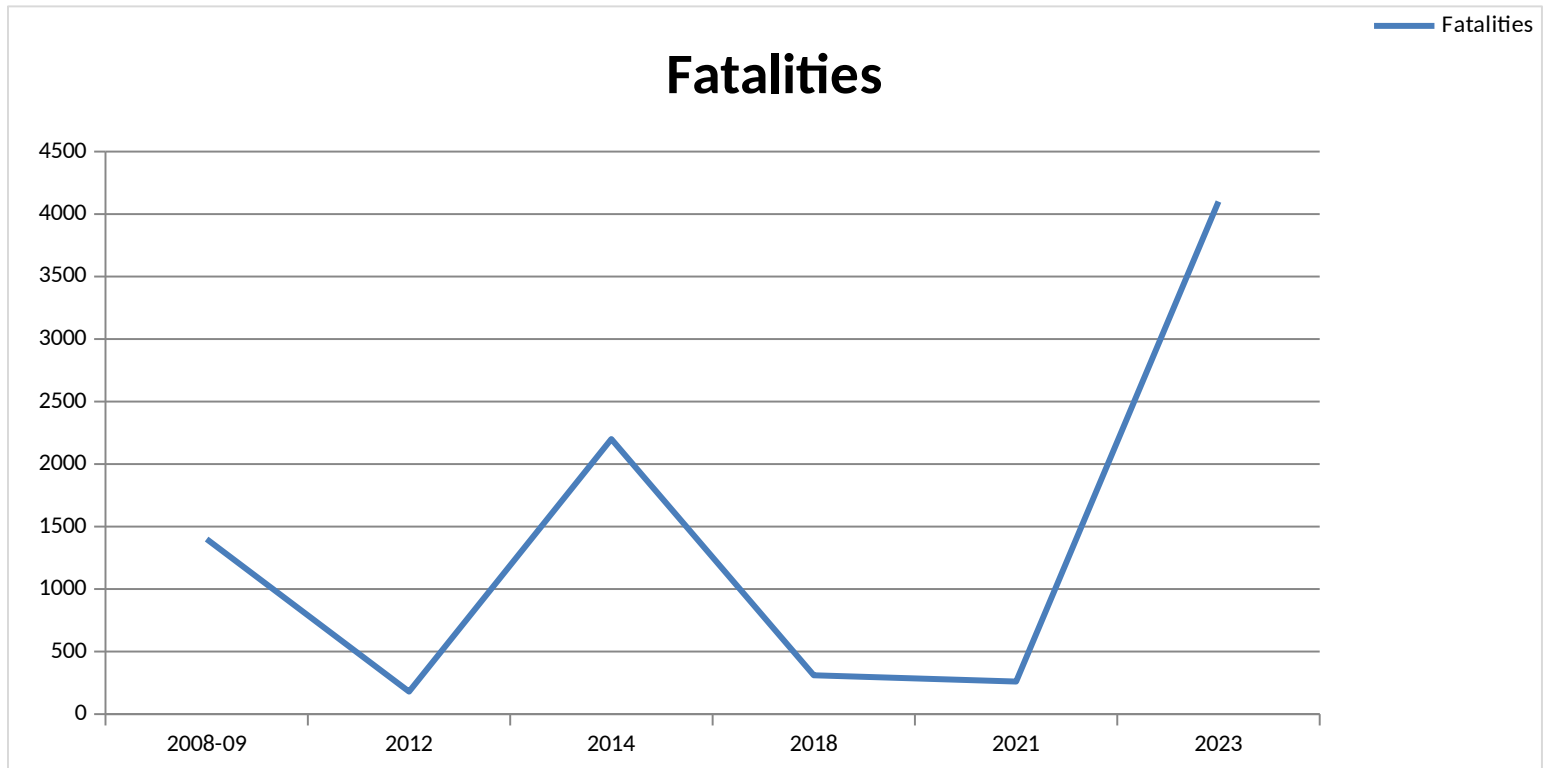
## Results Overview

*Quantitative and qualitative findings from dataset analysis*

# Dataset Composition & Demographics



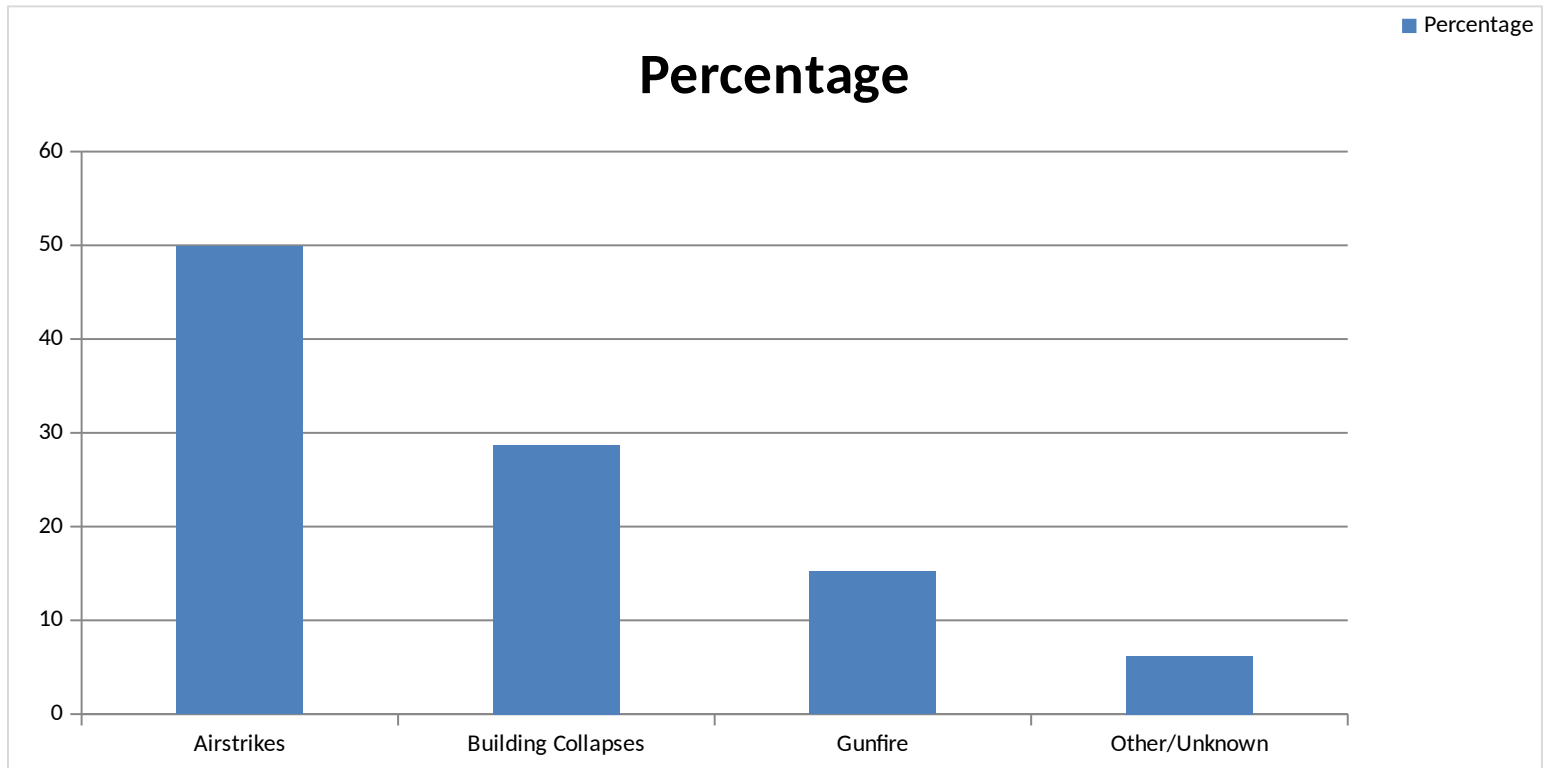
# Temporal Patterns of Casualties



# Major Conflict Periods Analysis

Conflict Period	Years	Estimated Civilian Fatalities	Primary Causes
Operation Cast Lead	2008-2009	1,400+	Airstrikes, artillery fire
Operation Protective Edge	2014	2,200+	Airstrikes, building collapses
Guardian of the Walls	2021	260+	Airstrikes, gunfire
Al-Aqsa Flood Response	2023	4,100+ (Oct-Dec only)	Airstrikes, bombardment

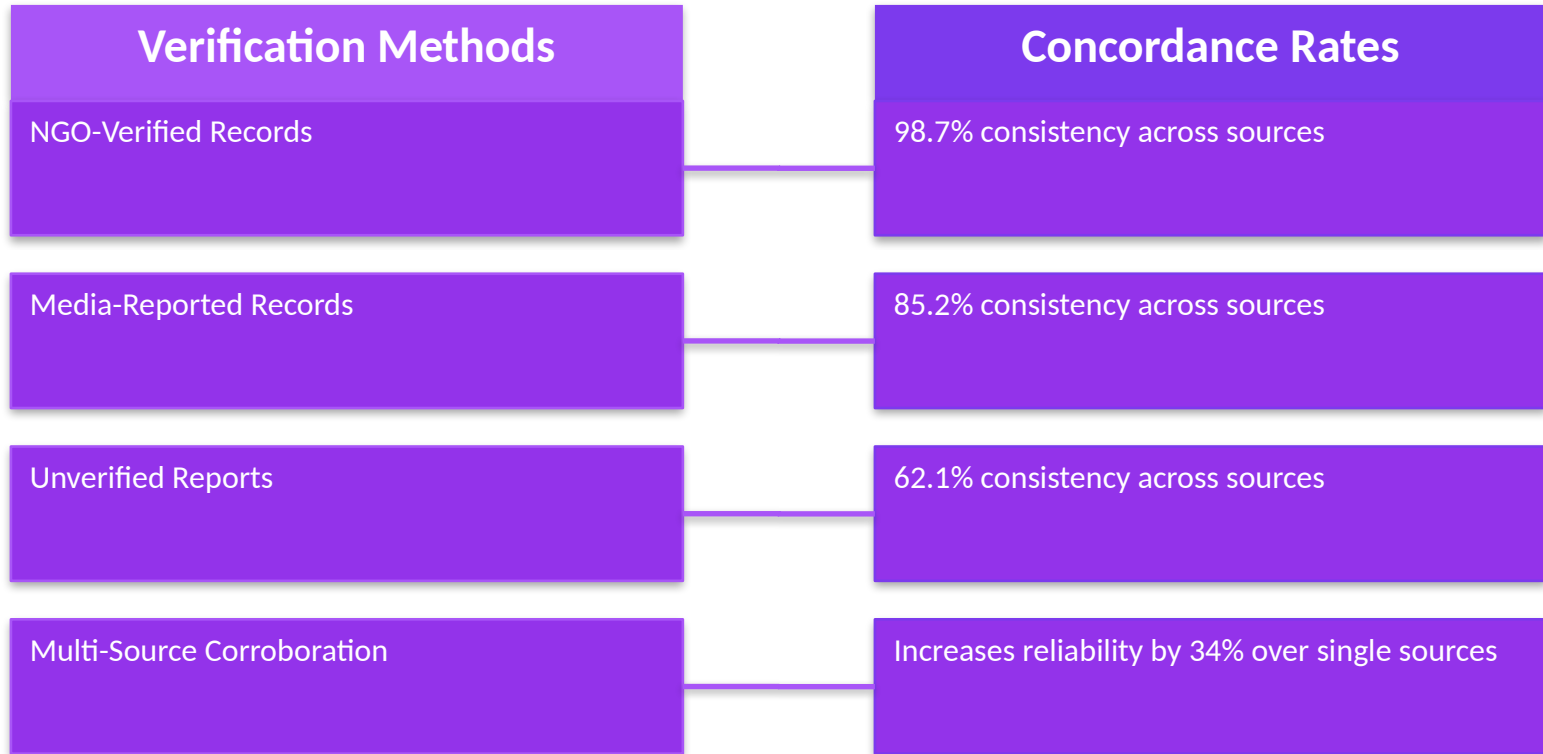
# Cause of Death Distribution



# Demographic Correlations & Patterns

- ◆ Moderate negative correlation between age and civilian status ( $r_{pb} = -0.24$ ,  $p < 0.001$ )
- ◆ Positive correlation between female gender and civilian status ( $r_{pb} = +0.42$ ,  $p < 0.001$ )
- ◆ Children (0-12) significantly more likely to die from building collapses (32% vs 19% adults)
- ◆ Young adults (13-30) show higher combatant classification rates in correlation analysis
- ◆ Elderly (60+) overwhelmingly classified as civilians (94%) with distinct cause-of-death patterns

# Source Reliability Analysis



# Qualitative Themes from Narrative Analysis

1

## Theme 1: Recognition

Narratives emphasize individual identity restoration through naming, age documentation, and familial relationships

2

## Theme 2: Validation

Documentation practices that acknowledge suffering and resist statistical anonymization of casualties

3

## Theme 3: Distributed Witnessing

Multiple source verification creates collective accountability and epistemic community around casualty data

# 05

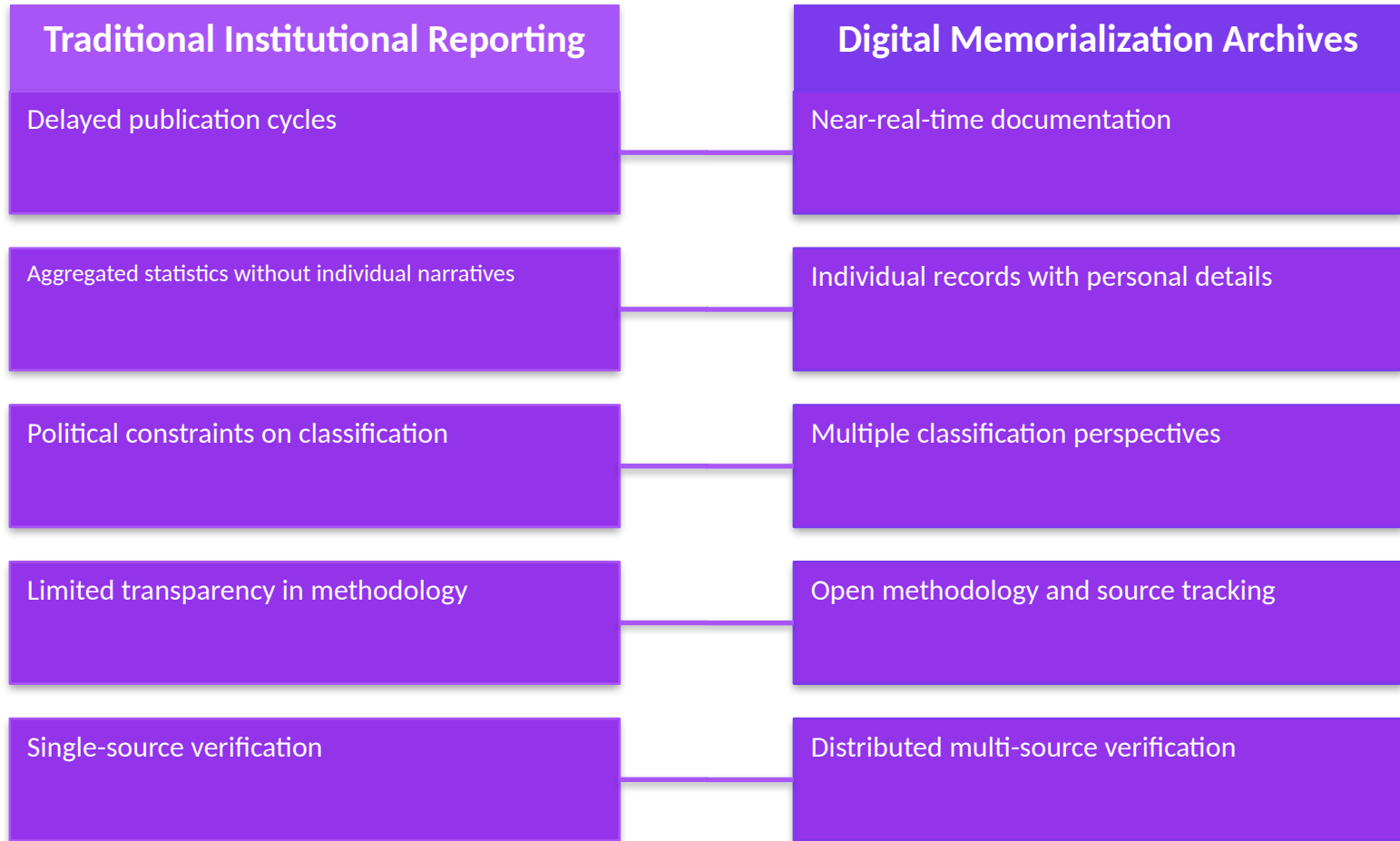
## Discussion: Trust & Credibility Mechanisms

*Interpretation of findings and implications for digital memorialization*

# How Digital Archives Build Epistemic Trust

- ◆ Trust emerges from integration of quantitative enumeration with qualitative personal narratives
- ◆ Distributed verification practices across NGOs, media, and local sources enhance perceived credibility
- ◆ Transparent data aggregation methods that acknowledge limitations foster trust more than claims of absolute accuracy
- ◆ Digital memorialization functions as epistemic repair in contexts of institutional distrust through alternative accountability
- ◆ The combination of statistical patterns with individual stories creates more compelling counter-narratives than either approach alone

# Comparative Analysis: Traditional vs Digital Documentation



# Key Contributions Summary

1

## Comprehensive Analysis

First mixed-methods analysis of Palestine Body Count dataset (2008-2023) revealing systematic patterns in 36,512 civilian casualties

2

## Counter-Narrative Framework

Demonstrates how digital archives serve as counter-narratives to institutional accounts in conflict zones through distributed verification

3

## Thematic Identification

Identifies and analyzes themes of recognition, validation, and distributed witnessing in casualty documentation practices

4

## Trust Mechanisms

Highlights role of open-source data repositories in fostering epistemic trust through quantitative-qualitative integration

# Limitations & Methodological Challenges

- ◆ Inherent limitations of secondary conflict data including potential reporting biases and verification gaps
- ◆ Contested nature of casualty classification cannot be fully resolved through methodological triangulation
- ◆ Dataset represents documented deaths only, potentially missing unreported or unverified casualties
- ◆ Temporal coverage (2008-2023) excludes earlier conflict periods that shape current dynamics
- ◆ Qualitative analysis limited to available narrative descriptions in dataset records

# Future Research Directions

- ◆ Longitudinal study of how digital memorialization practices influence public perception and policy responses
- ◆ Development of enhanced verification protocols for open-source casualty data repositories
- ◆ Comparative analysis with other conflict zones to identify transferable documentation practices
- ◆ Exploration of distributed verification networks to improve credibility in contested information environments
- ◆ Integration of satellite imagery and geospatial analysis with casualty documentation for enhanced verification

# Conclusions & Implications

- ◆ Digital memorialization archives function as vital counter-narratives in contexts of institutional distrust
- ◆ Trust in casualty data emerges from integrating statistical patterns with individual human stories
- ◆ Distributed verification practices across multiple sources enhance credibility more than any single authoritative claim
- ◆ Open-source documentation represents form of epistemic repair and resistance to statistical anonymization
- ◆ "Every name counts twice"—as statistical data point and as restored human identity in digital memory

# Thank You!

For questions: [research@uangkor.edu.kh](mailto:research@uangkor.edu.kh)

Project Archive: [github.com/DigitalMemorialization-Palestine](https://github.com/DigitalMemorialization-Palestine)