

# The problem of power

## Partial electrification in Northern Uganda

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When Lalogi, a trading centre with a population of roughly 1,300 in Northern Uganda, was electrified through the national grid in 2016, it sparked great excitement among people living in and near trading centres. A middle-aged resident recalled the day that the first houses were connected and people shouted on the street: 'There is power! There is power!' Not long after, many new businesses settled in the buildings facing the main road that bisects the trading centre.

### Broken promises

A married man with children in his mid-20s, Godfrey was among those who seized the productive potential of electricity. Not long after the grid's arrival, Godfrey opened a welding workshop, selling steel doors, window frames, school boxes, roasting grills and other metal works that he manufactured himself. Godfrey's business depended on a regular supply of electricity. Therefore, it was unfortunate for him when the electric grid began to show signs of unreliability only six months after the first connections in Lalogi were made. From then on, frequent and prolonged power outages became the standard for Lalogi's electricity consumers.

As Godfrey and others describe, running a business under these conditions is a struggle. Work could be interrupted anytime, and it was impossible to plan ahead, which made the future increasingly uncertain. However, Godfrey soldiered on and made adjustments, including diversifying his business activities, extending working hours and seasonally taking up farming practices.

Godfrey's struggle plays out in the context of infrastructural development. In 2001, the Ugandan state adopted a strategy for rural electrification, which was amended in 2012 to accelerate the pace of electricity access rates (MEMD 2012). The effects of this strategy are currently beginning to show in statistics and the kilometres of power lines that criss-cross the country.

Over the last two decades, anthropologists have paid increasing attention to infrastructures as sites that reflect and produce social and political life. Larkin's literature review defines infrastructure as 'built networks that facilitate the flow of goods, people, or ideas and allow for their exchange over space' (2013: 328). Infrastructures bring about societal changes and hold the promise of modernity, progress and freedom, especially – but not exclusively – for people in the Global South as Larkin notes (*ibid.*: 332). However, as more recent scholarship attests, infrastructures frequently break down (*cf.* Anand et al. 2018). Alternatively, as von Schnitzler shows in her research on water and electricity services in South African townships, infrastructures remain inaccessible to large parts of the population, reinforcing historical legacies of exclusion (von Schnitzler 2016). Following his reflections on electricity services in India, Gupta urges scholars to attend to this 'partial presence of modern infrastructure' (Gupta 2015: 564) to gain a fuller picture of how infrastructures shape life in the Global South.

Partially present infrastructures create precarious conditions for life. Anna Tsing's definition of precarity as 'life without the promise of stability' (2015: 2) resonates well with Godfrey's predicament. The erratic electricity supply in Lalogi made work and income unstable in a straight-forward, here-and-now sense, exemplified by a sudden blackout. It also shook people's expectations of the kind of development the electric grid could bring about in the future. With the literature on infrastructures in mind, the precarity caused by the erratic grid in Lalogi seemed to gain extra force because of the promises people attached to it around its arrival. People in Lalogi explained that the poles and wires had initially spurred excitement, and this excitement had attracted entrepreneurs from neighbouring areas. However, in 2019, three years after the first connections had been made, another affective reaction had taken over. Residents and business owners now expressed



**Fig. 1.** Lalogi trading centre, December 2019.

disappointment with the electrical infrastructure, which had already resulted in the closure or relocation of several businesses. Nevertheless, there were businesses like Godfrey's that made a meagre profit.

This article looks beyond the precariousness of partial electrification in Lalogi by focusing on Godfrey's strategies to sustain his business. Our contention regarding the concept of precarity is that it does not capture well those conditions where stability was never given, at the same time as it fails to account for the opportunities in such settings. Furthermore, it might risk presenting Godfrey and his peers as passive recipients of the electricity services when they play an active role in shaping the electricity infrastructure's affordances and impact. We aim to reveal this space for agency by paying close attention to the flexibility and creativity exhibited by people like Godfrey.

### Rural electrification and the economic gap

Electrification in Northern Uganda began in the 1960s, and the first transmission line to supply the north (Lira and Gulu) was commissioned on independence in 1962. Between then and the early 2000s, few developments took place in the region regarding electricity infrastructure. This was partly due to Northern Uganda's status as predominantly rural (Gore 2017: 48) and partly due to the civil war that broke out in 1986 between the Lord's Resistance Army led by Joseph Kony and President Museveni's National Resistance Movement. The war lasted 20 years and led to the degradation of the existing infrastructure at the same time as it put a stop to any new infrastructural developments.

While the war in Northern Uganda was at its height, two crucial changes happened regarding electricity distribution in the country. Firstly, the government decided to restructure – deregulate and privatize – the electricity sector in the late 1990s and early 2000s, partly to improve the sector's performance and partly in response to the pressure from external donors inspired by SAPs (Structural Adjustment Programmes). The privatization of electricity generation and distribution opened these functions for bids from multiple private companies, while the transmission of over 33kV remained a public function (Gore 2017: 106). There are different opinions about electricity sector restructuring in Uganda. While there have been improvements in the electricity supply to wealthier, urban areas, unstable electricity supply remains the standard for many consumers. Privatization has resulted in a rise in the price of electricity, leaving consumers confronted with an increasingly complex market with unequal services depending on their

geographical location. In Lalogi, people wondered why they were serviced by a different, and in their view, less effective distributor than nearby towns and trading centres.

At the same time as they restructured the electricity sector, the Ugandan authorities changed their approach to rural electrification. In 1999, the cabinet approved the establishment of the Rural Electrification Agency (REA) to ensure the electrification of rural areas, which in most cases is not a profitable undertaking and therefore not likely to attract commercial interest under the privatization scheme. After peace returned to Northern Uganda in 2008, the region has been one of the targets of the REA's rural electrification efforts through the construction of new transmission lines and distribution networks. The REA also supports distribution companies operating in rural areas, including the one that currently supplies Lalogi and Godfrey's welding workshop.

Although Lalogi is among the rural areas deemed suitable for electrification through the national grid, distribution faces the challenge of an economic gap between the cost of supply and the return through the sale of electricity to end-users. Lalogi is sparsely populated and has low electricity demand, like other rural areas. Electricity distribution in Lalogi is operated by a cooperative established in 2008 following a community initiative to bring electricity supply to Pader and Abim to the east of Lalogi and simultaneously create a foundation for peace between ethnic groups in the region. In 2019, the cooperative was operating in seven districts with the common feature of having low revenue potential from an electricity distribution perspective.

Low revenue potential creates an insecure basis for electricity distribution within a sector that has been subjected to the logic of the free market. In other words, rural electrification in Uganda is not an economically feasible undertaking until demand has been built up to a certain level, which is the long-term hope of the strategy. In a report prepared for the external donor of the transmission line to Lalogi, the authors link insufficient revenues to the high failure rate of the network: 'When the grid operator has insufficient revenues to cover the required maintenance expenses, it is a threat to the long-term sustainability of the project' (Multiconsult 2019: 38). Another explanation for the unreliable electricity supply echoed among electricity consumers in Lalogi in 2019 was the use of substandard poles to hold to the transmission and distribution lines. Dangerously leaning poles were a visible sign that the infrastructure was 'weak', as people would often describe it.

### The need to be flexible

Before joining the community of small-scale businesses in Lalogi, Godfrey had worked for a welder in the neighbouring district, where he had also been an apprentice. This experience enabled him to open his own business. Running a welding workshop provided him with a better basis for income than more common economic activities in the area, including farming and petty trade. However, extended periods without electricity caused economic uncertainty for Godfrey that threatened the survival of his business. Late in May 2019, a continuous power cut in Lalogi lasted for three weeks. During this time, Godfrey more or less abandoned his business in the trading centre to stay with his family on the piece of land he rented outside the trading centre. Here, he prepared the soil for planting soybeans to sell and a local variety of beans for him and his family to eat. When the power resumed, he returned to his welding workshop, but the interruption had not been lossfree. During the outage, Godfrey still needed to cover rent for the workshop and pay the monthly service fee to the power distributor. Furthermore, the outages meant that

**Fig. 2.** Godfrey assembles a roasting grill for a customer outside the rental unit where he keeps his tools and materials, 2019.





**Fig. 3.** Godfrey's welding plant, 2019.

**Fig. 4.** Godfrey welds the corners of the roasting grill. He works long hours on days with stable electricity supply, 2019.

**Fig. 5.** A broken electric pole has been temporarily repaired but continues to lean dangerously over a field on the outskirts of Lalogi, 2019.



he could not deliver orders within a reasonable time frame making his customers complain and demand a refund of their deposits.

The timing and duration of electricity outages in Uganda are often unpredictable, at least for the ordinary citizen. In other countries, like Nepal and South Africa, electricity customers regularly get information by post or through smartphone apps, showing which days and even hours electricity will be unavailable. This practice, known as load-shedding, is common in some countries where demand sometimes exceeds supply and enables planning. In Uganda, power outages have multifaceted causes – a combination of technical, communicational and structural problems – in a geographically extensive network that rests on cooperation between multiple actors. Sometimes, power outages are known in advance by the power distributor, for instance, for the scheduled maintenance of the network. However, if the fault derives from the feeder lines to the distribution grid, the distributor has no direct insight into causes and time frames.

In Lalogi, consumers are usually uninformed about outages, and many people are reluctant to contact the distributor because of previous experience of unfriendly, condescending or simply useless responses. The owner of a computer centre offering printing and typing services told Nielsen that whenever he called the power distributor on the phone to enquire about an ongoing outage, he would receive the same explanation: rotten and falling poles. 'They will say: "I said pole, pole, pole"', he said, raising his voice to mimic how the message had been conveyed, and then they would hang up on him. The manager of what some referred to as the best restaurant in Lalogi had a similar experience but said she was afraid that the employees of the power distributor might label her stubborn for calling them every time the power went off. She had therefore stopped doing so almost entirely.

Inadequate communication between distributors and consumers was all too familiar to Godfrey. In June, he faced another challenge. The construction of a new building next door meant that the line supplying his workshop and several other buildings was cut off temporarily. Godfrey was unaware of the plan until he witnessed the linemen physically disconnecting the cable. When he learned that

it would take several weeks before his workshop would be reconnected, he quickly decided to shift his business to the opposite side of the road, which still received power. The shop's relocation entailed losing the electrical units he had paid for in advance through the prepaid metering system. It also meant that he had to pay double rent for a time. Yet, in the new location, he could continue to work in so far as the electricity supply permitted it and thus keep up with orders from customers.

The electric grid was not the only source of electricity in Lalogi. Before the grid was installed, diesel generators and solar panels provided access to electricity for some. Munro and Bartlett (2019: 77) report a recent rise in the availability of solar products in Northern Uganda. In Lalogi, many business owners stated that they had invested in alternative sources of electricity to reduce their reliance on the grid and allow for more stable work. Still, diesel generators, solar panels and batteries of the capacity that could power energy-hungry appliances such as refrigerators and electric grinding mills were expensive to buy. Diesel generators were additionally costly to run, for which reason some business owners charged higher prices for their services when using generator power. Another factor that was relevant when deciding whether an alternative source of electricity would be a good investment was one's 'confidence in the grid'. For instance, the owner of a casino told Nielsen that he had refrained from buying solar because he was confident that the grid would stabilize with time.

Using alternative energy sources in combination with the grid was one strategy for mitigating the unwanted effects of an unstable electricity supply in Lalogi, but it was not the only one. Since opening the welding workshop, Godfrey had expanded and diversified his business by acquiring an electric mill for grinding sesame seeds and groundnuts – a tactical move in a context where you could not know when there would be power in the grid since the grinding mill allowed Godfrey to extend the hours he could work. During the day, he could weld, and in the evening, when people returned from their fields, he could offer them the use of the grinding mill to refine their products in exchange for a small amount of money. In the second half of 2019, Godfrey added another set of skills to his repertoire as he learned how to repair motorcycles,

**Fig. 6.** Stand-alone solar power systems and diesel generator sets provide alternatives to grid electricity in Northern Uganda, 2019.



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a service that is in demand all year round. He simultaneously ran the welding workshop, now back at the original location. Orders were few, but Godfrey anticipated that with the transition to the dry season in December and January, requests for doors and other metal works would go up when people started to build. On the other hand, the grid's stability was more difficult to predict.

The unreliable electricity supply in Lalogi made Godfrey consider moving his business to another trading centre, but so far, the idea has not materialized. Even with the interruptions to his work, Godfrey was able to make more money than he would have if he had relied on farming alone. To label Godfrey's situation as precarious risks overlooking these potentials of partial electrification. However, Godfrey's moderate success – the fact that he was still in business while others had been forced to close – must be understood in the light of his flexible approach to work and his strategic manoeuvres when faced with concrete challenges. The erratic power supply incurred economic losses due to reduced turnover, lost customer trust and unforeseen expenses. Still, Godfrey was able to make sure that over time he made a meagre profit by extending his working hours, diversifying his income sources and combining electrified work with work that did not rely on electricity.

## Conclusion

Typically, when Eriksen began to teach the anthropology of nationalism in the early 1990s, he would emphasize infrastructure and services to integrate nation states, both on a pragmatic, practical level and as representations and identification. In 1920, Lenin famously said that 'communism is Soviet power plus electrification of the whole country'. Thus, like postal services, telecommunications and public transport, people were entitled to electricity as citizens. Following the deregulation and privatization of the public sector, which has been a trend in many parts of the world in recent decades, these services and infrastructures are increasingly available to people, no longer in their capacity as citizens but as customers and only as long as they are profitable. Citizens of African countries, where the state has admittedly long been incapable or unwilling to provide a range of services and infrastructures, have seen a shift towards a less active state and a more robust market orientation – documented by many researchers in the last decades (see Gardner & Lewis 2015) – making it difficult

for citizens to claim their rights, since, having been redefined as customers, they only have consumer rights left.

The rural-urban contrast is another general feature of the African continent highlighted through partial electrification in Lalogi. In Ethiopia, where over half of the urban population has access to electricity, the figure for the rural population is in the single digits (Padovini 2019), similar to the contrast between the Kampala region and rural Northern Uganda. Moreover, having 'access to electricity' does not necessarily mean that one has electrical power in the house or shop continuously, owing to the erratic nature of the grid and a lack of money. Besides, there are large regions in the African continent where electricity is non-existent. Ironically, one of the areas yet to be electrified is the Omo Valley in southwestern Ethiopia, the site of a sizeable hydroelectric plant which will not connect Omo Valley residents to the grid but has displaced them and disrupted the Omo River on which they depend. Development mainly occurs in cities, even though its most significant impact is in rural areas.

The clashing scales of infrastructural developments (Eriksen 2018) are nowhere more visible than in this setting. The gap between the level of the central planning of large-scale infrastructure and its local implementation is glaring and renders local populations relatively powerless vis-à-vis the state. With the additional factor of privatization in mind, it is evident that rural Ugandans are precarious following the usual criteria.

However, we can also view their situation differently. As 'the informal sector' presupposes the existence of a formal sector, precarity suggests loss. Neither condition is met in the lifeworlds inhabited by Godfrey and his network. The flexibility (defined by Bateson 1972, as the uncommitted potential for change) displayed in his rapid adjustment of livelihood strategies suggests that a term like survivalist improvisation (Ferguson 2015) would capture this particular situation better.

The state or the private sector does not promise a stable, affordable electricity supply and the people of Lalogi are well aware of this, finding options and making adjustments accordingly. At the same time, we also want to make clear that people like Godfrey do more than survive. Working despite, around and *with* the unstable electricity supply, they succeed in improving the conditions of their lives, harnessing, if not fully then at least partially, the benefits associated with electricity. ●