Representations and Realities: Investigating Roadside Bias in Coded Civil War Data

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Abstract

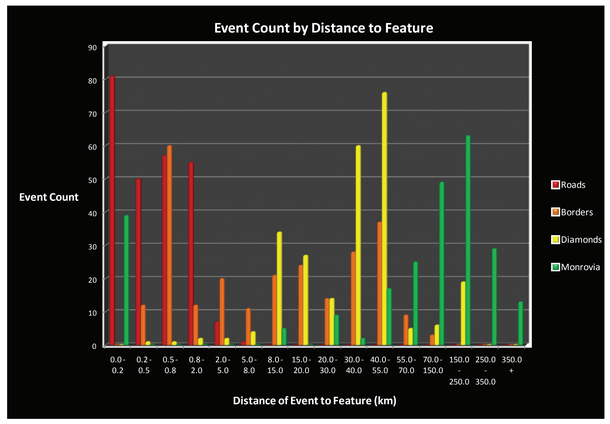
This project builds on prior disaggregated studies of civil conflict by discussing the utility of news media as a source for coded conflict data, with Liberia serving as a case study. The Armed Conflict Location Event Data (ACLED), made available by the International Peace Research Institute Oslo and the Center for the Study of Civil War, breaks civil war into individual conflict events at the local level. This offers an exciting opportunity for small scale analysis of rebel movement. However, there is a striking tendency for events to occur near roads, which raises questions about a possible roadside bias in news coverage of war, as news accounts are the primary source of event data. By characterizing ACLED event locations through spatial analysis, and by qualititatively assesing news reporting during Liberia's war through personal interviews and engagement with historical records, this paper examines a potential under-representation of rural areas in data of this kind, and explores the implications.

(Clockwise from top): NPFL soldiers fighting in Monrovia; Liberian women protest for peace; refugees flee fighting; alluvial diamond mines financed rebel armies; post-war Truth and Reconciliation Commission billboard in Monrovia; NPFL rebel leader, Charles Taylor.

The Liberian Civil War

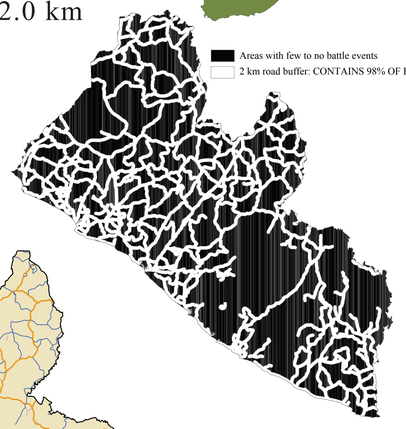
- 1989: Civil War Begins when Charles Taylor and the National Patriotic Front of Liberia invade the country
- Taylor quickly comes to control much of interior of Liberia
- Numerous additional rebel factions, with various goals
- 1997: Taylor is elected President of Liberia
- 2003: Taylor goes into exile in the midst of intense fighting; UN peacekeepers arrive
- 250,000 killed, and approximately 1 million displaced in a country of 4 million

Results of Spatial Analysis

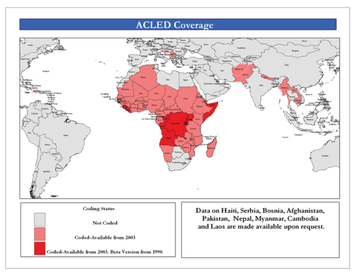


Most events are occuring near roads. Out of 251 events:

-51% occur within 0.2km of a road
-75% occur within 0.8 km
-98% occur within 2.0 km



Data



The Armed Conflict Location and Events Dataset (ACLED) is designed for disaggregated conflict analysis and crisis mapping, and can be used in any GIS, mapping program, or statistical package.

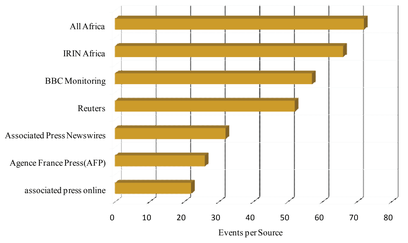
The dataset codes the location of conflict events with:

- Coordinates (latitude/longitude)
- Event Date
- Actors (rebels, goverment, civilians, etc)
- Event Type

Event Number	Event Type Description
1	Battle- No Change of Location Control
2	Battle- Rebel Control Location
3	Battle- Government Regains Control
4	Headquarters or Base Establishment
5	Non-Violent Rebel Presence
6	Rioting/Protesting
7	Violence Against Civilians
8	Non-Violent Transfer of Location Control

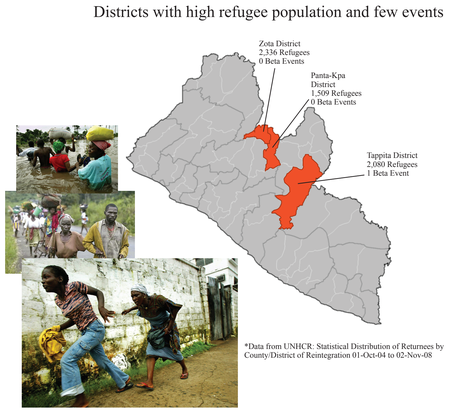
Events are derived from a variety of sources, mainly concentrating on news reports from war zones, humanitarian agencies, and research publications.

Top 7 Sources in ACLED: Liberia



Refugee Sending Areas

Districts with high refugee population and few events

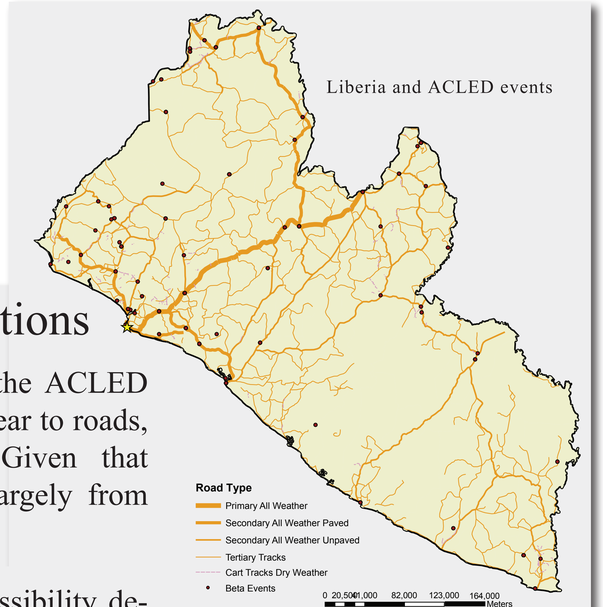


*Data from UNHCR: Statistical Distribution of Returnees by County/District of Reintegration 01-Oct-04 to 02-Nov-08

Research Questions

When placed in a GIS, the ACLED event points all fall very near to roads, which raises concerns. Given that event records are taken largely from news reporting:

- To what extent did accessibility determine locations of news reporting?
- What are the implications about the utility of journalism in coded civil war data?



Methodology

Spatial analysis of ACLED data:

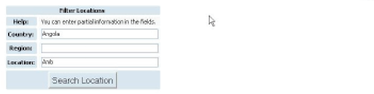
- Design geodatabase with road subtype and digitize roads from UN map of Liberia
- Geocode events and diamonds
- Run spatial joins between events and roads, diamonds, borders, and the capital

Characterize Liberia's media landscape:

- Examine Liberian Truth and Reconciliation Commission Report on the role of the media in the conflict
- Interview Liberian journalists who reported during the conflict

Compare with supplementary refugee data

Urban Bias in Coding Methods

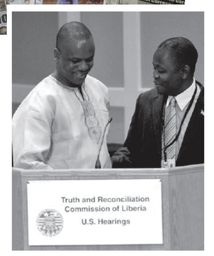


Location	Description	Latitude	Langitude	Region	Country
Amba	populated place	-13.2666	15.05	Huambo	Angola
Ambaca	populated place	-9.2666	15.1833	Cuanza Norte	Angola
Ambaca	populated place	-9.3833	15.3666	Cuanza Norte	Angola
Ambaeta	populated place	-11.9166	22.1	Moxico	Angola
Ambaiela	populated place	-11.9166	22.1	Moxico	Angola
Ambalequia	stream	-12.5155	15.3586	Huambo	Angola
Ambando	stream	-12.4333	15.2333	Huambo	Angola

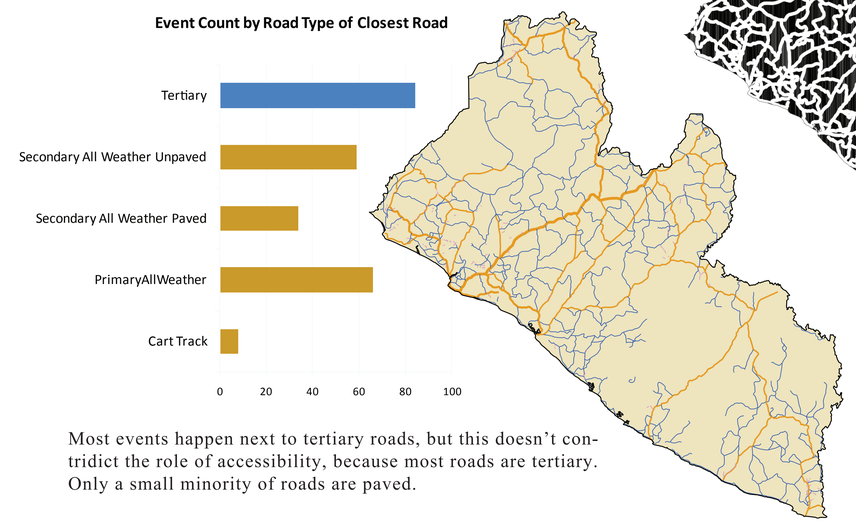
- When coding, event coordinates are assigned based on city location, not GPS point
- When location of event is uncertain, event coordinates default to provincial capital, which is naturally more urban

Implications

If media is not a spatially representative source, then the accuracy of the ACLED data may be questioned. This would diminish the spatial conclusions drawn about the nature of conflict, and could have potential policy implications. Additionally, many Liberians lost friends, family, homes, and belongings, and an under-representation of rural areas potentially writes many out of the history of the war.



(top) Liberian newspapers; (below) TRC hearings



Most events happen next to tertiary roads, but this doesn't contridict the role of accessibility, because most roads are tertiary. Only a small minority of roads are paved.

The Media Landscape During Liberia's War

In order to draw spatial conclusions about conflict from news sources, a few fundamental assumptions must be true:

- Reporters travel to all parts of the country--rich and poor, rural and populous
- Journalists report every event they witness
- News coverage was not only complete, but honest

In testing these assumptions, I conducted personal interviews with journalists who reported during the war. I also utilized the Liberian Truth and Reconciliation Commission report on *Media and Outreach in the TRC Process*

Journalists testified to:

- Disintegration of local media due to destruction/looting of equipment, economic depression, and overall safety
- Reliance of Liberians on international news
- Safety risks that journalists faced: threats, arrests, murders
- Role of the media as propaganda
- Inability to cross front line safely

★ All of these factors would prevent news from being a spatially representative source of conflict data.

"Due to the conflict and concern for their safety, and that of their families, journalists were at risk of being labeled as 'spies' by either belligerents if they attempted to cross over to the other side in pursuit of their reportorial duties…Most of the trained journalists in the country were trapped in the capital."
-Emmanuel D. Abalo, Former Head of the Press Union of Liberia
(personal correspondence, Feb. 28, 2010)

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