

– MOVEMENT 2. FORMALIZING ARRANGEMENTS: Re-signification and the Making of Governable Spaces

THE RE-ARRANGEMENTS COLLECTIVE

Abstract

The second movement considers (re)arrangements as projects of formalization that seek to impose and even fix a form to spaces historically constructed as marginal. This impositional arrangement operates as a governmental desire to fix a form by re-signifying both subjects and spaces.

Introduction

The contexts we research individually—artisanal mines of eastern Congo (Timo), favelas in Rio de Janeiro (Francesca), and the *quartiers précaires* of Abidjan (Fabien)—are characterized by a proliferation of arrangements. These arrangements link residents, institutions and more or less official, (il)legitimate and (il)legal collectives together (often across scales) into operative relations that are at times conflictual, cooperative and provisional. Despite their diversity, the contexts in which we work have each been historically stigmatized as ‘black’ or ‘marginal’ places (see Simone, 2009; 2016), where the structures of institutional control and governability have met serious limits while enacting deliberate violence. Although we focus on marginal sites, we are aware that arrangements are not limited to such spaces, as the other essays in this intervention will make clear. Here we wish to stress that arrangements can emerge from projects of formalization that seek to rationalize, make legible and fix subjects and social spaces in specific forms. One injunction to make subjects and spaces governable arises from the intractable differences and the peculiarities of social relations at the margins that make such spaces opaque and less amenable to the interests of the state, private enterprises and global markets.

It is this opacity to power that may invite the imposition of an institutional form of re-arrangement, which in turn may (perhaps unintentionally) make available the sense of previously less apparent social arrangements. Whether through compulsion or desire, power seeks to connect ever more seamlessly the everyday activities and transactions at the margins; it ‘wants’ to further rationalize, standardize and model these behaviors, and to enact through them a more integrated, extensive and efficient logistics that also meets the imperatives of the global market (Brenner, 2014; Arboleda, 2016).

In this essay we borrow from Bernard Stiegler (2011: 38) the idea of arrangement as a tendency toward the perpetual composition of elements, in spite of the inherent opposition that may exist. An arrangement exists in this delicate balance between opposition and composition even as its temporality offers the possibility that if particular tendencies form and become hegemonic, the particular arrangement may be destroyed. In this sense, the form of arrangements emerges through more or less overt contestation. It is the outcome of a desire to modify and/or control and fix the elements of an arrangement by restricting the proliferation of variation. This thus leads us to ask: how (or to what extent) do governing powers impose form—that is, a fixity of purpose, stability of patterns, and plan of direction to arrangements? And how does the form of arrangements help us to understand the processes of governing and their contestations?

We approach arrangements (and re-arrangements) as a process of giving new form to existing relationships, practices and spaces so as to diminish their inherent complexity and indeterminacy and consequently increase their governability. Our writing speaks of governmental moves to re-order 'black' spaces by prescribing a new norm or ideal, limiting previously available options and imposing new logics and categories that have the tendency to define how particular spaces and social subjects will relate to institutional actors and to each other. In all the processes we study—electricity regularization in Rio de Janeiro, mineral traceability systems in eastern Congo, and local broadcasting in Abidjan—arrangement formation emerges through 'formalization', which in all three cases manifests as an imposed process of re-defining, re-structuring and holding—at least for a certain duration—(new) sets of patterns that seek to produce a new order. One may conceptualize these as 'operations' of capital (Mezzadra and Neilson, 2019), or the enactments of visionary diagrams by the state (Scott 1998; Mitchell, 2002)—even though the effects of these operations on the ground are heterogeneous.

Here, we consider formalization as entailing the *re-signifying of spaces and subjectivities* to make them more governable, meaning to open them up to state and market valuation, extraction and policing. As we will show in the empirical sections of this essay, the miners of eastern Congo are meant to be re-interpellated as 'conflict-free' producers whose provision of essential metals to global markets no longer troubles the ethical conscience of Europeans; favela dwellers are enjoined to become compliant and 'risk-free' consumers/customers; and Abidjan's residents are supposed to turn into 'responsible' citizens who will only speak and participate in the public sphere in accepted, consensual ways.

These contextual re-significations are visible because the previous arrangements changed their form. Consequently, the form of an arrangement is important because it makes transformations visible, but also because it creates a hold that may restrict further change in a subject or social space. Form is tied to temporality, or to what we might call the 'tenses' of an arrangement. Past, present and future tenses never hold equal importance together; rather, the stress on a particular temporality is often premised on rendering insignificance to another. For instance, the tense of the governance arrangements we characterize are unquestionably future-oriented because they seek to create model favela utility consumers, conflict-free mineral producers and disciplined citizens of Abidjan. Being future-focused, they are able to justify the transformations in the present as temporary attempts to make particular subjects in particular spaces more pliable and governable. Thus, we do not place form in opposition to arrangement, as if the latter was somehow external, other, or irreducibly subaltern. Instead, we see form as an expression of the temporal—and indeed temporary—character of arrangements.

In the rest of the essay, we focus on the desire to create governable spaces and subjects through arrangements, mirroring our colleagues' more extensive consideration of residents' aspirations elsewhere in this intervention (see Movement 3 and Movement 5). We discuss the abstractions, contradictions and fictions that the desire to give form to an arrangement conjures up within processes of formalization, including the constellation of practices, relations, technologies and affects that they bring into play. In the next section, we conceptualize the form of arrangements as a governmental desire for re-signification primarily oriented toward 'fixing' people and places, underpinned by the logics of modeling, (im)mutability and mediation. Following this, we draw on our respective fieldwork to illustrate how the form of these arrangements is materialized in the social world by transforming the negotiability of socio-spatial relations. In the final part, we conclude that attempts to fix the form of arrangements are always temporary, tentative and incomplete maneuvers. It is this incompleteness of form in particular that makes arrangements a vital and generative site of politics.

The formalization of arrangements: governmental desire as a re-signifying project

Giving form to arrangements means, most generally, seeking to (*re*)order the multitudinous, unscripted, unpredictable and opaque dynamics of everyday life at the global margins. It means getting disparate human and non-human elements (somehow) to coalesce into some kind of pattern that reveals stable contours (spatial, bodily), discernable functions and roles, regular rhythms (of movement, of interaction, of transaction), purposefulness of intentions, and possibilities for command and control. From a governmental perspective—often uncritically embraced in Spatial Planning—the dominant assumption is that a form is not only good but also necessary. Urban designers debate which built forms are most sustainable, frequently without questioning whether there is a need for form in the first place, or its political meaning. Similarly, while there is disagreement over how to ‘formalize’ informal labor, housing and access to infrastructure, the need to give and fix a form to their scope is as implicit as it is unquestioned. While we do not wish to engage in a debate over whether form is ‘good’, ‘bad’ or ‘(un)necessary’, we do draw inspiration from scholarship that links the desire for form—in all its declinations across multiple fields (e.g. architecture, identity, informational systems, politics)—to assertions of power and legitimations of unequal, exploitative social orders (Foucault, [1975–76] 2003: 239–64; see also Forester, 1982; Mitchell, 1988; Mahmood, 2005; Watson, 2009; Weber, [1968] 2019).

As we see it in our research, *governmental practices* (*re*)shape the form of arrangements through formalization processes that may target those working at the margins to *impose* and fix a specific shape on the variability of power relations. This need to ‘fix’ people and places here acquires a double sense: trying to ‘fix’ something or someone that is considered ‘broken/out of the norm’; and trying to ‘fix’ as a way to decide and settle that which is intended. The desire to form manifests as the desire to set a clear course and reach for the workings of an arrangement, and in the process, to model social spaces as isotropic: ‘normalizing’ them so as to stabilize, if not erase, their indeterminacy, friction and incongruence. As James C. Scott (1998) has argued, this kind of ordering—the rationalization and standardization of social spaces to ensure their legibility and availability to ‘modernizing’ discipline—has long been the *modus operandi* of state power. But the ordering logics of ‘logistical capitalism’ (Harney and Moten, 2021; see also Cowen, 2014; Tsing, 2015) are never far away; indeed, their own efforts to fix and clarify spaces as points of extraction and zones of passage have often been yoked in with state interventions.

While form may speak to the emerging character and contours of an arrangement, a focus on formation may enable us to capture the *processual* nature of a specific form. Taking our cue from Jamie Peck and Nik Theodore’s (2015) work on the modalities that allow policies to become governmental agendas which translate and move globally, we see three interlocking logics in the process of giving form to arrangements: modeling, (*im*)mutability and mediation. By *modeling*, we mean both the process of providing idealized representations in order to orient social relations and aspirations and the attempt to abstract the messy, non-linear practices and outlooks at the heart of arrangements into something measurable, patternable and ideally predictable. The second logic we identify is that of (*im*)mutability, which is related to the need to contain all the possible alternatives that could emerge from an arrangement. In marginalized spaces—perhaps more than elsewhere—arrangements have a strong tendency to mutate their form and to unmold the patterns prescribed by formalization processes. In this sense, arrangements are temporary; hence, containing mutability signifies seeking to arrest change and prolong the life of the specific form of an arrangement.

Finally, in all our field sites we see that the attempts to model spaces, to contain their mutability, takes place through the work of *intermediaries* whose infrastructural, techno-human transformations give shape to arrangements and materialize a desire for

legibility. In particular, we see how the form of the arrangement changes by replacing those forms of mediation that are considered 'broken' or 'unsuitable'. Mediators are generally considered as actors (including individuals, organizations and institutions but also technologies) which are positioned 'in-between' and defined 'by the relations within which they are situated' (Guy *et al.*, 2012: 5). Intermediaries make connections and enable relationships, but they do so in ways that are charged with political meaning either as human brokers (Vogel and Musamba, 2017; Koster and van Leynseele, 2018) or technological artifacts (Akrich, 1987; Hockenberry *et al.*, 2021). In our contexts, mediators help to give form to the arrangement by re-distributing agency amongst different types of human and non-human actors.

Attempts to govern the margins sometimes require re-signifying the relation of the margin to the center. We believe that the purpose of such re-signification is to flip the script about a place so as to elicit the support and consent of a skeptical public in return for specific badly-needed social benefits. In eastern Congo, mineral supply chains were designed to enable and promote the traceability of minerals with the aim of ensuring that only 'conflict-free' minerals can reach the global market from a region in dire need of economic support but deemed to contain endemic violence. In Rio de Janeiro, electricity regularization expressed the extension of the market logic to a favela population that previously, in most cases, accessed electricity informally, thus embedding ideas about an extension of consumers' rights and the improved infrastructural 'integration' of the favelas with the city. Local radio in Abidjan was similarly created as a performance of 'good governance' in the 1990s that aimed to transfer political responsibility toward a self-organizing civil society, channeling citizens' angry, exuberant voices in ways that were acceptable to the state and in line with an historical agenda of cultivating 'developed' subjects.

It is because the marginalized and disenfranchised often occupy spaces that lie beyond the bureaucratic restraints of the state and yet offer opportunities for the extension of markets or disciplinary control that they are positioned as being in need of interventions to make them more legible, pliable and available to state-market regulation. In this way, a discourse of transparency in mineral supply chains in eastern Congo, of 'good consumers and citizenship' in Rio's favelas, and of 'responsible' citizenship in Abidjan serves to legitimize interventions whose ultimate aim is to re-signify the endemic conflict, poor infrastructure and 'speech let loose' (Brisset-Foucault, 2019) that pose a problem for the 'good' governance of marginalized populations.

Modeling arrangements: translating governmental desires

In this section, we delve into our case studies to illustrate how formalization seeks to model urban spaces and subjectivities to make them governable. The Rio and Congo field sites make clear that desires for governability are often expressed by public and private entities together, since governability indeed implies improved possibilities for administration and extraction, transaction and state surveillance. Across all three cases, modeling for governability highlights the double-edged nature of concepts like 'integration', 'citizenship' and 'transparency', which have been well discussed by radical critics (e.g. Foucault, [1975–76] 2003; Harney and Moten, 2013; Simpson, 2017; Quinan and Thiele, 2020): they are presented at once as promises (of recognition, service delivery, democracy) and as compulsions (disciplining figures, contractual obligations). The abstractions of modeling, furthermore, attempt to reduce or abstract the complexities of pre-existing arrangements. In Abidjan, for example, local radio emerged as a device to cut through the 'noise' of what Partha Chatterjee (2004) calls 'political society', with its unruly demands for democracy and livelihood. In Congo, post- or neocolonial ethics have become reduced to a technical question of traceability; while in Rio, smart meters promise to deliver not just essential infrastructure, but also social order, spatial legibility and, of course, payments from the poor.

Since 2008, the installation of a permanent police presence in the form of the Pacifying Police Units (UPPs for their Portuguese acronym) in Rio's favelas provided a form of securitization through which the private electricity provider—Light—could more easily develop electricity regularization programs aimed at reducing commercial losses. These programs, that are not new but have been developed since the privatization of the energy sector in the 1990s, were able to benefit in this context from the state's performance of a monopoly of violence. They became part of a governmental project (in the Foucauldian sense) in which different types of re-ordering processes come together within a broader public-private discourse of 'integrating' the favelas with the city.

Electricity regularization aimed to re-signify favela residents as compliant consumers/customers, while at the same time indirectly extending this meaning to the idea of 'good citizenship' (Pilo, 2020). Indeed, the idea of a 'good citizen' who pays their (electricity) bills and taxes is heavily charged with a moralizing agenda underpinned by the desire to re-signify the favelas and 'open them up' to specific market logics and actors (such as service companies, but also tourism). In the case of electricity regularization, this re-signification of places manifested in some cases through the identification of addresses by the private electricity company. Essential for developing an efficient billing system, this operation partially (and informally) took over the state's function of recognizing addresses, and aimed to create legibility for the market while giving the illusion of re-signifying these districts as more formally recognized parts of the city. Thus, in this context, electricity regularization supported the desire to re-signify the favela and its residents as consumers/customers/citizens.

Similarly, in eastern Congo a global market desires tin, tantalum and tungsten (3T) ores and, through a discourse of mineral traceability, the market has partnered with the state to administer a program that integrates artisanal mining space with the global market by rendering it isotropic through a supply chain mechanism that 'purifies' minerals of the climate of conflict that defines their origin. The push for mineral traceability gained force in 2009, when civil society reports first began linking the extraction of 3T minerals (some of which are used in cell phone components) to the financing of rebel groups propagating conflict and sexual violence in eastern Congo (Enough Project, 2009).

Shortly thereafter, in 2010 the Obama administration passed the Dodd-Frank Wall Street Reform and Consumer Protection Act (commonly referred to as Dodd-Frank), section 1502 of which mandates that publicly traded companies must make full disclosures to the Securities and Exchange Commission (SEC) and on their websites regarding their sourcing of 3T and gold minerals from the Democratic Republic of the Congo (DRC) and its neighbors. A cottage industry of experts emerged to provide consulting services to government and businesses on how to regulate mineral flows and conduct due diligence in mineral supply chains. The local variant of due diligence in the tin supply chain in Congo is the international Tin Supply Chain Initiative, known as iTSCI. On the ground, this initiative is implemented by the Congolese state and a Washington-based NGO known as Pact, and it has grown to cover almost all tin-producing areas in eastern Congo.

Under the guise of mineral traceability, the state has penetrated previously neglected rural areas in eastern Congo and littered them with state agents to ensure mineral supplies are channeled to flow along fixed routes into urban centers (PRG *et al.*, 2020). Traceability here entails control of the logistical spaces along which minerals flow through verification procedures that mainly seek to ensure the eradication of pre-existing and profitable arrangements of mineral provisioning engaged in by rebel groups. State mining agents work to document the origin and flow of minerals as they impose licit and illicit taxes, while offering few (if any) services to improve the livelihoods of artisanal miners, traders and their communities.

To formalize artisanal mining, the state requires miners and traders to register themselves (which entails a fee) and then organize themselves into cooperatives, which are increasingly instrumentalized by local elites for personal accumulation (Vogel *et al.*, 2018; de Brier *et al.*, 2020). All of this further impoverishes a mining public while offering little in the way of security (PRG *et al.*, 2020). Traceability does not mitigate the conflict at the sites of mineral extraction; at best, it merely displaces it beyond the artisanal mines. What it does achieve, however, is to manage the perception of the global public vis-à-vis the consumption of so-called conflict minerals. As a governance arrangement, traceability serves to *re-signify* the conflict in eastern Congo as a technical problem that can be purified of its tainted context through supply chain management led by iTSCI and enforced by the state.

In 1995, local radio emerged in Abidjan as a communication infrastructure at a time when both governability and governmental legitimacy were in deep crisis. The collapse of Côte d'Ivoire's cash-crop economy in the 1980s, accentuated by structural adjustment programs, questioned the state's ability to bring about a better life, or simply a decent one. By the early 1990s, the state's hold on Abidjan was so tenuous that it had to hire street gangs to suppress street-level dissent (Kouamé Yao, 2017) in a desperate attempt both to retain a monopoly over violence, and to contain the waves of popular discontent. The authorization of local broadcasting was thus part of a broader attempt to re-imprint governmental order onto the city, to channel and mold its social and political energies lest they become once and for all unavailable to state control.

Eventually recognizing that the outright suppression of public speech (like that of democratic aspirations) was impossible, the Ivorian state promoted local radio as a technology through which citizens would *self-regulate*. The aim was that local stations, as nominally grassroots (i.e. non-commercial and community-oriented) operations, would channel city talk from the street level into the official public sphere, where citizens' expression would be subject to new rules of transparency and propriety. Talk that had previously been hardly audible to the state in its free-flowing intensity and creole language was now subject to surveillance by the national media regulator and municipal authorities, with which citizens were invited to enter into 'dialogue' on the airwaves. Citizens long excluded from the media sphere were now invited to call in, only then to be corrected for the way they expressed themselves—too vehement, too divisive, too unrefined in their mastery of French. Listeners could only discuss their experiences of immiseration, infrastructural violence and administrative obfuscation in the technocratic language of development. In this way, local radio reiterated historically exclusive parameters of 'proper' expressive citizenship, but did so by placing the burden of regulation upon radio hosts (most of them unpaid and self-trained) and their audiences.

What we are saying is that electricity regularization policies in Rio sought to model a new form in line with pre-existing arrangements of infrastructural delivery and access; mineral traceability schemes sought to 'reform' the previous conflict-financing arrangements by 'organizing' extraction, trade and predation in eastern Congo; and local radio sought to give form to Abidjan's circuits of city talk in ways that made them more accessible to state control. In each case, the will to form involved more than mere technicalities and technologies: it involved the wholesale re-signification of people and spaces, turning the favelas into securitized zones of legitimate consumption, artisanal mines into unproblematic zones of production, and Abidjan's sites of everyday public speech into a domesticated 'civil society'. Ultimately, what was at stake in giving form in each instance was the governability of these spaces and subjects, including the reiteration and extension (in both time and space) of the state and market's grip over a social world otherwise characterized by proliferating, largely illegible and seemingly volatile arrangements. In the next section, we turn to discuss how the desire to fix the new form entails a transformation of the field of negotiability for different urban and regional actors.

Containing mutability: changing the field of negotiability

Fixing the new signification also entails containing the intrinsic mutability of arrangements. Intermediaries become particularly important in this work of containment, as they have traditionally underpinned or facilitated relations between these places and actors (i.e. the state, the private electricity provider, the artisanal miner, the favela dweller and the radio host). Thus, power acts upon mediations, including the replacement or suppression of intermediaries—both human (brokers) and/or non-human (papers, technological artifacts)—in order to contain the instability of arrangements and their tendency to be(come) indeterminate. Consequently, by enabling and inhibiting mutability, intermediaries can facilitate the re-signification of subjects and spaces. Finally, this process of containment represents an attempt to maintain the new form by modifying the field of negotiability—and in so doing, to reframe actors' differential agencies in a context of tension and potential rejection of the arrangement.

For rural mining communities in eastern Congo, the navigation of space is an act of survival that entails finding every imaginable technique to evade the demanding tentacles of various fee-claiming public authorities (Lund, 2006; Movement 3). Public authority is situationally defined and may appear as state agents but also as non-state armed groups, the Congolese army, bandits, miners, and even internally displaced persons (Hoffmann *et al.*, 2016). One of the master tacticians at navigating the various islands of (in)security in rural eastern Congo is the *négociant(e)*; that is, the mineral trader who purchases metal ores from rural mine sites and delivers them to urban processing centers (*comptoirs*) for export. As brokers of minerals, they are the central protagonists given responsibility by the state to provide proof of origin of the mineral ores.

Verification of mineral origin is a costly process, but it is part of the due diligence regime imposed upon *négociants* by the state and foreign interests in the name of providing transparency. In a bid to transfer minerals quickly to urban centers, *négociants* (many of whom are men) broker agreements with an array of interest groups, from miners, state agents and customs authorities to the heads of mining cooperatives and armed groups. To balance the interests of these and other players requires a steady supply of wit and a lot of hard cash. Investing in a mining project is both costly and highly risky because mineral ores are not guaranteed, and miners can—if they find it more to their advantage—rob an absentee investor of their mineral ores. They might do so alone, or in collusion with other miners, the local authorities, and/or armed groups.

Navigating the vacillating desires of various interest groups alongside the material risks of extraction is the craft learned and mastered by every wily *négociant*. As the moving target between rural and urban spheres, the *négociant* is the figure that is 'traced' by the machinery of 'transparency' for government taxes and (either real or fictitious) mineral sourcing information. Within that delicate balance of exploiting miners, buying minerals on the cheap and selling them for more, paying taxes and extortion fees and supplying the sourcing information, it is (apparently) possible to make a living. We can therefore think of the *négociant* as doing the work of *domesticating* a very *foreign* arrangement: mineral traceability. The work of re-signification in this context is to downplay indeterminacy and exploitation so as to uphold the pretense of a seamless flow of so-called conflict-free minerals from rural mines to global markets.

Without a doubt we know that intermediaries like iTSCI also make substantial sums of money. They profit and accumulate even more by salvaging the commodities of far-removed and systematically marginalized mineral producers (see Tsing, 2015, cited in Meagher, 2019: 73). This is no less true of the Congolese state, which administers the traceability program as iTSCI's partner and utilizes it to extract rents in the form of taxes. Since salvage accumulation ultimately uses supply chains to harness the cheap labor and commodities of an undervalued or marginalized population at different scalar levels, there is a requirement that local eccentricities be rendered legible to

global market imperatives. Traceability initiatives like iTSCI do this work by targeting mineral traders, among other subjects, thus profiting by linking into the marginal areas but also allowing openings for the extension of at least a modicum of state control over a recalcitrant population.

In favelas, formalization is quite different but the objective is similar: to decrease the indeterminacy and commercial risks by imposing legibility onto the arrangement of electricity provision. In this context, replacement of the technical delivery system lies at the heart of the process of changing the forms of mediation. In most of the favelas occupied by a UPP police unit that underwent the electricity regularization process, a smart metering system has been installed. Mechanical meters were replaced with digital ones that enable the execution of remote commercial operations like meter reading, disconnection and re-connection, all from the company's headquarters.

From the electricity provider's perspective, this technology enables the company to overcome a series of potential risks that could destabilize the arrangement created through electricity regularization. First, it removes the need for the company to send out its agents to execute these operations, thus suppressing the potential for moments of conflict. However, during the fieldwork there were countless stories about how Light's agents play a major role in developing illegal connections for residents in exchange for a small sum, or how conflicts arise when homes are disconnected due to non-payment. Second, it was also anticipated that the technology would play a preventive role in terms of stabilizing the security context, but in fact, Light always claimed it was highly risky to send its agents into some favelas where they could be threatened by gang members, especially when attempting to disconnect residents.

Similar to the Congolese context, we can see here how security is regarded as an important aspect for understanding how the arrangement is re-shaped, even though the power relations and forms of competition in this case are different. In fact, while in Congo there is direct competition between the state and different local actors (chiefs, rebels, smugglers) for fiscal extraction, in Rio the private electricity company is indirectly challenged by the presence of the gangs, and the state is seen as the guarantor of security in order for the market to expand. In Rio, then, the desire for state sovereignty as expressed by the electricity provider emerges from a requirement for market protection within the arrangement shaped by the formalization of electricity provision. In this context, the digital meter appears as an artifact to minimize all forms of human mediation—avoiding both corruption and negotiation—in turn manifesting a faith in technological artifacts as being less corruptible and more trustworthy than humans.

In contrast to the Congolese case—although with similar motives—the smart meter emerges as a tool to 'digitize' traceability and to minimize human interactions at specific points of potential corruption (in other words, to eliminate figures like the *négociant*). The introduction of a smart metering system can therefore be understood as a tool to fix even more firmly the re-signification of these residents as compliant consumers/customers while the places themselves are re-ordered, formalized and made legible. In addition, in some neighborhoods the smart meters are installed in anti-fraud cabinets in order to protect the system even better against corruption and restrict access from unauthorized persons (including customers). In other words, the aim is to limit the field of negotiability—not only between humans (residents and agents), by limiting opportunities for corruption, but also between humans and technological artifacts, by limiting the possibility of manipulating the meters.

In Abidjan, what local radio was meant to contain as an intermediary was quite broad: the proliferation of popular aspirations for change, including democratization and an end to two decades of impoverishment. Despite its apparent 'newness', which initially generated a lot of interest when the first stations began to operate (the number of stations grew from 7 to 25 between 2000 and 2016), radio acted fundamentally as a technology for political conservation (in line with the medium's (post)colonial

history—see Larkin, 2008). That is, local radio worked to limit the mutability of arrangements connecting citizens to the public sphere and to the state. It did so, first, by offering a very limited, strictly policed multivocality. To be sure, new stations allowed citizens to speak in the mediated public sphere more than they had ever been allowed to before, but they could only speak through a limited set of scripts, and from a limited number of positions as voicing subjects (Pilo', 2020).

On the local airwaves they were asked to perform as archetypes: the bootstrapping entrepreneur; the hapless beneficiary; or the technocratic reformer who has to submit a fully-worked-out budget to the municipality before multiple, enduring insecurities can even be considered. Furthermore, scripts of 'good governance' and civic respectability allowed the voicing of critique only along two axes: either speakers were audibly pro-government, in which case they could speak freely, or they had to couch their critique in the most consensual terms of shared aspirations for the country's ever-elusive development. Negativity, refusal—or even worse, the intimation that things were 'not normal'—were immediately dismissed as either anti-government (and thus aligned with the equally predatory opposition parties), or nonsensical: quite literally, unreasonable.

This contributed to limiting the field of negotiability for the expression of popular voices. It constrained the assertion of a genuine, radically democratic urban multivocality: one that does not limit itself to policed pluralism but embraces cacophony and refusal as generative sites. Of course, local radio has not erased people's aspirations for change, but by providing the illusion of 'bottom-up' mediated expression, it has contributed to the continued silencing of street knowledge in favor of state-scripted speech. The fragmentary knowledge that things are not as they seem, that they could and should be otherwise, continues to be shared under the radar, in the 'undercommons' (Newell, 2012; Harney and Moten, 2013) where new arrangements are continuously envisaged and tried out—until one can take form.

Our three case studies illustrate the importance of intermediaries—and mediation in general—for fixing form to arrangements, albeit in separate but related ways. In Rio, smart meters enact the corporate dream of dis-intermediation, giving electricity providers unfettered access to the favela reconstituted as a secure 'bottom-of-the-pyramid' market—even as the meter itself turns into a mediator whose integrity needs to be protected. In eastern Congo, the *négociant* is not de-activated but folded back into newly 'transparent' supply chains of mineral extraction and repurposed, on the one hand, as prey for a global market in need of cheap minerals and sourcing information, and on the other, for a state increasingly keen to improve its image and fiscal health. Wedged between the global and predatory public authorities of the extractive industry, the *négociant* survives by re-arranging and circumventing the logistical spaces constructed by the demands of traceability. In Abidjan, lastly, the introduction of local radio demonstrates how a mediating technology invested with contradictory desires can end up narrowing the scope for agency and negotiability for both state *and* citizen: entrenching a status quo that both find unsatisfactory and displacing/deferring the question of socio-political change seemingly indefinitely.

Conclusion: on the illusion of formalizing arrangements

In this essay, we have focused on the form of arrangements within governmental projects to make specific spaces more governable in an attempt to formalize otherwise inchoate, fragmented and contested urban and regional realities. Formalization here designates specific modalities and materialities of power. Formalization cuts through, abstracts, reduces and (dis)intermediates arrangements in order to 'fix' and prescribe their form for specific people and places. By making the contours and tendencies of social relations more defined it renders them legible and predictable, seeking to mold them to meet the expectations of the state and market. Yet formalization in this sense

is always partly illusory. The ability of formalization projects to hold together the different elements of an arrangement across time and space is always only partial, and the governmental desires that drive formalization are precisely that: desires and projections, which always contain an aspirational dimension.

This is not to deny the human, infrastructural and ecological violence that formalization can enact upon marginalized urban worlds. Clearly, the pacification of the favelas in Rio, the mineral extraction in Congo, and even the normalization of silence on Abidjan's local airwaves involve very real harm. Yet, despite the fantasies of seamless government and total infrastructural access and control, there is always something that exceeds the control linked to the specific form of an arrangement. This excess attests, first, to the limits of power in shaping social space and human subjectivity. Identity, relation and even materialities remain too fluid to ever be fully fixed or prescribed. Second, governmental attempts to reduce the complexity of arrangements inevitably *exclude* those elements that either call forth new arrangements, or reveal the unsatisfactory nature of existing ones. These excluded elements can be thought of as what Jacques Rancière calls the 'part of those that have no part' (cited in Derickson, 2017), an exclusion that is at once constitutive (since it specifies what an arrangement is not) and undermining.

Together, the excess and the excluded ensure that formalization processes are incomplete: they cannot give a wholly encompassing, coherent or final form to arrangements. This is revealed over time, as the failures of formalization become apparent. In Abidjan, local radio's attempts to formalize city talk have simply sustained a parallel public sphere (sometimes referred to as 'pavement radio') which continuously undermines the popular legitimacy and credibility of the official, state-sanctioned public one. In eastern Congo, iTSCI initiatives cannot hope to be a substitute for meaningful conflict resolution. And in Rio, electricity regularization has failed to provide a new social contract with an affordable service and (renewed) consumers' rights—a failure partially expressed through the eventual breakdown of the smart meter system.

Where formalization seeks to fix completely, *re-arrangements* may yet linger, morph, disentangle and even dislocate elements, thus enacting that perpetual composition that occurs in spite of opposition. However, to see the failure of formalization (that is, its incompleteness) as an end point would be a mistake. Indeed, the failure of governance arrangements often provides the impetus for *more* supposedly improved formalization, not less. As James Ferguson (1994) notes about the ceaseless failures of 'development' schemes, failure is often the point, meaning that the purpose of the scheme was never development per se, but the advancement of state power as the sole legitimate purveyor of (perpetually deferred) development. In short, what is often framed as 'failure' can in reality be a time-bound delay awaiting more suitable conditions for the reactivation of the productive capacities necessary to extend power into new domains. As Harney and Moten (2021) warn, the continuous failure of attempts to give form to the multitudinous, provisional arrangements of social life for marginalized urban majorities is what simultaneously fuels the continuous *compulsion to improve* within the state and market machinery: to connect even more seamlessly to everyday activities and transactions at the margins, to further rationalize, standardize and model these behaviors, and to enact through them the fantasy of ever more integrated, extensive and efficient logistics.

Incompleteness, as some have argued, is that which is opposed to the desire for total logistical integration, or the will to bring everything within the logic of the market (Nyamnjoh, 2017; Guma, 2020; Harney and Moten, 2021). We concur, and certainly view it as a refusal to adopt a form, or a way to reveal the violence behind the lure of a pre-given form. Projects aimed at re-signifying people and spaces will always be incomplete, not because of some imperfection in their design, but because of the impossibility of foreclosing all room for maneuver at the margins where, as AbdouMaliq Simone (2004) has long argued, an indeterminate future is worked out.

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References

- Akrich, M. (1987) Comment décrire les objets techniques? [How to describe technical objects?]. *Techniques et Culture* 9, 49-64.
- Arboleda, M. (2016) Spaces of extraction, metropolitan explosions: planetary urbanization and the commodity boom in Latin America. *International Journal of Urban and Regional Research* 40.1, 96-112.
- Brenner, N. (ed.) (2014) *Implosions/explosions: towards a study of planetary urbanization*. Jovis, Berlin.
- Brisset-Foucault, F. (2019) *Talkative polity: radio, domination and citizenship in Uganda*. Ohio University Press, Athens, OH.
- Chatterjee, P. (2004) *The politics of the governed: reflections on popular politics in most of the world*. Columbia University Press, New York, NY.
- Cowen, D. (2014). *The deadly life of logistics: mapping violence in global trade*. University of Minnesota Press, Minneapolis, MN, and London.
- de Brier, G., A. Jorns, M. Geray and A. Jaillon (2020) How much does a miner earn? Assessment of miner's revenue and basic needs study in the DRC. International Peace Information Service (IPIS), Antwerp [WWW document]. URL <https://ipisresearch.be/publication/much-miner-earn-assessment-miners-revenue-basic-needs-study-drc/> (accessed 21 September 2021).
- Derickson, K.D. (2017) Taking account of the 'part of those that have no part'. *Urban Studies* 54.1, 44-8.
- Enough Project (2009) The impact of Dodd-Frank and conflict minerals reforms on eastern Congo's war. Enough Project, Washington, DC.
- Ferguson, J. (1994) *The anti-politics machine: 'development', depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press, Minneapolis, MN, and London.
- Forester, J. (1982) Planning in the face of power. *Journal of the American Planning Association* 48.1, 67-80.
- Foucault, M. ([1975-76] 2003) *Society must be defended: lectures at the Collège de France*. Edited by A.I. Davidson. Picador, New York, NY.
- Guma, P.K. (2020) Incompleteness of urban infrastructures in transition: scenarios from the mobile age in Nairobi. *Social Studies of Science* 50.5, 728-50.
- Guy, S., S. Marvin, W. Medd and T. Moss (2012) Intermediaries and the reconfiguration of urban infrastructures: an introduction. In S. Guy, S. Marvin, W. Medd and T. Moss (eds.), *Shaping urban infrastructures*, London, Routledge.
- Harney, S. and F. Moten (2013) *The undercommons: fugitive planning and black study*. Minor Compositions, Wivenhoe.
- Harney, S. and F. Moten (2021) *All incomplete*. Minor Compositions, Wivenhoe.
- Hockenberry, M., N. Starosielski and S. Zieger (2021) *Assembly codes: the logistics of media*. Duke University Press, Durham, NC, and London.

- Hoffman, K., K. Vlassenroot and G. Marchais (2016) Taxation, stateness and armed groups: public authority and resource extraction in eastern Congo. *Development and Change* 47.6, 1434–56.
- Koster, M. and Y. van Leynseele (2018) Brokers as assemblers: studying development through the lens of brokerage. *Ethnos* 83.5, 803–13.
- Kouamé Yao, S. (2017) Nouchis, ziguéhis et microbes: déclassément et distinction sociale par la violence de rue en Côte d'Ivoire [Nouchis, ziguéhis and microbes: downgrading and social distinction through street violence in Côte d'Ivoire]. *Politique africaine* 148.4, 89–107.
- Larkin, B. (2008) *Signal and noise: media, infrastructure and urban culture in Nigeria*. Duke University Press, Durham, NC, and London.
- Lund, C. (2006) Twilight institutions: public authority and local politics in Africa. *Development and Change* 37.4, 685–705.
- Mahmood, S. (2005) *The politics of piety: Islamic revival and the feminist subject*. Princeton University Press, Princeton, NJ, and Oxford.
- Meagher, K. (2019) Working in chains: African informal workers and global value chains. *Agrarian South: Journal of Political Economy* 8.1/2, 64–92.
- Mezzadra, S. and B. Neilson (2019). *The politics of operations: excavating contemporary capitalism*. Duke University Press, Durham, NC, and London.
- Mitchell, T. (1988) *Colonizing Egypt*. University of California Press, Berkeley, CA.
- Mitchell, T. (2002) *Rule of experts: Egypt, technopolitics, modernity*. University of California Press, Berkeley, CA.
- Newell, S. (2012) *The modernity bluff: crime, consumption and citizenship in Côte d'Ivoire*. University of Chicago Press, Chicago, IL, and London.
- Nyamnjoh, F. (2017) Incompleteness: frontier Africa and the currency of conviviality. *Journal of Asian and African Studies* 52.3, 253–70.
- Peck, J. and N. Theodore (2015). *Fast policy: experimental statecraft at the thresholds of neoliberalism*. University of Minnesota Press, Minneapolis, MN, and London.
- Pilo', F. (2020) Material politics: utility documents, claims-making and construction of the 'deserving citizen' in Rio de Janeiro. *City & Society* 32.1, 71–92.
- PRG, IPIS, SFR and Ulula (2020) Evaluating due diligence programs for conflict minerals: a matched analysis of 3T mines in eastern DRC, Los Angeles, CA and Antwerp [WWW document]. URL https://cris.maastrichtuniversity.nl/ws/portalfiles/portal/76505518/eval_ddp_20210217.pdf (accessed 3 January 2023).
- Quinan, C. and K. Thiele (2020) Biopolitics, necropolitics, cosmopolitics: feminist and queer interventions. *Journal of Gender Studies* 29.1, 1–8.
- Scott, J.C. (1998) *Seeing like a state: how certain schemes to improve the human condition have failed*. Yale University Press, New Haven, CT, and London.
- Simone, A. (2004) *For the city yet to come: changing African life in four cities*. Duke University Press, Durham, NC, and London.
- Simone, A. (2009) *City life from Jakarta to Dakar: movements at the crossroads*. Routledge, London and New York, NY.
- Simone, A. (2016) Urbanity and generic Blackness. *Theory, Culture & Society* 33.7/8, 183–203.
- Simpson, A. (2017) The ruse of consent and the anatomy of refusal: cases from indigenous Australia and North America. *Postcolonial Studies* 20.1, 18–33.
- Stiegler, B. (2011) *The decadence of industrial democracies: disbelief and discredit (volume 1)*. Translated by D. Ross and S. Arnold. Polity Press, London.
- Tsing, A.L. (2015) *The mushroom at the end of the world: on the possibility of life in capitalist ruins*. Princeton University Press, Princeton, NJ, and London.
- Vogel, C. and J. Musamba (2017) Brokers of crisis: the everyday uncertainty of eastern Congo's mineral négociants. *The Journal of Modern African Studies* 55.4, 567–92.
- Vogel, C., J. Musamba and B. Radley (2018) A miner's canary in eastern Congo: formalisation of artisanal 3T mining and precarious livelihoods in South Kivu. *The Extractive Industries and Society* 5.1, 73–80.
- Watson, V. (2009) Seeing from the South: refocusing urban planning on the globe's central urban issues. *Urban Studies* 46.11, 2259–75.
- Weber, M. ([1968] 2019) *Economy and society: a new translation*. Edited and translated by K. Tribe. Harvard University Press, Cambridge, MA.