

Beyond Mixed Metaphors of Networks: Applying Social Network Analysis to Study #PublicAuthority and Governance

Patrycja Stys explores how using Social Network Analysis (SNA) can improve our understanding of public authority.

This article is part of the #PublicAuthority blog series, part of the ESRC-funded [Centre for Public Authority and International Development](#).

The struggle to conceptualise contemporary states – and effectively promote post-conflict reconstruction and state-building – continues. Even in the global North, realities of globalisation, regional economic blocs and security pacts, and transnational organised crime and [corruption](#) challenge the Westphalian (and Weberian) ideal(type) of state sovereignty. The same processes impact states in the global South, some further distorted by protracted, sporadic conflict; problems governing territories within their internationally recognised [borders](#); and the out-sourcing of state functions like the provision of security and other public services to a host of non-state actors and organisations.

In such contexts, public authority is constantly challenged and renegotiated between formal state representatives, armed groups, customary and community leaders, NGOs, international agencies, religious institutions, and a slew of other actors. Governance is no longer solely the purview of formal state institutions and their representatives; it is a function of the fluid dynamics and interactions between all these actors, state and non-state alike. In states like the Democratic Republic of the Congo (DRC), for example, [the seeming instability of such governance has been surprisingly stable](#).



While tens of thousands of people have fled to Goma, there are many other people affected by the crisis throughout the Kivus region. In the shadow of the hills of Masisi, people who have fled recent inter-ethnic clashes and attacks on villages are setting up new homes.

Image Credit: [Steven van Damme/Oxfam](#) via Flickr CC BY 2.0

In the light of reality and failed development interventions, the conceptualisation of 'the state' (and public authority) called for reassessment. Alternative analytical lenses included concepts like ['states-within-states'](#), ['twilight institutions'](#), ['rebel governance'](#), ['rebelocracy'](#), ['hybrid governance'](#), ['Big Men and networks'](#), and ['governance through brokerage'](#).

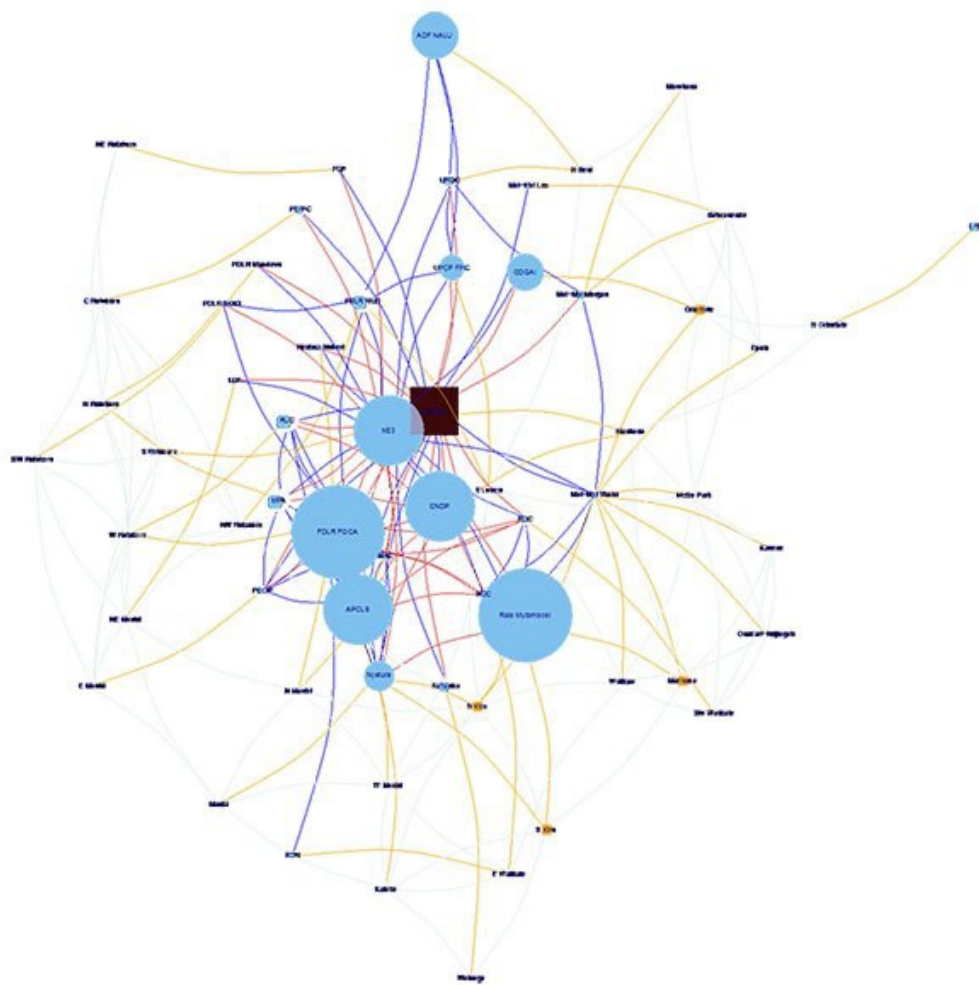
Building on this tradition, LSE's [Centre for Public Authority and International Development](#) (CPAID), aims to analyse public authority broadly, considering all the various actors and organisations who perform its functions in fragile, conflict-affected states. This understanding of public authority hinges on the inter-related concepts of the political marketplace, moral populism, and public mutuality/civicism, elaborated on in Duncan Green's [earlier post](#).

CPAID's approach frees us to consider formal state representatives in the same framework as informal ones – part and parcel of the same integrated system. If we understand how governance actually works in these contexts, who public authorities are and what they do, we are much better placed to fashion development initiatives that effectively promote economic growth and stability.

Social Network Analysis in the Study of Public Authority and Governance

Many of these approaches to public authority and governance draw on the concepts of networks, brokerage, resource flows, and transnational linkages. It makes sense.

I take a similar approach, but instead of using network as a metaphor, I employ Social Network Analysis (SNA) theories and concepts, premised on the assumption of a complex structure (and therefore dependence) among the individuals, institutions, organisations studied. [Network is not a nebulous concept](#); it is a graph with actors (nodes) and ties (edges) connecting them. These depict social actors and the relationships between them. The example below^[1] is that of ties between armed groups in the DRC at the height of the M23 rebellion in August 2013:



[REDACTED]

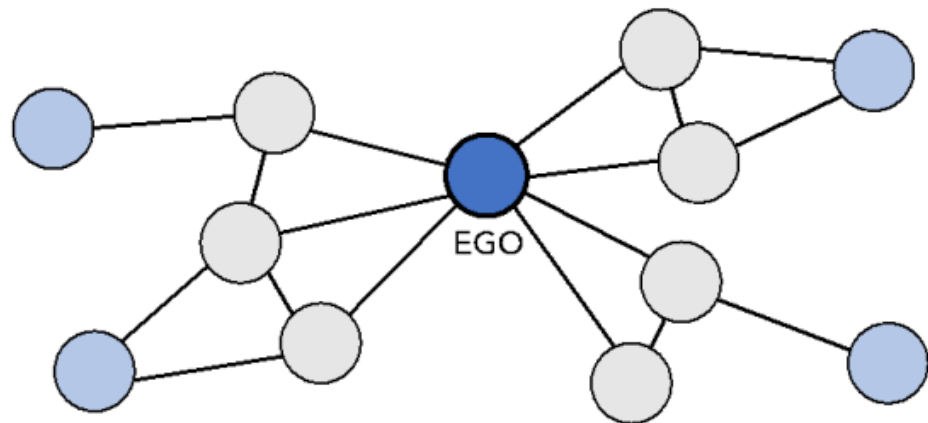


[SNA](#) dates back to the work of Jacob Moreno in the 1930s and has a long tradition of usage in Sociology, [Anthropology](#), Management, [History](#), and [many other disciplines](#). Bruce Kapferer's (1972) study of [strategy and transaction](#) in a factory in Kabwe, Zambia – based on 10 months of fieldwork – remains a seminal work, in social anthropology and SNA.

In previous research[\[2\]](#), I studied [personal support networks](#) of residents in Masisi and Rutshuru territories in eastern DRC. Civilians, demobilised and active combatants were the actors. The ties we investigated were those of instrumental support (finding a job, getting a loan); social companionship; and emotional support (getting advice on major life-changing decisions). These ties are closely related to social capital and public mutuality/civicness.

We all rely on these networks in our daily lives. [They are even more imperative to survival in conflict-affected areas](#) where the state is absent at best and predatory at worst: where job placement services and unemployment benefits are unheard of; where mental health support is non-existent; and where the state police and military exacerbate insecurity instead of protecting citizens. When people cannot rely on the state and their elected representatives, they must rely even more on one another for support and security: physical, financial, and emotional.

Of particular interest are brokers, those who occupy [structural holes](#) and therefore bridge (or broker) between different parts of the network. In the figure below, Ego is a broker:



In order for information or resources to pass from actors on the left side of the network to those on the right, they must pass through Ego. Ego is in a position of privilege and opportunity by virtue of his/her structural position in the network. Likewise, [Ego is under constant pressure](#) from the actors he/she connects or bridges.

Brokers are public authorities in their own right, capable of diffusing discord between groups as much as exacerbating it into violence. I am interested in [brokers between in-group members \(co-ordinators\) and out-group members \(liaisons\)](#): brokers in armed groups, ethno-linguistic communities, as well as those who broker between different armed groups (and their members), civilians, and demobilised combatants.

I am not assuming a priori that brokers are demobilised combatants, politicians, formal state representatives, or customary leaders. One of the insights from [covert](#) or [illicit networks studies](#) is that *brokers are seldom – if ever – those we assume them to be*.

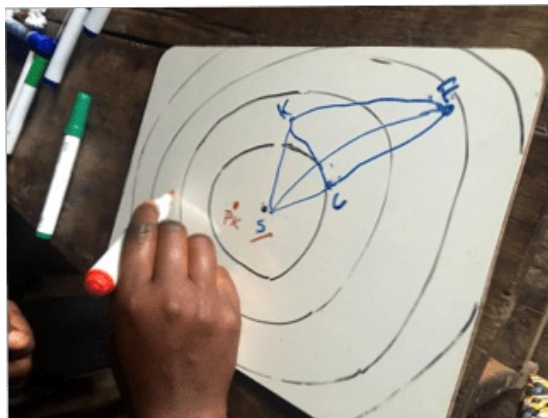
Brokers occupy specific structural positions in social networks (like Ego above). They may not be the most extroverted of respondents, and they may not even be key informants, or those in positions of formal authority. This makes them hard to identify, more so if the population studied is a large one.

That is where SNA comes in. We can actually visualise the networks, and identify brokers, between and within groups. We can then parse out what makes them brokers – the specific characteristics or attributes of those occupying brokerage positions in these social networks.

Doing and Applying SNA


This is part of my contribution to CPAID. We want to figure out who such public authorities are (and what makes them so), by analysing actors' network positions to identify brokers (and their characteristics, or attributes). The relationships, or ties, we study will be determined by local conceptualisations of public service provision (be it security, conflict resolution, healthcare, education, or political representation), and the diverse actors associated with these services. This entails ethnographic fieldwork.

Having defined our ties and research sites, we aim to collect social network data using [participant-aided sociograms](#). In this case, we'll ask respondents to map out their own networks on whiteboards, using markers:



We want to know who provides these social services for the respondent, and in exchange for what. Therefore, the individuals identified by the initial respondent on their whiteboard are then interviewed themselves. Even when it is impossible or imprudent to interview all identified service providers, we will still have the information concerning their ties and attributes, as provided by the respondent.

So, we would start with a seed set of respondents, and use a hybrid of snowball sampling and respondent-driven sampling to compile our network:



The resultant network is partially-observed, but [various methods](#) exist for dealing with incomplete or sampled data. We would like to identify these brokers, public authorities in their own right based on their structural position in the network.

These are the individuals that broker, for example, security or disputes between and within different communities. We want to understand under what conditions they facilitate such service provision, and in what circumstances they hinder it.

If we effectively identify these public authorities, we can assess whether we are targeting the right individuals in development interventions and peace negotiations. Likewise, we can better support them in the positive functions they perform in their societies, be it brokering peace or providing social services.

This is not a top-down approach. It is based on the perceptions and assessments of residents in the communities where we work. It is about understanding governance and as it is practiced – and supporting the public authorities who benefit their communities.

That's the point. And hopefully it is a right step in getting development *right*.

Read more about [#PublicAuthority](#) and visit [our website](#).

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[1] Alliances are blue ties and enmity are red ties; nodes are armed groups, as well as their areas of influence. Connections between them are indicated by orange ties. Light blue ties indicate geographical contiguity between locations. The network is multiplex (having multiple types of ties) and multilevel (having multiple kinds of nodes with ties between them). Size of armed group is proportional to approximate troop numbers (apart from FARDC). Data partly sourced from [Bafilemba and Mueller \(2013\)](#), compiled and charted by myself and [Johan Koskinen](#).

[2] In charge of the DRC case study, I carried out social network data collection in eastern DRC in 2016 as a postdoctoral research fellow on the ESRC/DfID Poverty Alleviation Research Grant ES/M009130/1 (PI: Prof. Paul Nugent; CIs: Drs Zoe Marks and Jan Eichhorn), based at the University of Edinburgh. Data collection was generously co-funded by the Political Settlements Research Programme (PI: Christine Bell). Research design was conducted with colleagues at the University of Melbourne, Swinburne University, and the University of Manchester's Mitchell Centre for Social Network Analysis. Specifically, I would like to thank Prof. Garry Robins, Prof. Dean Lusher, Dr Colin Gallagher, Dr Johan Koskinen, Dr Daniel Tischer, Dr Susan O'Shea, Dr Bernie Hogan, and Dr Judith Verweijen for their invaluable input, and ceaseless support, at various stages of this project. The greatest debt of gratitude remains to the seven Congolese researchers who evaluated and refined the data collection instruments, and spent over four months in the field with me collecting the data.

The views expressed in this post are those of the author and in no way reflect those of the Africa at LSE blog, the Firoz Lalji Centre for Africa or the London School of Economics and Political Science.