

Concrete approaches to peace: infrastructure as peacebuilding

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On 16 September 2014, the force commander of the UN Organization Stabilization Mission in the Democratic Republic of Congo (MONUSCO) inaugurated a culvert at Mushake, on the road connecting the mineral-rich and rebel-infested Walikale territory to the regional UN hub of Goma. In the oppressive and humid heat of eastern Congo, Bangladeshi blue helmets proudly clapped and waved their flag as the force commander cut the ribbon and addressed the few local dignitaries who assisted at the ceremony. As he put it, the culvert that military engineers had delivered would ‘address a critical bottleneck on the Sake–Masisi road axis to facilitate mobility for both UN contingents and local inhabitants’.¹

The culvert in Mushake is just one tiny element in a wide range of infrastructure works under way today in eastern Congo—a patchwork of feeder roads, bridges, government buildings and waterworks propelled by the UN and its peacebuilding partners. These projects explicitly aim at extending state authority by facilitating access for security forces and administrative personnel to conflict areas, as well as equipping these agencies with administrative infrastructures. The output is remarkable: hundreds of kilometres of roads, nearly 100 administrative buildings constructed and socio-economic support provided to hundreds of thousands of people. The importance attributed to these works in the overall UN strategy for the Democratic Republic of Congo (DRC) is reflected in the fact that these and other infrastructural developments constituted the costliest among all the components of the overall stabilization strategy between 2008 and 2011.² Nor is the DRC unique in this respect. Infrastructure has become a prime tool in so-called stabilization efforts in fragile and conflict-affected settings across the globe. The international community has sunk billions of dollars into the muddy soil of South Sudan to erect a new state, and has spent more on reconstruction in Afghanistan alone than the entire post-1945 Marshall Plan cost, all in the hope of engineering peace and stability.³ Today’s peace- and statebuilding policy documents are littered with

¹ MONUSCO, ‘MONUSCO force commander inaugurates culvert on important road in Mushake’, 16 Sept. 2014, <http://monusco.unmissions.org/en/monusco-force-commander-inaugurates-culvert-important-road-mushake>. (Unless otherwise noted at point of citation, all URLs cited in this article were accessible on 20 Oct. 2017.)

² International Security and Stabilization Support Strategy for the DRC, *Quarterly Report, January to March 2011* (Goma: Stabilization Support Unit, 2011), p. 42; see also the ‘hidden’ infrastructure costs mentioned on p. 14.

³ Elias Groll, ‘The United States has outspent the Marshall Plan to rebuild Afghanistan’, *Foreign Policy*, 30 July 2014,

phrases such as ‘bridges for peace’ and ‘paving the road to peace and development’.⁴ As James I. Wasserstrom put it when he was head of the Office for Oversight of Publicly Owned Enterprises in the UN Mission in Kosovo, infrastructure adds ‘arms and legs’ to strategies aimed at winning ‘hearts and minds’.⁵

To be sure, logistics and physical reconstruction have always constituted a big part of the budgets of complex peacebuilding missions, which typically unfold in some of the world’s most logistically daunting environments. What is different today is that infrastructure has become one of the main ways in which peacebuilders aim to achieve their typically wide variety of highly political goals such as local security, the extension of state authority, and the restoration or establishment of the rule of law. Take, for example, the theory of change at the heart of the initial UN stabilization strategy in the Congo, which pins down the broader logic pervading today’s stabilization efforts and, in addition, informed the decision to rebuild the Mushake culvert:

The theory of change behind the ISSSS [International Security and Stabilization Support Strategy] and STAREC [Stabilization and Reconstruction Plan for Eastern Congo] is based on the logic that re-establishing road movement along key transport links and creating corridors of security is of critical importance to reinforcing state presence in the Eastern provinces as is [*sic*] a top priority for the Government of DRC and the UN mission (MONUSCO). Not only does it permit the circulation of public security forces and facilitate access to key state services such as administration and justice, but accessibility enhances the delivery of much needed humanitarian support and reduces the isolation in which illegal armed groups and bandits thrive. Similarly, improved transport conditions increase livelihood opportunities for the populations served by the road and are drivers for economic growth.⁶

Over the past decade, the built environment of conflict zones has moved from the unglamorous sphere of reconstruction into the limelight of peacebuilding. Peace- and statebuilding enterprises that link Washington, Kabul, Juba, London and Goma materialize in ramifying networks of roads, bridges, culverts, buildings, water pumps and electrification systems, populated by armies of hard-hatted construction workers and engineers—the ‘substance’ of peacebuilding.⁷ Infrastructure is no longer the background to meaningful action but itself constitutes political agency. The passage quoted above illustrates perfectly what we see as a curious paradox of today’s stabilization missions: that inherently *political* interven-

<http://foreignpolicy.com/2014/07/30/the-united-states-has-outspent-the-marshall-plan-to-rebuild-afghanistan/>. See also Special Inspector General for Afghanistan Reconstruction (SIGAR), *Quarterly Report to the US Congress* (Arlington, VA, 30 July 2014), pp. 4–5.

⁴ Mott MacDonald, *Provision of infrastructure in post conflict situations* (London: Department for International Development [DFID], 2005), p. 4; United Nations Office for Project Services (UNOPS), *Paving the road to peace and development* (Copenhagen, 2007).

⁵ Quoted in Merriam Mashatt, Daniel Long and James Crum, *Conflict-sensitive approach to infrastructure development* (Washington DC: United States Institute of Peace, 2008), p. 1.

⁶ UNOPS, *Roads in the east: Burhale–Shabunda phase 2, project initiation document* (Kinshasa, 2012), p. 4; see also the objectives in the first International Security and Stabilization Support Strategy, *Integrated programme framework 2009–2012* (Kinshasa, 2009), pp. 7, 13.

⁷ See John Law, ‘Technology and heterogeneous engineering: the case of the Portuguese expansion’, in Wiebe E. Bijker, Thomas P. Hughes and Trevor Pinch, eds, *The social construction of technical systems: new directions in the sociology and history of technology* (Cambridge, MA: MIT Press, 1987), pp. 111–34.

tions—aimed at improving security and fostering more effective state authority—frequently operate through what are otherwise considered *technical* practices. If one pauses on such a theory of change for a second, it raises difficult questions: can improvements in the built environment of conflict-affected societies help engineer peace? To what extent do modern political order and peace—or their absence—depend on the material world? *Can* one build a state out of concrete and steel? Will a state ‘work’ if its roads and government buildings are fixed? Today’s western peace- and statebuilding efforts in states affected by conflict and so-called ‘fragility’ seem to hinge on the assumption that infrastructure is the panacea by which peace and stability may be achieved.

The purpose of this article is to take stock of the surprising prominence of infrastructure as a characteristic of contemporary peacebuilding. We argue that placing infrastructure at the centre of the peacebuilding enterprise is very different from, say, foregrounding governance deficits or conflict economies—in conventional terms, the more social side of the story. By attempting literally to engineer peace and stability, we suggest, peacebuilders invoke a mode of power that is rarely recognized as such within International Relations (IR) but has arguably been central to modern western state formation: namely, infrastructural power, or the capacity to enrol the physical environment in the service of political aspirations. Yet the expert field of study concerned with state- and peacebuilding does not readily lend us the tools to grasp infrastructure as an element of power. Given the vulnerabilities characterizing so-called fragile and conflict-affected environments, the potential impact of infrastructural efforts requires the attention of students of, as well as the main actors in, international politics.

Drawing on examples from Mali to the Congo, and from Somalia to Afghanistan, we suggest that the emphasis on the built environment in contemporary peacebuilding plays out through two contradictory dynamics. On the one hand, the turn to infrastructure evidences a renewed emphasis on visible and solid *outputs*: large infrastructure works whose effects on fragility are assumed to be non-controversial and positive, such as opening up access for armed forces, state agents and economic flows. Such a move away from the emphasis on governance issues associated with liberal peacebuilding aligns with a more pragmatic stance. On the other hand, we identify a second approach to infrastructure in peacebuilding: aimed at local communities, this approach is reflected in those programmes in which infrastructure is envisaged as the seed of a *process* to rewire socio-political relations in order to achieve stabilization outcomes. Either perspective can be grasped through different theories of infrastructure, and together they make up the ambivalent politics of infrastructure in today’s pragmatic peacebuilding.⁸ Yet while their premises and aspirations differ, together they entail a thorough politicization of infrastructure that—once made explicit—comprises a new field of tensions within today’s peace- and statebuilding efforts.

⁸ For an overall discussion of pragmatic approaches to peacebuilding, see the introduction to this special section, pp. 293–99.

The rise of infrastructure in peace- and statebuilding

We recognize that peacebuilding, statebuilding and stabilization may mean different things to different people—in particular in expert literature. On the level of policy and implementation, however, these nuances are less relevant. With regard to the general purpose of an intervention, peace can be considered an end in itself; and the construction of effective and legitimate state institutions is one instrument for reaching peace.⁹ In recent international missions, including those in Kosovo, Afghanistan or the DRC, it has proved increasingly difficult to tell state- and peacebuilding apart, not least since the introduction of the latest innovation, that is, stabilization missions. The latter include both short-term and long-term engagements and address matters of immediate security as much as institution-building and issues of economic development. In this article, we follow practitioners and use the three terms—peacebuilding, statebuilding and stabilization—interchangeably, in order to focus on significant changes in practice, specifically the increasing emphasis on the built environment.¹⁰

The destruction of infrastructure has long been a conventional weapon of war.¹¹ Since around the turn of the century, however, infrastructure has also become a weapon for peace. Infrastructure was significantly drawn into statebuilding around 2002, in the wake of the western invasion of Afghanistan. In the debris of the large-scale destruction of Iraqi infrastructure, the American-headed coalition from the outset spent heavily on roads and government buildings.¹² In Afghanistan, infrastructure was at the core of the American counter-insurgency doctrine of ‘clear, build, hold’, and later the US military’s stability operations manuals defined infrastructure as a centrepiece of the strategy.¹³ In a way, infrastructure was also the easy option: programmes such as the Commander’s Emergency Response Program (CERP) provided commanding officers with a way of achieving ‘concrete results’ on which to report back, even if they were in reality completely overwhelmed by the sheer magnitude of the challenges they encountered. Over the past fifteen years, American commanders have collectively been doling out millions of dollars a year to whomever could promise them tangible results, spending money on projects with questionable or no impact, located in places some of which the US government has difficulty even pinpointing on a map.¹⁴

⁹ Roland Paris and Timothy Sisk, eds, *Dilemmas of statebuilding* (London: Routledge, 2009).

¹⁰ For an extended discussion of the rising prominence of stabilization missions and their relation to the concepts of peace- and statebuilding, see Robert Muggah, ed., *Stabilization operations, peace and development* (London: Routledge, 2014); Jan Bachmann, ‘Policing Africa—the US military and visions of crafting “good order”’, *Security Dialogue* 45: 2, 2014, pp. 119–36.

¹¹ As Michael Rose, then commander of the UN Protection Force in the Balkans, put it in 1994: ‘Hitting one tank is peacekeeping. Hitting infrastructure command and control, logistics, that is war.’ Cited in Michael N. Barnett, *The international humanitarian order* (London: Routledge, 2010), p. 67 (emphasis in original).

¹² Richard H. Brown, ‘Reconstruction of infrastructure in Iraq: end to a means or means to an end?’, *Third World Quarterly* 26: 4–5, 2005, pp. 759–75.

¹³ Joint Chiefs of Staff, *Joint Publication 3-07: Stability Operations* (Washington DC, 2016), p. I–1.

¹⁴ A 2011 audit by the US government on CERP projects in Laghman Province found that more than 90% of the funding was spent on risky projects whose outcomes were ‘questionable’. See SIGAR, *Commander’s Emergency Response Program in Laghman Province provided some benefits, but oversight weaknesses and sustainment concerns led to questionable outcomes and potential waste*, Audit-11-7 (Arlington, VA, 2011). In 2016 SIGAR reported that USAID could not account for precise locations for projects within its Secondary Roads programme: see

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Infrastructure and ‘technical assistance’ have always figured as an implicit component in stabilization, right back to the prehistory of the latter concept. Infrastructure was as central to the rise of modern warfare and to European colonial administration across the globe as it was to American modernization efforts in southern Vietnam in the late 1950s and early 1960s, or the parallel US and Soviet engineering missions in Afghanistan in the 1960s and 1970s.¹⁵ In the 1980s and 1990s, however, spending money on infrastructure for primarily political purposes became somewhat unfashionable. Capturing the spirit of the moment, the 1994 *World Development Report* argued that infrastructure development ought to be left to the private sector and managed ‘like a business, not a bureaucracy’.¹⁶ Instead, the donor community focused its efforts on ‘governance’—spurred on at the end of the decade by the Millennium Development Goals (MDGs), which nevertheless, according to some detractors, failed at least in part because the programme discounted the ‘omitted MDG’ of infrastructure.¹⁷ In the following decade, spreading outwards from Afghanistan and Iraq, a ‘renaissance’ in donor infrastructure spending began to be apparent in Africa;¹⁸ and in 2011 the UK House of Commons firmly concluded that ‘infrastructure is back on the agenda’ of official development aid.¹⁹

Infrastructure is back, then; but with a different face. As UNOPS, the UN’s main infrastructure delivery agency, puts it suggestively, ‘On the face of it, building a road is simply about connecting two points. In reality, a road is so much more.’²⁰ It had hitherto been the conventional wisdom that infrastructure should appear only in post-conflict reconstruction efforts, a few safe years after the conclusion of a peace agreement.²¹ What makes today’s stabilization efforts so interesting is that they, on the contrary, deploy infrastructure earlier on, ‘when there is no peace to keep’.²² In the process, infrastructure has become imbued with a wide range of high-level social, economic and political effects. Even the World Bank today promotes infrastructure spending during the course of conflict,

SIGAR, *Afghanistan’s road infrastructure: sustainment challenges and lack of repairs put US investment at risk*, Audit 17-11 (Arlington, VA, 2016), pp. 4–5. For a general critique, see Ashley Jackson, ‘What have we learnt on stabilization in Afghanistan? Not much’, *Foreign Policy*, 15 May 2013, <http://foreignpolicy.com/2013/05/15/what-have-we-learned-about-stabilization-in-afghanistan-not-much/>.

¹⁵ See e.g. Martin van Creveld, *Supplying war: logistics from Wallenstein to Patton* (Cambridge: Cambridge University Press, 1977); James Carter, *Inventing Vietnam: the United States and state building 1954–1968* (Cambridge: Cambridge University Press, 2008); William J. Rankin, ‘Infrastructure and the international governance of economic development, 1950–1965’, in Jean-François Auger, Jan Jaap Bouma and Rolf Künneke, eds, *Internationalization of infrastructures: proceedings of the 12th Annual International Conference on the Economics of Infrastructures* (Delft: Delft University of Technology, 2009), pp. 61–75.

¹⁶ World Bank, *World Development Report 1994: infrastructure and development* (Washington DC, 1994), p. 2.

¹⁷ Antonio Estache and Quentin Wodon, *Infrastructure and poverty in sub-Saharan Africa* (Basingstoke: Palgrave Macmillan, 2014), p. 22.

¹⁸ Commission for Africa, *Still our common interest* (London, 2010), p. 44.

¹⁹ House of Commons International Development Committee, *DFID’s role in building infrastructure in developing countries*, 9th Report of Session 2010–12 (London, 13 Nov. 2011), p. 7.

²⁰ UNOPS, *The true power of infrastructure* (Copenhagen, 2014).

²¹ Paul Collier, V. L. Elliott, Håvard Hegre, Anke Hoefler, Marta Reynal-Quero and Nicholas Sambanis, *Breaking the conflict trap: civil war and development policy*, World Bank policy research report (Washington DC, 2003), p. 158.

²² Jan Eliasson, ‘Greater efforts needed to address fragility that leads to conflict, stresses Deputy Secretary-General in remarks to World Bank event’, press release, Dsg/Sm/1021 (New York: UN, 7 Oct. 2016).

advocating ‘a stronger focus on the interaction between [infrastructure] projects and the conflict context’.²³

This move towards deploying infrastructure as the ‘tip of the spear’ in peacebuilding is part of a broader return to infrastructure on the global development agenda. Whether or not it has been prompted by China’s increasingly salient global infrastructure agenda, ‘closing the infrastructure gap’ tops the agenda for development banks and governments interested in stimulating economic growth in Africa, Asia and Latin America.²⁴ What is of particular interest in the context of this article is the attribution by current peace- and statebuilding missions of larger powers to infrastructure, considering it a key tool in helping to achieve such complex objectives as the extension of state authority and the improvement of security, a dynamic that requires careful analysis. Before we move on to consider how this turn to infrastructure plays out in contemporary peacebuilding, we want to take a step back to underscore its theoretical import.

Infrastructural statebuilding

The contention that stability, the extension of state authority and the achievement of security can essentially be attained through the provision of infrastructure is supported by a disparate but highly compelling body of literature. This literature suggests that the historical formation of powerful western states has first and foremost been an infrastructural achievement. According to theoretical heavyweights ranging from Michael Oakeshott to James Scott and from Michel Foucault to Anthony Giddens, infrastructure plays a large role in the formation of modern political orders and their reproduction across different societies, including colonial ones. In their own ways, all these writers emphasize how modern states were able to centralize power, capital and decision-making through the building of railways and roads linking national peripheries firmly to the government; by instituting telegraph and postal services that allowed regular and swift communication of orders; and, more generally, by arranging and limiting social relations through the built environment.²⁵ Acting on people not directly but through the physical environment constitutes a way of exercising power that Michel Foucault

²³ Michelle Rebosio and Per Egil Wam, *Violent conflict and the road sector: points of interaction* (Washington DC: World Bank, 2011), p. 27.

²⁴ See e.g. World Bank, *Africa’s pulse*, vol. 15 (Washington DC: World Bank Office of the Chief Economist of the Africa Region, April 2017); Economist Corporate Network, *Spanning Africa’s infrastructure gap: how development capital is transforming Africa’s project build-out* (Dubai and Johannesburg, 2015).

²⁵ This is an argument summarized in Steven van de Walle and Zoe Scott, ‘The political role of service delivery in state-building: exploring the relevance of European history for developing countries’, *Development Policy Review* 29: 1, 2011, pp. 5–21, and reinforced across a much wider literature. See e.g. Michel Foucault, *Security, territory, population: lectures at the Collège de France, 1977–1978* (New York: Picador, 2007); Michael Oakeshott, *Lectures in the history of political thought* (Exeter: Imprint Academic, 2007; first publ. 1967), p. 370; James Scott, *Seeing like a state* (New Haven, CT: Yale University Press, 1998); Michael Mann, ‘The autonomous power of the state: its origins, mechanisms and results’, *European Journal of Sociology* 25: 2, 1984, pp. 185–213; Anthony Giddens, *A contemporary critique of historical materialism*, vol. 1, *Power, property and the state* (Berkeley: University of California Press, 1981); Jo Guldi, *Roads to power: Britain invents the infrastructure state* (Cambridge, MA: Harvard University Press, 2012); Michael Peter Adas, *Machines as the measure of men: science, technology, and ideologies of western dominance* (Ithaca, NY: Cornell University Press, 1989).

considered the most advanced and nuanced characteristic of the politics of late modernity he set out to dissect. The central theoretical thesis of this literature—that the built environment is central to politics, power and government—now gains wide traction in critical social sciences, where the further nuances are explored around Bruno Latour’s technocratic but alluring claim that ‘technology is power made durable’.²⁶ However implicitly, contemporary peacebuilding seems to invoke such a notion of material politics, which Michael Mann summarized as ‘infrastructural power’ and defined loosely as ‘the capacity of the state to actually penetrate civil society and to implement logistically political decisions throughout the realm’.²⁷ In a way, these insights are so straightforward, and infrastructure is so widely deployed as a statebuilding tool by governments across the world, that it is surprising it took so long to permeate peacebuilding.

Yet this thesis somehow entirely escapes contemporary debates around the direction that peacebuilding and statebuilding are taking. In fact, there seems to be a widespread reluctance in academic debates to engage with the material outputs of today’s state- and peacebuilding operations.²⁸ Both mainstream and more critical students of interventions consider the playing field of interventions as a purely *social* world, inhabited exclusively by human actors equipped with interests, identities, capacities and histories but detached from their material conditions: rebel groups, vulnerable populations, internally displaced persons and predatory state agents.²⁹ The reason for this may lie precisely in the close connection that has historically been drawn between infrastructure (roads, rails, telegraphs, canals), state power and the modernization project. James Scott criticized large interventions in the built environment as a form of power through which states could render their domain legible and thus governable, in ways that escape conventional modes of political contestation.³⁰ In a context closer to our subject-matter here, the anthropologist James Ferguson replicated this argument in the context of aid in his seminal book *The anti-politics machine*.³¹ His critique that aid constitutes a form of domination that works through the depoliticization of relations of power under the guise of technical aid resonates powerfully in contemporary critiques of peace- and statebuilding.³² While acknowledging that infrastructure is a vehicle for the projection of power, critics curiously tend to overlook what infrastructure might actually do, limiting themselves instead to unpacking the ways in which these programmes are unaccountable to their

²⁶ Bruno Latour, ‘Technology is power made durable’, in John Law, ed., *A sociology of monsters: essays on power, technology and domination* (London: Routledge, 1991), pp. 103–31.

²⁷ See Mann, ‘The autonomous power of the state’, p. 189.

²⁸ For exceptions, see Christine Hamieh and Roger MacGinty, ‘A very political reconstruction: governance and reconstruction in Lebanon after the 2006 war’, *Disasters* 34: issue supplement s1, 2010, special issue, pp. S103–23; Jonathan Goodhand, ‘Stabilizing a victor’s peace? Humanitarian action and reconstruction in eastern Sri Lanka’, *Disasters* 34: issue supplement s3, 2010, special issue, pp. S342–56.

²⁹ Peer Schouten, ‘The materiality of state failure: social contract theory, infrastructure and governmental power in Congo’, *Millennium* 41: 3, 2013, pp. 553–74.

³⁰ Scott, *Seeing like a state*.

³¹ James Ferguson, *The anti-politics machine: development, depoliticization and bureaucratic power in Lesotho* (Cambridge: Cambridge University Press, 1990).

³² See e.g. Roger MacGinty, ‘Routine peace: technocracy and peacebuilding’, *Cooperation and Conflict* 47: 3, 2012, pp. 287–308.

beneficiaries, as Karin Aggestam argues most explicitly in her study of water infrastructure projects in Palestine.³³ But instead of slipping political effect through the back door of technical interventions, today's peacebuilders seem to be doing the opposite: they explicitly deploy infrastructure with the overt objective of achieving such highly political outcomes as spreading state authority, security and the rule of law out from centres of state power. There is today an overarching consensus that infrastructure is key to peacebuilding; yet there is no common understanding of *how* exactly interventions in the built environment can help achieve peace.³⁴ In the following sections of this article, we propose that it is possible to discern two main ways in which infrastructure is deployed in peacebuilding, each with its own problems and opportunities.

A tale of two pragmatisms, part one: infrastructure as peacebuilding by other means

In a play on Clausewitz's famous words on war, we dub the first of the two dynamics identified at the beginning of this article 'infrastructure as peacebuilding by other means'. In what seems to be a direct application of theories of infrastructural power discussed above, 'peacebuilding by other means' entails a heavy and explicit emphasis on the reconstruction of roads and government buildings—the hardware of the state—for overt political reasons. This practice constitutes the core of recent UN stabilization missions in Afghanistan, the DRC and South Sudan, and figures prominently in numerous peacebuilding initiatives under way in contexts including Iraq and Somalia. UNOPS spends roughly 70 per cent of its global infrastructure portfolio in fragile and conflict-affected states. The theory of change underpinning infrastructure as peacebuilding by other means seems straightforward: building peace means building roads. Under this heading, one finds both long-term efforts to build central state capacity across a national territory and short-term quick-impact projects aimed at winning the hearts and minds of potentially hostile local populations.

Yet a look beyond the theoretical discourse at the actual impact of roads as security corridors and government buildings as extensions of state authority reveals a confusing picture. While across the whole range of statebuilding efforts, infrastructure outputs are presented as equal to statebuilding results, the few studies that exist agree that investment in the built environment has led to increased stability exactly nowhere.³⁵ We propose that the core of the problem resides in an *output-oriented* understanding of infrastructure at the expense of approaches that would

³³ Karin Aggestam, 'Desecuritization of water and the technocratic turn in peacebuilding', *International Environmental Agreement* 15: 3, 2015, pp. 327–40.

³⁴ United Nations Peacebuilding Support Office, *Peace dividends and beyond: contributions of administrative and social services to peacebuilding* (New York, 2012), p. 1.

³⁵ For an overview of the ambiguous results of US stabilization efforts in Afghanistan, see Jackson, 'What have we learnt?'. On stabilization efforts in the DRC, see International Security and Stabilization Support Strategy, 'Situation assessment July 2011', quoted in Hugo de Vries, *Going around in circles: the challenges of peacekeeping and stabilization in the Democratic Republic of the Congo*, Clingendael Institute, Conflict Research Unit Report (The Hague, Aug. 2015), p. 49; DFID, 'Roads in the east phase 2: annual review March 2016' (London, 2016) p. 2.

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integrate infrastructure with its governance. Without accompanying ‘influencing work’, as DFID has called it,³⁶ infrastructures are just things that can be used for good, for bad, or simply not used at all.

Characteristic of such an approach are so-called ‘quick-impact projects’ (QIPs). These are small infrastructure interventions aimed at having immediate high impact on local populations. While initially designed for repatriation programmes within humanitarian missions, QIPs became emblematic of the experimentations of western military forces in Afghanistan and Iraq aimed at delivering ‘peace dividends’. Like other aspects of stabilization, they are today deployed in contexts ranging from the African Union’s stabilization mission in Somalia to the UN’s mission in Mali. In many of these projects, the creation of infrastructure constitutes its own measure of success, without any further enquiry into its actual impact on supposed drivers of conflict.³⁷

What seems to be happening in many instances is that a gap of mistranslation arises between programme strategy and implementation, whereby stabilization ambitions get translated directly into technical delivery indicators.³⁸ Infrastructure is so pervasive in contexts of intervention precisely because it can be construed as a ‘concrete’ output towards a wide variety of goals on the peace–development nexus. Infrastructure seems particularly amenable to a mode of operation, deeply ingrained in contemporary stabilization efforts, in which the main focus is on high numbers of concrete deliverables—which can be reported on back home—in contexts where it may be difficult to tackle the trickier issues closer to the core causes of the conflict. Host-country governments, too, often prefer large-scale, highly visible infrastructures, to which they can point as their achievements and use to strengthen their own positions.³⁹ The Congolese government, for instance, put a characteristically heavy emphasis on tangibles, including the delivery of roads and administrative infrastructure, in its initial stabilization plan for the eastern Congo⁴⁰—not coincidentally, exactly in line with the ruling party’s infrastructure-driven election campaign of a ‘revolution of modernity’.⁴¹

Simply equating stuff built with advances towards peace, we argue, is a mistake. Infrastructure, on the semantic level, is a relational concept.⁴² Implicit in the word is a reference to something separate from it: a physical system is only an *infra*-structure if it supports human-driven processes external to itself. This means that

³⁶ Eddy Bynens and Gary Taylor, *Supporting infrastructure development in fragile and conflicted-affected states. Case study—DR Congo* (London: DFID, 2012), p. 11.

³⁷ In addition, before 2009 the US Army did not even document the QIPs it was involved in Afghanistan. See SIGAR, *Quarterly Report to Congress* (Arlington, VA, 30 Oct. 2009), pp. 18–19.

³⁸ This observation is based on a limited but representative analysis of project-level documentation we carried out: see Peer Schouten and Jan Bachmann, *Roads to peace? The future of infrastructure in fragile and conflict-affected states* (Copenhagen: Danish Institute for international Studies and United Nations Office for Project Services, 2017).

³⁹ Hamieh and MacGinty, ‘A very political reconstruction’.

⁴⁰ See Government of the DRC, *Programme de stabilisation et de reconstruction des zones sortant des conflits armés (STAREC)* (Kinshasa, 2009).

⁴¹ Marta Iñiguez de Heredia and Romuald Adili Amani, 2012, ‘DR Congo President’s “Revolution of Modernity” is starting to look like “business as usual”, in *Africa at LSE* (London, 22 May 2012, blog entry).

⁴² Susan Leigh Star and Karen Ruhleder, ‘Steps toward an ecology of infrastructure: design and access for large information spaces’, *Information Systems Research* 7: 1, 1996, p. 113.

its effects on peace can emerge only in interaction with what people actually use it for—a point that largely escapes peacebuilding planning today. Rather than making sure infrastructure is *used* in peace-supporting ways or conducting follow-up evaluations to learn case-by-case lessons, donors prefer to move on to the next concrete project.

Even if infrastructure is today deployed to achieve explicit peacebuilding objectives, there is thus some truth in the assertion that infrastructure can become a ‘pragmatic’ alternative, substituting for a real engagement with the root causes of conflict. But to thereby dismiss its agency in stabilization does not do justice to the irrevocable impact that infrastructures might have on social and political relations in fragile contexts—effects that may escape the attention of peacebuilders as they look on past delivery to the next project.

We may illustrate these points through a brief discussion of recent stabilization missions. The UN Stabilization Strategy for the DRC, for example, intended to restore the authority of the government in the country’s eastern regions with QIPs worth almost US\$270 million. There was good progress in terms of outputs, strategic roads, prisons and administrative buildings, yet violent conflict and insecurity in many areas worsened. According to critics, the infrastructure projects had ‘zero impact’ on security as they did nothing to address ‘state–society relations’ and simply facilitated the extension of predatory behaviour by Congolese armed forces and administrators along roads prioritized by the government.⁴³ The grand ambition of creating peace gave way to a militaristic ‘clear, hold, build’ approach in a range of strategic localities.⁴⁴ There are strong indications that some of this infrastructure was subsequently used for repression of free speech and abuse of human rights, thereby serving to fortify a highly contested authoritarian regime. The prison in Goma built by UNOPS has housed pro-democracy activists belonging to a highly popular non-violence movement called La Lucha, who were detained because they spoke out against President Kabila’s efforts to extend his mandate.⁴⁵ While the MONUSCO stabilization strategy emphasized in 2012 that ‘rebuilding roads ... expanding the transport grid and clearing corridors of checkpoints will ... destroy key profit centres of the remaining armed groups’,⁴⁶ a 2016 MONUSCO review of the situation after road works had been carried out showed that while mobility surged, locals complained forcefully of harassment by armed groups and state security forces at roadblocks along the new road.⁴⁷

⁴³ Author interview with MONUSCO official, Goma, 15 May 2017. See also Emily Paddon and Guillaume Lacaille, *Stabilizing the Congo*, Forced Migration policy briefing 8 (Oxford: Refugee Studies Centre, 2011), pp. 16–17; de Vries, *Going around in circles*, pp. 48–9.

⁴⁴ MONUSCO Stabilization Support Unit, *International security and stabilization support mission for the Democratic Republic of the Congo: generating a joint political approach to stabilization* (Kinshasa, 2012), p. 12. See also Christoph Vogel, *Islands of stability or swamps of insecurity? Monusco’s intervention brigade and the danger of emerging security voids in Eastern Congo*, Africa policy brief no. 9 (Brussels: Egmont Royal Institute for International Relations, 2014).

⁴⁵ Human Rights Watch, *DR Congo: free youth activists*, 15 March 2016, <https://www.hrw.org/news/2016/03/15/dr-congo-free-youth-activists>.

⁴⁶ MONUSCO, *UN support for security and stabilisation of eastern DRC*, background briefing, EDRM 3091507, quoted in David Shelley, *Business case: economic appraisal. Roads in the east 2, phase 2 report*, prepared by Coffey International Development for DFID (London, Dec. 2011), p. 6.

⁴⁷ Alain Likota, ‘Focus sur le projet intégré de stabilisation du nord Kalehe’, *Echos de la MONUSCO* VIII: 56 (April 2016), p. 15.

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The core assumption of the strategy, that instant service provision would extend the reach of state authorities, which would in turn improve security, had proved wrong.⁴⁸ Infrastructure as peacebuilding by other means ended up a bad case of history repeating itself: the dictator Mobutu had used roads as a tool to extend his domination.⁴⁹ Also echoing the Mobutu period, most of the roads rehabilitated for stabilization become unusable after one rainy season if they are not maintained.

Similar experiences surface elsewhere. The American-delivered ring road in Afghanistan has become a regular target of insurgency attacks, and a review by SIGAR of USAID's stabilization efforts in Afghanistan confirmed increased levels of violence in villages that received stability funding for infrastructure reconstruction, which seem to attract attacks by the Taliban.⁵⁰ Now as in the past, local populations cannot detach the hypothetical utility of infrastructure from the identity of its provider: a much-needed feeder road delivered by Americans will always be an 'American road' in the eyes of people with grievances against the American presence. To be sure, reconstructed roads do provide logistical capacity to US bases in Afghanistan; but the opportunity they provided for rackets also became a main source of warlord funding.⁵¹ Since South Sudan became independent, infrastructure has been a major fixture in donor spending, even after violence broke out between groups loyal to, respectively, President Kiir and Vice-President Machar at the end of 2013. Continued violence provoked a discussion on whether 'security access roads' and other key infrastructures delivered as part of the stabilization agenda had in fact exacerbated tensions and inadvertently facilitated abuses by an army that was now party to the conflict.⁵²

These examples raise the question of whether donors should engage in reconstruction and the extension of a state's reach in areas where not only has the state acted coercively but its claim to legitimate authority is highly contested. In the worst case, even the simplest feeder road might facilitate the proliferation of illegal taxation practices or the blossoming of the illicit economic activities on which armed groups tend to thrive. One UNOPS project manager called infrastructure a 'double-edged sword',⁵³ in that outputs can also be hijacked by parties to a conflict.⁵⁴ In such cases, infrastructure does have effects on power and security, but these effects constantly escape the purchase that peacebuilders' logical frameworks claim to hold over it. The attribution of large powers to infrastructure in stabilization efforts largely disregards the point that the effects of

⁴⁸ At the same time, the strategy did work in that it delivered on the expectations of the Congolese government, providing roads, prisons, administrative buildings and training for its security forces. See de Vries, *Going around in circles*, p. 48.

⁴⁹ James Fairhead, 'Paths of authority: roads, the state and the market in eastern Zaire', *European Journal of Development Research* 4: 2, 1992, pp. 17–35.

⁵⁰ Kevin Sieff, 'After billions in US investment, Afghan roads are falling apart', *Washington Post*, 30 Jan. 2014. See also SIGAR, *Quarterly Report to Congress* (Arlington, VA, 30 Oct. 2015), p. 144.

⁵¹ House Subcommittee for National Security, *Warlord, Inc.: extortion and corruption along the US supply chain in Afghanistan* (Washington DC: US House of Representatives, 2010).

⁵² See Schouten and Bachmann, *Roads to peace?*, p. 8; also Sam Barnes, Stelios Comninos, Chan Awuol Jr and Achuth Philip Deng, *South Sudan Recovery Fund, round 3: UN Joint Stabilization Programmes. Outcome evaluation* (Mallorytown and Copenhagen: Dundex, 2015).

⁵³ Author's interview with UNOPS project manager, Goma, Nov. 2016.

⁵⁴ Yuri M. Zhukov, 'Roads and the diffusion of insurgent violence', *Political Geography* 31: 3, 2012, pp. 144–56.

infrastructure development cannot be built in fully but arise in interaction with people's responses and resistances to, and alliances with, the physical environment. Infrastructure is thus more 'lively'⁵⁵ than the term 'output' encompasses, and its agency in peacebuilding is certainly more rich and complex than is implied by critiques of technocratic peacebuilding that depict it as a passive vehicle. If there are thus some grounds to criticize a more pragmatic approach to peacekeeping which focuses on infrastructure delivery as peacebuilding by other means, this does not do justice to the profound effect that interventions in the built environment might have on conflict dynamics in the context of stabilization efforts.

A tale of two pragmatisms, part two: 'the true power of infrastructure'⁵⁶

While infrastructure does figure as a prominent substitute for other peacebuilding activities, the field is much more diverse than that characterization alone suggests, and this take on infrastructure as stabilization by other means is itself under heavy fire within communities of practitioners. In other words, it is not fair to reduce contemporary stabilization to this top-down approach. There are more intricate ways in which the built environment is strategized to achieve stabilization objectives; ways that, if anything, entail a further politicization of infrastructure rather than its opposite. This can best be illustrated through the way UNOPS advertises itself. In a series of advertisements targeting social media, it offers images of engineers and construction workers in hard hats building a variety of infrastructures in clearly identifiable developing world settings. Superimposed over these images is either the hashtag '#BuildingCommunities' or the more philosophical 'WHEN IS A ROAD #NOTJustARoad?' Through these advertisements, UNOPS prompts us to recognize that infrastructures are not simply objects: rather, infrastructure constitutes social relations, and evokes visions of mobility, modernity or the common good.⁵⁷

This view is more in line with a different branch of infrastructure projects in peacebuilding, which works to delegate sources of power, as well as the agency of infrastructure, away from central states to its prime users: local communities. It concerns the ensemble of peacebuilding and stabilization initiatives, in which ownership of the projects is with the conflict-affected communities.⁵⁸ While according to output-based approaches infrastructure has an effect only *after* delivery of the asset (by causally facilitating the movement of communities, economic actors and state agents), in this approach infrastructure manifests its agency on peace during planning and construction, by bringing together communities in new ways.⁵⁹ In building infrastructure in conflict-affected societies, UNOPS

⁵⁵ Ash Amin, 'Lively infrastructure', *Theory, Culture and Society* 31: 7–8, 2014, pp. 137–61.

⁵⁶ UNOPS, *The true power of infrastructure*.

⁵⁷ Brian Larkin, 'The politics and poetics of infrastructure', *Annual Review of Anthropology* 42, 2013, pp. 327–43.

⁵⁸ For a discussion on the deployment of community-driven projects in reconstruction, see Patrick Kyamusugulwa, 'Participatory development and reconstruction: a literature review', *Third World Quarterly* 34: 7, 2013, pp. 1265–78.

⁵⁹ This distinction is readily recognized by practitioners: see John Hawkins, Camilla Herd and Jill Wells. *Modifying infrastructure procurement to enhance social development* (London: Engineers Against Poverty/Institution of Civil Engineers, 2006), p. 1.

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explains, the agency gives vulnerable communities ‘more power over their own lives. This is the true power of infrastructure.’⁶⁰

If infrastructure has been construed as a conduit of state power, this alternative view points to the importance of exploring how topics such as state authority, citizenship and perceptions of a public good are enmeshed with infrastructures in ‘everyday experience’.⁶¹ In other words, infrastructures are magnets for social and political aspirations.⁶² An emerging academic literature on the symbolic power of infrastructure provides two relevant insights in this context. First, it shows that while infrastructures are politically ‘big’—because their size and homogeneous quality mean they are likely to have substantial impact—the character of that impact is not predictable but has the potential to reinforce, disrupt and subvert both political borders and societal divides. Second, exploration of the politics of infrastructure cannot wait until infrastructure is in place. Controversies emerge throughout all stages of the life of an infrastructural project. At all stages in the process of design, deliberation, construction and use, infrastructures divide groups or bring together different communities in a variety of ways around concrete problems, contested values, fears and promises of social transformation. Such a view of infrastructural politics, which echoes a notion of politics reminiscent of that advocated by John Dewey,⁶³ shifts the focus away from central statebuilding towards controversies around which different stakeholders converge to confront the issue of an intervention in the built environment.

We may illustrate this with a concrete example. A US military road stabilization project in Kunar Province, Afghanistan, sourced 80 per cent of its labour force from a 10-kilometre radius to integrate local communities. The logic was that working collectively on creating a public good should engender a sense of responsibility and solidarity. Road construction was also intended to send a message to potential spoilers and the broader population of America’s long-term commitment.⁶⁴ At the same time, the national government managed to position itself as a broker mediating between the interests of several local strongmen and the communities along the road. In this way, the project might have enhanced the government’s legitimacy in a conflict-prone area. The counter-insurgency expert David Kilcullen posits that in this case the construction process may have proved to be more valuable than the road itself, as the construction of the road became

⁶⁰ UNOPS, *The true power of infrastructure*.

⁶¹ See Stephen Graham and Colin McFarlane, eds, *Infrastructural lives* (London: Routledge, 2015), see also Hannah Appel, Nikhil Anand and Akhil Gupta, ‘Introduction: the infrastructure toolbox’, *Cultural Anthropology* website, 24 Sept. 2015, <https://culanth.org/fieldsights/714-introduction-the-infrastructure-toolbox>.

⁶² For key contributions within the emergent anthropology of infrastructure, see Penny Harvey and Hannah Knox, ‘The enchantment of infrastructure’, *Mobilities* 7: 4, 2012, pp. 521–36; Penny Harvey and Hannah Knox, *Roads: an anthropology of infrastructure and expertise* (Ithaca, NY, and London: Cornell University Press, 2015); Nikhil Anand, ‘Pressure: the politechnics of water supply’, *Cultural Anthropology* 26: 4, 2011, pp. 542–64; Hannah Appel, ‘Walls and white elephants: oil extraction, responsibility, and infrastructural violence in Equatorial Guinea’, *Ethnography* 13: 4, 2012, pp. 439–65.

⁶³ See Noortje Marres, *Material participation: technology, the environment and everyday publics* (Basingstoke: Palgrave Macmillan, 2012).

⁶⁴ David Kilcullen, *Accidental guerilla: fighting small wars in the midst of a big one* (Oxford: Oxford University Press, 2009), pp. 95–6.

a tool to manufacture bonds between the government and local communities.⁶⁵

This approach, in which infrastructure's transformative power is unleashed during the construction phase, is deployed across a range of conflict contexts and for widely varying purposes. Community stabilization projects envision fostering community resilience to diffuse tensions or to increase state capacity, and can take different shapes. Some are woven into counter-insurgency programmes such as USAID's Community-Cohesion Initiatives in Afghanistan. Others take the shape of so-called 'community-driven development' projects, such as USAID's Transition Initiative for Stabilization in Somalia or the multi-billion-dollar National Solidarity Program in Afghanistan (NSP). The NSP, the biggest and longest-running development programme in Afghanistan, has shown significant effects with regard to reforming local governance structures. The 35,000 community development councils have decided on more than 80,000 development projects, mostly in the water, power and transport sectors. While a World Bank assessment claims that the NSP has 'extended the reach of government to almost all rural communities in the country',⁶⁶ other assessments, while acknowledging transformation at community level, cast doubt on its impact on the legitimacy of the national government.⁶⁷ The NSP's successor programme, the Citizen's Charter Afghanistan Project, seems to have taken those findings into account, and aspires to the establishment of a new 'social contract' between the government and local councils.⁶⁸

In a number of similar projects, fostering central state legitimacy features as something of an accidental outcome. Within the UN hybrid mission in Darfur (UNAMID), the UN Development Programme's community stabilization programme in Sudan or the multi-donor Somalia Stability Fund there is an emphasis on community-based, labour-intensive projects conducive to increased cohesion of governance at the local level.⁶⁹ Similarly, the UN stabilization mission in northern Mali (MINUSMA), mandated to restore state authority in a region where the state's legitimacy is highly disputed, encountered substantial local contestation. In response, a multi-donor trust fund in support of MINUSMA activities now puts more emphasis on so-called 'community-driven quick impact peace dividend projects' to 'maintain public support to the peace process'.⁷⁰ What

⁶⁵ Kilcullen, *Accidental guerilla*, p. 71.

⁶⁶ See World Bank, *Strategic directions for the National Solidarity Program: assessment of strategic issues and recommendations for future directions*, report no. ACS13685 (Washington DC, March 2015), p. 1.

⁶⁷ Andrew Beath, Christia Fotini and Ruben Enikolopov, 'The National Solidarity Programme: assessing the effects of community-driven development in Afghanistan', *International Peacekeeping* 22: 4, 2015, p. 311.

⁶⁸ See World Bank, 'Afghanistan government inaugurates citizens' charter to target reform and accountability', <http://www.worldbank.org/en/news/feature/2016/10/10/government-inaugurates-citizens-charter-to-target-reform-and-accountability>, 10 Oct. 2016.

⁶⁹ See Zurab Elzarov, 'Community stabilization and violence reduction: lessons from Darfur', *Stability: International Journal of Security and Development* 4: 1, p. Art. 7, 2015; UNDP Sudan, *Bringing stability to communities*, <http://www.sd.undp.org/content/sudan/en/home/presscenter/pressreleases/2016/03/28/bringing-stability-to-communities.html>, 28 March 2016.

⁷⁰ Danish Ministry of Foreign Affairs, 'Support to MINUSMA for the delivery of a peace dividend in the north of Mali', internal development engagement document (Copenhagen, 2015), p. 4. See also Nastasja Rupesinghe, 'Community engagement: softening the hard edge of stabilization?', paper presented at the 58th annual convention of the International Studies Association, Baltimore, MD, 22–25 Feb. 2017.

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these peacebuilding projects seem to share is the experience that communities, when in the driver's seat in contemporary stabilization missions, call for the delivery of tangibles as a means of bridging existing divisions.⁷¹ It is in putting those same fractured communities to work themselves to achieve this that infrastructure has the potential to strengthen community cohesion during conflict.

At the same time, it is important to explore whether, beyond such impacts, communities actually associate service delivery and improved infrastructure with improved peace and stability. As Fishstein and Wilder have pointed out in their study of the US 'hearts and minds' engagement in Afghanistan, those projects that were considered to fulfil a strategic security objective were not accorded a high level of legitimacy by local communities.⁷² In some cases, such local-level infrastructure projects, packaged as labour-intensive public work programmes, simply constituted an excuse to dole out money as a way of trying to prevent further conflict.

Overall, practitioners have found that infrastructure is simply the least controversial way of bringing conflicting communities together again around an incontrovertibly shared goal, as the International Labour Organization and the World Bank explicitly stated.⁷³ From this insight, it is only a small step to rather more ambitious experimentation with local communities through infrastructure: for example, context-sensitive efforts to render infrastructure projects more resilient to drivers of conflict, to engineer better values more in line with ideals of participation and transparent governance, and to create routes for the reinsertion of potential spoilers and former combatants.

These community-based and often small-scale infrastructure projects are generally more modest than their grand and state-centric counterparts, which are often clad in terms of high-flying ambitions to restore state authority. While there is something extremely seductive and straightforward about infrastructure as a tool for state power, by nearly all accounts community-based infrastructure projects seem to have the largest positive impacts on peace.

This analysis is not intended as an exercise in grading peacebuilding; rather, as an attempt to show the varied ways in which infrastructure figures in peacebuilding. It is a call for engagement with the politics of infrastructure that emerges when infrastructure is mobilized in contemporary peacebuilding. In order to be able to do this, we have argued, we need a discussion of what values stakeholders assign to infrastructure.

On 26 October 2016, MONUSCO inaugurated a bridge at the exact same spot in Mushake pinpointed at the beginning of this article, as a QIP to improve security

⁷¹ See e.g. Paul Fishstein and Andrew Wilder, *Winning hearts and minds? Examining the relationship between aid and security in Afghanistan* (Medford, MA: Feinstein International Center, Tufts University, 2011), p. 46. See also United States Agency for International Development, *Transition Initiatives for Somalia: quarterly progress performance reports, Q1 & Q2 2014* (Washington DC, 2014).

⁷² Fishstein and Wilder, *Winning hearts and minds?*, p. 3.

⁷³ International Labour Organization, *United Nations policy for post-conflict employment creation, income generation and reintegration* (Geneva, 2009). See also World Bank Independent Evaluation Group, *World Bank Group assistance to low-income fragile and conflict-affected states: an independent evaluation* (Washington DC, 2014).

and free circulation in this contested area.⁷⁴ The culvert had not lasted very long, and by the time one of us visited it two weeks after its latest refurbishment, the road had again become impassable to anything but the bravest of motorcyclists. As the road washed away once more, did the promise of stability wash away, too?

Conclusions

In this article, we have discussed a central yet understudied component of contemporary peacebuilding—namely, the material underpinnings of building political order and the contested politics that ensue. We started with the observation that infrastructure projects are prime concrete outputs of current international stabilization efforts. Deploying largely technical means to accomplish political objectives amounts to a paradigm shift in the way in which political order and disorder are acted upon in international interventions. Nevertheless, the effects of infrastructure on political goods such as security and political order have been curiously sidelined in otherwise burgeoning critical debates around peacebuilding. Concrete approaches to peace thus constitute a theoretically interesting puzzle for IR, because existing theories of public order and its absence do not allow us to grasp the workings of power when peacebuilders use material means to achieve political ends. If in much of the social sciences there has been a reluctance to explore the politics of the built environment, it is surprising that today's peacebuilding efforts *explicitly* strategize infrastructure schemes as a way of reassembling *political* relations and, quite literally, building new communities.

As we have shown, in many stabilization missions, infrastructure is deployed as peacebuilding by other means, and investments in the built environment are considered a key means to extend state authority and boost local security. Yet in most of these instances, infrastructure is treated as mere output: once it is implemented, circulation and mobility are supposed to unfold, themselves being assumed to constitute at least a necessary precondition for peace. While this theory of change seems to be supported by the history of state formation, nonetheless such efforts often end up substituting the building of a road for real engagement with the root causes of conflict. Yet to respond to this finding by dismissing infrastructure as technocratic and moving on does not do justice to the fact that infrastructure might have effects that escape the peacebuilders' intentions.

Infrastructure, we have shown, is also deployed in other ways. Many smaller stabilization projects try to bring conflict-affected communities together again around the promise of improved common services implicit in feeder roads, market buildings and other community infrastructures. What distinguishes this approach is that the functionality of infrastructure is ultimately secondary to its singular capacity to engender stabilization outcomes by forcing people together during construction work. Once we let go of the deeply ingrained assumption that infrastructure does its political work *after* construction, a whole new field of action

⁷⁴ As stated by MONUSCO: see <https://www.flickr.com/photos/monusco/30597849505/in/dateposted-public/>.

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unfolds. Borrowing from Noortje Marres,⁷⁵ we may note that when they are being built, infrastructures are likely to force the question upon affected populations of how to live together and make things work, and can thus constitute tools to bring communities back together around shared interests. And what is more shared than infrastructure?

This lesson is not new. As mentioned above, infrastructure has always been around as a tool to achieve foreign policy objectives that rub shoulders with what we would today call peacebuilding or stabilization. The difference is that today policy-makers explicitly establish this link in their theories of change. In Afghanistan during the 1960s and 1970s, the two superpowers engaged in what became known as ‘competitive coexistence’ in their infrastructure investment in Afghanistan, both aiming at strengthening political ties to the Afghan government by setting up large irrigation schemes and highway networks. And indeed, for many Afghans of that period ‘progress was construction’.⁷⁶ However, soon donors realized that building infrastructure systems alone cannot do the trick. Overestimation of the economic effects of technical solutions made the United States recalibrate its approach to emphasizing the participation of local communities. Those lessons—first learned 40 years ago—are being learned all over again in contemporary statebuilding.

If infrastructures have some powers to lend to peacebuilding, both extant approaches—one that considers infrastructure merely as a technical output and one that points to the transformative power of infrastructural processes—miss out on important insights on the workings of infrastructure in society. The myth that infrastructure is just a thing with specific positive effects in any setting notwithstanding, building infrastructure is an intervention which, particularly in conflict-affected settings, will always have unintended effects that risk undermining peacebuilding efforts.⁷⁷ The radical indeterminacy of infrastructure’s role as a socio-political agent means that it may very well become part of surprising and unexpected new social forces in volatile environments. Drawing on examples from Afghanistan to South Sudan, we have suggested that infrastructure interacts in complex ways with conflict dynamics, sometimes even empowering parties to the conflict. Schemes which aim at rearranging social relations through infrastructure ignore the resilience of social ties, grievances and other aspects of conflict. This point casts doubt on the power attributed to the peacebuilders who attempt to literally engineer socio-political relations, and cautions that much depends on the care taken to attend to the social relations unfolding around infrastructure. In practical terms, we propose that infrastructure projects implemented during or immediately after conflict should always be embedded in existing peacebuilding efforts rather than substitute for them, and that infrastructure programming

⁷⁵ See Marres, *Material participation*.

⁷⁶ DEVRES Inc, *Retrospective review of US assistance to Afghanistan 1950–1979* (Washington DC, 1988), p. 38. See also Timothy Nunan, *Humanitarian invasion: global development in Cold War Afghanistan* (Cambridge: Cambridge University Press, 2015).

⁷⁷ See de Coning’s contribution in the special section on how acknowledging complexity and non-linearity affects peacebuilding efforts: Cedric de Coning, ‘Adaptive peacebuilding’, *International Affairs* 94: 2, March 2018, pp. 301–317 above.

should be guided by careful evaluations of the socio-political fields in which it is intervening—before, during and after construction.

In providing this overview of infrastructure in contemporary peacebuilding, ultimately we are caught on an awkward patch of middle ground; for, on the basis of historical work on infrastructure and state formation, it is impossible to be entirely critical when observing the frustrating absence of infrastructure in ‘failed states’.⁷⁸ As we have emphasized, from a pragmatist perspective, one would not wish to reject political engineering from the outset: a core characteristic of what are often called failing states is that they are infrastructure-poor and so exercising even the most basic logistical functions at the interface of governance and community engagement is daunting. Hence it makes sense to attempt to (re)constitute that interface by—exactly—putting people to work, together, on something so vast, slow, grey and concrete that it can only be a public good. Yet we are still suspicious of political engineering—the effort to strategize the built environment for explicitly political aspirations—because of the vast potential impact it can have on some of the world’s most vulnerable populations. If intervention plays out in large part through the built environment, how do such interventions reverberate across the social and political worlds with which they will always be inextricably entwined? On a more practical level, we argue that policy-makers need to make clear on what assumptions their infrastructural engagement in conflict-affected environments rests and what exactly the *political* purpose is. Both assumption and purpose also need to be tested against historical examples of massive external infrastructure interventions and their implications for security. Furthermore, policy-makers and practitioners need to rethink what infrastructure does in fragile societies. As shared public goods and large technical systems, infrastructures will have a significant impact, yet one which defies predictability. Governments want the international community to deliver infrastructure projects as they see them as conveyors for extending their authority. At the same time, infrastructure processes have the potential to unsettle community relations, exacerbate societal divides or create new linkages. One lesson for policy-makers as well as scholars is to realize that infrastructure, beyond being a technocratic matter, generates political issues and these are simply too significant to leave to the engineers.

⁷⁸ Schouten, *The materiality of state failure*, pp. 553–74.