

1 Duality by Design: The Global Race to Build Africa's Infrastructure

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(‘The new dawn’)

This book starts from the idea that much can be learned about the design of new forms of organising, theoretically and empirically, by examining a phenomenon central to the global order: Africa's struggle to bridge a growing gap between supply and demand for basic infrastructure. A gap linked, amongst other factors, to the rapid growth of the continent's population, projected to reach 40 per cent of the world's population by 2100.¹ Infrastructure is a vast class of capital-intensive technologies that input into a wide range of productive processes that generate positive externalities and social surplus. Whether it is about transport (airports, railways and roads); utilities (power, water, sanitation and telecoms); or social assets (social housing, schools and hospitals), most forms of infrastructure are durable public goods, shared in use by many people and organisations. This is the fundamental attribute that makes infrastructure technology a source of broad value creation and appropriation.² This attribute also explains the role of infrastructure technology in enabling economic growth and social development and in equipping societies for climate change. So it is incumbent on those who provide assistance to development, and on the African policy makers themselves, to fill the gap in basic infrastructure. Failure to act, and failure to make Africa a better place to live and work, will saddle future generations with a major bottleneck to global, sustainable development. Africa's struggle is our struggle.

In this book, we argue that there is a fundamental duality in the design of the inter-organisational contexts set up to tackle this grand societal challenge of our times. Design dualities exist when organisations wish to

¹ Africa's 2017 population was around 1.3 billion, 16.6 per cent of the world's population. The UN (2017) projects it will double into a quarter of the world's population by 2050, and by 2100 it will reach 4.5 billion; together with Asia's population, projected to reach 4.8 billion by 2100, the two regions are projected to represent around 82 per cent of the world's population by 2100.

² Frischman (2012).

pursue two objectives that are jointly desirable, but they struggle to reconcile the two because the organisational design attributes that underlie one objective tend to be incompatible with the attributes of the other,³ for example, whether to exploit or to explore; to integrate or to differentiate? Faced with difficulties in designing organisations in such a way as to pursue dualities, organisational architects choose to focus on one of the poles, as opposed to aiming for both; so, they end up choosing ‘gains from focus’ at the expense of ‘gains from ambidexterity’.

The empirical studies curated for this book on global efforts to bridge Africa’s gap between supply and demand for basic infrastructure reveal a duality between *building institutions* and *building technology* – two equally desirable objectives that turn out to be organisationally incompatible. Both institutions (the prescriptions created and used by humans to organise all forms of interaction⁴) and basic infrastructure (the technology needed for the functioning of a modern society) are key enablers of socio-economic development.⁵ But building robust institutions is time-consuming and costly, and requires orderliness and transparency. In contrast, adaptability and opacity rule organisational design and evolution in order to enable quick development of new capital-intensive technology. Faced with difficulties in reconciling these two attributes, the organisations set up to promote development choose to focus on either pole of the duality.

To make sense of this duality *by design* we need to attend to the newly emerging global order. China is rising to become the world’s biggest economy, whilst the share of the global economy of the advanced economies, hobbled by fiscal pressures and populism, shrinks. This shift has given African policy makers agency to choose between two groups of intermediaries – the development agencies that broker resource exchanges between the recipient country governments, and primary donors (taxpayers) and contractors.⁶ ‘Traditional’ intermediaries include multilateral organisations such as the World Bank and the development agencies that are fully owned by the advanced economies; the ‘emergent’ intermediaries are mainly associated with the economic rise of China (Bräutigam 2009, 2011). Chinese assistance to the

³ Lawrence and Lorsch (1967); Evans and Doz (1989); Birkinshaw and Gibson (2004); Smith and Tushman (2005); Gulati and Puranam (2009).

⁴ Ostrom (1990), North (1990).

⁵ To the extent that the Global Competitiveness Index framework of the World Economic Forum (2017) lists institutions and infrastructure as the first two pillars of basic requirements.

⁶ Martens (2005); McDermott, Corredoira and Kruse (2009); Mair, Marti and Ventresca (2012).

development of Africa already equals that disbursed by the World Bank and dwarfs the assistance disbursed by the advanced economies. Irrespective of the intermediary, the higher-order goal is the same – socio-economic development. Yet, the priorities for action differ immensely. In the organisational contexts enabled by traditional credit, the emphasis is on building institutions, but this emphasis shifts to technology building when the Chinese credit is involved. And since the design attributes underlying the two objectives are incompatible, the leading participants choose to focus coordinated collective action on one objective or the other.

The choice of focus is rooted in the differing preferences of the intermediaries and in the self-interests of the recipients. Traditional assistance to development is conditional on two factors: First, on Western ideals of ‘good’ governance – transparency, accountability, inclusiveness, equity and the rule of law; and second, on the idea that development projects, the typical form whereby assistance is disbursed as this gives the intermediary leverage over inputs and activities, need to be delivered on time and within budget. But disbursing assistance under these institutional constraints is protracted because it requires mitigating many institutional voids. These voids correspond to the absence, or under-development, of the institutions of capitalism that support economic activity in advanced economies, e.g. efficient markets, strong regulation, independent judiciary, property rights and contractual enforcement mechanisms.⁷ So, under this approach, organisational design choice is guided by the principles of orderliness and transparency; that is, building the institutions first, and the infrastructure second. In contrast, Chinese assistance is not tied to governance and project-management ideals, and so comes with limited conditionality.⁸ The Chinese approach takes the local environment as a given and does not seek to change it.⁹ Instead, the aim is to fast track new infrastructure development by exploiting those institutional voids, or artfully manoeuvring around them. With this model, the principles of adaptability and opaqueness rule choice in organisational design, and that results in the choice to build infrastructure first and build institutions second.

⁷ Khanna and Palepu (1997; 2010). Of course, customary rules and traditions are also ‘institutions’ that play an important role in structuring human interactions; how they complement the institutions of capitalism is a debate for another place.

⁸ Henderson (2008); Henderson, Appelbaum and Ho (2013).

⁹ Bräutigam (2009, 2011).

By foregrounding this duality by design, we are not suggesting moral equivalence or the abandonment of principles entwined with the traditional approach. And neither are we suggesting that one approach is 'superior' to another, far from it. Indeed, we find equifinality, in that we argue both forms of organising are pursuing a similar superordinate goal – socio-economic development. Furthermore, we need to appreciate that the rise of a 'new' approach reflects the failure of the 'old' one to deliver. In fact, we still know little about how to organise for the tackling of grand challenges when there is a shortfall of institutions. What we are doing here is uncovering a duality that explains empirical regularities. We believe this duality offers a conceptual foundation for building a novel theory of organisational design with which to navigate institutional shortcomings.

But we are getting ahead of our story. We turn first to summarise the infrastructure gap facing Africa, and introduce our cognitive lens with which we propose to further our understanding of how to tackle this grand societal challenge. We then offer an overview of our empirical findings and the book's structure. Finally, we sketch the rudiments of a theory of (meta-)organising in environments with weak institutions, in light of the design duality revealed by this volume of studies on efforts to build basic infrastructure in Africa, a critical part of our global commons.

1.1 Africa's Infrastructure Gap: A Grand Challenge of Our Times

Africa is the last frontier in management research.¹⁰ So it is not surprising, then, that the continent's struggle to bridge its infrastructure gap, whilst long a topic of interest to development economists, remains a largely untapped problem in management scholarship. Yet Africa's infrastructure gap is a useful setting in which to produce fresh evidence and insight into new forms of organising to tackle the grand societal challenges of our time – seemingly intractable problems that, in the way they intertwine technical and socio-economic elements, cannot effectively be addressed without coordinated and sustained effort from multiple actors.¹¹ Management literature suggests that tackling grand challenges requires unconventional approaches and novel ideas. But we still know little about how to design these actionable organisational solutions, even less so when there is a shortfall of institutions in the environment.

¹⁰ Klingebiel and Stadler (2015); George et al. (2016).

¹¹ Some grand challenges are discrete, with a clear endpoint, like developing an HIV vaccine; others are broad and open-ended like building Africa's infrastructure, curing cancer or eliminating poverty; Colquitt and George (2011); Ferraro, Etzion and Gehman (2015).

The root causes of Africa's growing gap in basic infrastructure are well understood: a conflation of rapid population growth, fast urbanisation, climate change and a complicated colonial legacy. Assessments of this gap, estimated in monetary terms at \$130–170bn per year, with a related financing gap of \$68–108bn, are plentiful in the technocratic literature.¹² We find it useful to share some illustrative figures before introducing our core argument on tackling this grand challenge. For example:

- The International Energy Agency estimates that nearly half of Africa's population lack access to grid-connected electricity, and that the frequency of power outages experienced by industrial users costs about 2 per cent of the continent's GDP every year.¹³
- According to the UN, economic water scarcity is a widespread problem in sub-Saharan Africa, whilst physical water scarcity is problematic in northern Africa.¹⁴
- The proliferation of slums is a cause for global concern – 60 per cent of sub-Saharan Africa's urban population live in slums, lacking property rights and access to very basic public infrastructure and services.¹⁵ With 90 per cent of urban growth happening in the developing world, particularly in Africa, the UN projects that by 2023 the number of slum dwellers will reach 2 billion (a quarter of the world's population). If the world fails to act, this will fuel poverty, social exclusion, radicalisation, hunger, gender inequality and mass migratory pressures; all of which threaten the global order.
- Equally worryingly, by 2100, Africa will host many of the largest megacities in the world. Metropolises such as Lagos, Kinshasa, Dar es Salaam, Khartoum and Niamey are all projected to exceed 55 million people.¹⁶

So it is not surprising that the UN asserts that investment in basic infrastructure is the most important requirement that must be fulfilled in order to meet its Sustainable Development Goals (SDGs). These goals include ending all forms of poverty, fighting inequalities, protecting the planet, tackling climate change and ensuring prosperity. The ninth SDG, in particular, spells out the need to build resilient, reliable and sustainable infrastructure, with a focus on affordable and equitable access for all. Importantly, a 1 per cent increase in the stock of basic infrastructure is estimated to correspond to a 1 per cent increase in GDP.¹⁷

With this backdrop, we turn now to examine this challenge through an organisational lens.

¹² African Development Bank (2018). ¹³ IEA (2016); IRENA (2014).

¹⁴ UNEP, 2010. Africa Water Atlas. United Nations Environment Programme (UNEP)

¹⁵ UN-Habitat (2016); UN (2018). ¹⁶ Hoorweg and Pope (2017).

¹⁷ UN (2013); World Bank (1994); Esfahani and Ramirez (2003).

1.2 Institutional Voids, Intermediaries and Organising for Development

At the crux of the challenge of tackling Africa's infrastructure gap is the problem of navigating institutional voids. Institutional voids relate to the lack of developed prescriptions with which to organise interaction between humans and economic agents; institutions are interdependent with norms, but the two concepts are distinct. Norms are the cultural prescriptions that are part of the generally accepted moral fabric of societies. In contrast, the best way to think of institutions is in terms of the 'rules of the game' that individuals and organisations design, both formally and informally, to enable and constrain collective and individual action. Broadly, these rules encompass three dimensions. They clarify:

- who the participants are in a set of interactions, their distinctive roles and how to achieve the superordinate goals that unify the participants.
- the arrangements that monitor interactions between participants within an organisational system and with external stakeholders, as well as the arrangements that are used to assess the performance of the system in relation to the identifiable system-level goals; and
- the arrangements by which the consequences of non-compliance are established, how conflicts between participants and between participants and external stakeholders are adjudicated, and how penalties for non-compliance are enforced.

In developing countries, the under-development or absence of the institutions of capitalism, which enable and support economic activity in advanced economies, creates institutional voids.¹⁸ Institutional voids hinder the mechanisms that allow resource exchanges, increasing the transaction costs for businesses and the state. These voids include:

- Inefficient markets for capital, skilled labour and products.
- Poor and under-developed regulation.
- Ill-defined property rights.
- Weak systems of checks and balances; the so-called non-executive institutions of accountability, capable of constraining arbitrary action by the political leadership and the public bureaucracy.
- Weak rule of law and independent judiciary, which are needed to act as impartial third-party structures in the arbitration of conflict, enforcement of legal contracts and resolution of disputes.
- Absence of competitive, free and fair elections.

¹⁸ Khanna and Palepu (1997, 2010).

- Limited openness in the way civil society operates and information flows, due to institutional constraints imposed on the media and on freedom of information.
- Emphasis on the conferral of patronage in the way political parties are organised.

Gaps in basic infrastructure are in themselves a class of physical or 'hard' institutional void that are challenging to navigate. A lack of transport infrastructure complicates the flow of goods and people, making it harder for individuals and organisations to coordinate action, cooperate and trade; an unreliable power supply deters private investment and undermines productivity; lack of basic social infrastructure makes it harder to develop and retain talent, tackle gender inequality and poverty, and so build local capabilities. And yet, basic infrastructure voids also hold opportunities for multiple public and private actors to work together to create and appropriate value. In the short-term, new infrastructure development projects are a boost to the local economy and create lucrative opportunities for private firms, as either suppliers or development partners. Further, in the long-term, new infrastructure are common goods that can be leveraged to promote societal prosperity at large. But regrettably, corrupt actors also see in new infrastructure development projects opportunities for rent-seeking by breaking the law and pursuing informal private gains at the expenses of the common good.

The lack of infrastructure and other institutional voids remain a feature of most African states. Of course, Africa is not a homogeneous continent. Around half of African states have already achieved middle-income status, and in many others, a democratic central government has devolved power to local authorities.¹⁹ Still, most African states are settings where deep-seated aspects of neo-patrimonial governance enable the local elites to concentrate vast amounts of political, economic and, even, juridical and military power.²⁰ Helping African states and private firms build infrastructure and navigate the institutional voids are the intermediaries. In the infrastructure sector, development agencies play this role by brokering the resource exchanges necessary for the local authorities to build capital-intensive public goods. This occurs to the extent that assistance to development as a source of revenue (including official aid but also export credits and loans) is roughly 10 per cent of the GDP for many emerging economies. These intermediaries fall into two categories.

The 'traditional' intermediaries provide about two thirds of development assistance; these include development agencies owned by the advanced economies, and multilateral agencies such as the World Bank.

¹⁹ African Development Bank (2014).

²⁰ Chabal and Daloz (1999); Erdmann and Engel (2006).

These traditional intermediaries make assistance conditional on the recipients conforming to Western standards of ‘good’ governance and project management.²¹ If the recipients fail to meet these conditions they cannot qualify for assistance, or the development agencies apply pressure, i.e. by threatening to terminate assistance, actually terminating it or reducing it. In other words, traditional agencies act as open-system intermediaries that seek to both create benefits for parties beyond a restricted set of system participants, and to improve the general institutional environment.²²

The other third of assistance to development comes from the ‘emerging’ intermediaries – the countries that lie outside the OECD Development Assistance Committee. China bears by far the greatest weight in this group. Assessing assistance disbursed by China (mostly in the form of buyer’s credits and concessional loans) – as opposed to pledges of assistance yet to be committed – is difficult, as the Chinese authorities are very secretive. However, reliable figures suggest that assistance from China in Africa will soon exceed assistance disbursed by the World Bank; Chinese assistance also dwarfs that from Western agencies.²³ Assistance provided by intermediaries such as the China Eximbank and the China Development Bank comes with limited conditionality.²⁴ This is not to say, though, that the Chinese intermediaries act as closed-system intermediaries, only seeking benefits for the participants in the organisational contexts enabled by Chinese credit. This is not the case. Instead, Chinese assistance seeks to replicate the successful model of Japanese assistance used to develop China decades earlier, and so the Chinese loans tend to be tied only to purchasing and importing from China as much technology and as many services as possible.²⁵

Much has been written in the economic development literature of the last decade about how, with the economic rise of China, African governments have gained agency to choose between two competing forms of intermediation.²⁶ Before we develop our argument from an organisational

²¹ Good governance is one of a broader set of prescriptions on how to engineer development that became known as the ‘Washington Consensus’ in the early 1980s. Other prescriptions include a neo-liberal agenda of economic reform, promoting less government, the benefits of markets and the importance of avoiding excessive inflation, excessive budget deficits and overvalued exchange rates. The Washington Consensus has since lost its allure, but assistance to development by traditional donors remains conditional on good governance; UN (1995); Burnside and Dollar (2000); Hermes and Lensink (2001); Rodrick (2006).

²² Mair and Marti (2009); Dutt et al. (2016).

²³ From 2000 to 2015, US\$63 billion were disbursed by the Export-Import Bank of China (China Eximbank) against US\$1.7 billion by the USA Eximbank; in 2015, the World Bank provided US\$14.3 billion of loans to Africa, a figure similar to the finance committed by China; Eom et al. (2017).

²⁴ Henderson (2008); Henderson, Appelbaum and Ho (2013).

²⁵ Bräutigam (2009, 2011).

²⁶ Hernandez (2017); van Dijk (2009); Woods (2008); Tan-Mullins, Mohan and Power (2010).

perspective, we summarise here the gist of this unresolved debate: On one side are scholars who see Chinese assistance as allowing profligate African states to build up unsustainable levels of debt, retain weak financial, economic and political governance, and occasionally infringe human and civil rights. For harsher critics, Chinese assistance is nothing more than a 'narrow elite business dialogue' and 'rogue aid', serving an opaque clique of interests dominated by informal and personal relationships.²⁷ China's true motives for cooperation with Africa are also questioned, particularly around the use of natural resources as collateral in return for credit, the so-called 'resource for infrastructure deals'.

Yet other scholars argue that China-bashing is hypocritical and only serves to bolster Western interests. They claim that Western assistance to development is dogmatic and inflexible, that good governance requirements increase transaction costs too greatly and that Western assistance's impact on socio-economic development has been negligible. And so, in their view, China provides much-needed investment in critical infrastructure; brings technical and commercial know-how and widens market access; and quickly completes the new infrastructure necessary for development without any tiresome strings attached. Disagreements notwithstanding, there is agreement that the availability of alternative sources of credit has strengthened the bargaining power of African states in their negotiations for assistance to development. This gained agency raises the question of whether a 'race to the bottom' will ensue in terms of the conditions offered to borrowers who are of strategic importance to both groups of intermediaries.²⁸

1.3 Using Organisational Design to Navigate Institutional Voids

The debate amongst development scholars on the new global order is instructive, but leaves out issues that are important from an organisational design perspective. Broadly speaking, intermediaries enable public agencies and private firms to come together in actor-networks unified by an identifiable system-level goal. But environments with poor institutions are a boundary condition that lies outside most extant organisational design studies. Hence, our understanding remains incipient on the choices that organisational designers need to make to navigate institutional voids. To further our understanding of this issue, we first need to amass evidence in the tradition of inductive research. Armed with data assembled through

²⁷ Naim (2007). ²⁸ Mohan and Lampert (2013); McLean and Schneider (2014).

painstaking fieldwork, we can cycle between more data and theory to identify relevant constructs, propose relationships that link those constructs and develop new underlying theoretical arguments on how those logical relationships illuminate general phenomena.²⁹ So, empirical studies about Africa's struggle to build basic infrastructure are useful to help us develop the rudiments of a theory on designing organisations to navigate institutional voids.

This volume of empirical studies reveals efforts to mobilise a diversity of organisational structures in order to fill Africa's infrastructure gap, such as: markets, to address the lack of power-generation capacity; authority hierarchies, to develop new railway lines; alliances, to build new hospitals; self-organising structures, to upgrade informal settlements; and other hybrid forms of organising. This diversity is not surprising. Indeed, it mirrors the diversity of the designed structures by which advanced economies pursue similar goals. Given that the focal problems have differing attributes, it is predictable to find differing structures designed to help economise on transaction costs and leverage local capabilities.³⁰ Furthermore, African states are not alike from an institutional perspective, another factor contributing to organisational diversity. Changing institutions is also costly and time-consuming and those transaction costs are a source of organisational diversity.³¹ Grand-challenge task environments also require both a high degree of differentiation to attend to the different facets of the tasks and a high degree of integration amongst the participants in order to achieve desirable outcomes – two attributes that also contribute to organisational heterogeneity.³²

Our goal here, then, is not to explain this diversity of forms of organising to tackle Africa's infrastructure gap. Rather, we were driven by the question as to whether we could identify any general underlying patterns in the way these differing structures sought to tackle this grand challenge. Could we, then, dig below this diversity to identify patterns in the way these structures were designed to adapt to their environment? As we probed deeper into the evidence amassed for this book, a pattern did emerge. All the studies illuminate organisational contexts set up to ultimately promote socio-economic development by way of tackling basic infrastructure. Yet the evidence leveraged to explain the extent to which these organisations succeeded or failed to achieve their objectives suggest the existence of two fundamentally different approaches to navigating institutional voids. One group of studies focuses the analysis of

²⁹ Eisenhardt, Graebner and Sonenshein (2016).

³⁰ Williamson (1985); Ostrom (1990). ³¹ Libecap (1989).

³² Knudsen and Srikanth (2014).

organisational success or failure on the extent to which the participants managed or did not manage to fill the institutional voids in the environment before building the infrastructure. Another group of studies advances explanations for organisational success or failure that are rooted in the way those very same institutional voids were exploited in order to build the infrastructure.

But before we turn to our argument, and in the tradition of inductive research, we offer an overview of the evidence collated across the next twelve chapters. The studies differ in that some touch more on technological aspects, whereas others focus on the institutional issues. Irrespective, though, of the cognitive lens deployed to guide data collection and analysis, all the studies offer fresh evidence on organising to build basic infrastructure, from transport and energy, to hospitals and social housing. As we worked to make sense of the findings, it dawned on us that we should organise this book according to whether the focus was on building institutions or building infrastructure – a duality to which we return after presenting the findings.

1.3.1 Building Institutions before Building Infrastructure (Part I)

Part I offers a set of empirical studies focused on inter-organisational contexts enabled by traditional intermediaries. Symptomatic of the issues with an organisational focus on building institutions, the emphasis of most studies is on the struggle in these contexts to fill the infrastructure gap that they are targeting. The delays are rooted in difficulties to build first institutions and capabilities, and, thus, difficulties in building markets, polycentric structures and strengthening regulation.

Specifically, Chapter 2, by Worch et al., adopts a ‘capability perspective’ to explain the failure to change and develop institutions. The authors ground their insights on South Africa’s electricity crisis between 2005 and 2008, when institutional difficulties with reforming the state’s monopolistic national electric utility, Eskom, led to multiple power outages. The institutional reform aimed to create a competitive market to attract private investment in order to develop power-generation capacity, expand the distribution and transmission network, and ameliorate the coal-supply chains. But the analysis reveals the unintended consequences of the reform, such as a substantial loss of critical competences, skills and experience within Eskom, which merely exacerbated the energy crisis. The main insight is that institutional changes come with an added risk of letting an existing capability gap grow further, and, once lost, local capabilities are hard to regain because the gaps take time to identify and resolve.

Chapter 3, by Hamukoma and Levy, also focuses on institutional reforms as a prerequisite to filling infrastructure gaps. They, too, ground their insights on the South Africa energy crisis. They trace a six-year delay in the implementation of the new energy policy to a conflict between powerful political stakeholders with diverging visions – an unresolved conflict exacerbated by the lack of dispute-resolution mechanisms in the environment. The study reveals difficulties with reconciling competing political interests, between letting the market set energy prices to attract private investment and keeping energy affordable to reduce poverty. The authors note that, in the end, ‘politics trumped economics’, leaving South Africa’s power industry overwhelmingly vertically integrated and controlled by Eskom, the state-owned utility – and so, after all these years, the much-sought institutional reform is yet to happen.

Karplus et al. yield a similar insight in Chapter 4, on the institutional enablers of energy system transition. Their research is grounded on the expansion of solar photovoltaic power capacity in eight African countries. The analysis reveals that institutional voids, if successfully navigated with the help of intermediaries, are not always impediments to technological progress. For example, development agencies can substitute for lack of capital markets, or a market reform can overcome vested interests in the organisational status quo. But the authors also note that seizing technological opportunities in sustainable ways requires institutional reform in order to enable efficient markets and competitive procurement – and, as their evidence shows, these institutional reforms take a long, long time to implement.

Chapter 5, by Rose et al., picks up on the problem of ameliorating existing institutions to make them effective. The authors ground their argument on the Southern African Power Pool (SAPP) – the oldest and most advanced electricity market in Africa. Their research shows the SAPP has the potential to enable resource-rich countries to export power to countries with limited resources, and so improve security of supply for participants and reduce the cost of providing reserves. But, twenty years after its inception, the SAPP still struggles to encourage capital investment and reform of national policies because the participants cannot agree the design of contracts, and the transaction costs remain too high. Difficulties in reconciling the efforts of the states to resolve their power issues are traced to the lack of a cross-border body with the authority to harmonise national regulations and policies, whilst deferring implementation to the states. The authors conclude by suggesting that a more polycentric structure could encourage cooperation in the agreement of decisions on investment priorities, but its creation is hampered by a gap in local capabilities.

Adopting a technological perspective, Chapter 6, by Ismail, Metcalfe and McPherson, argues that innovation is creating new opportunities to fill infrastructure gaps. But the authors also recognise that institutional reform is a prerequisite to seizing those opportunities. Their study focuses on Zambia's growing gap in power-generation capacity, due to population growth and climate change. The analysis points to hybrid technological paths, which combine capital-intensive technology, e.g. large-scale solar and wind generation, with decentralised solutions, e.g. off-grid solar. But implementing this idea requires setting up a hybrid organisational system capable of concomitantly navigating different sets of institutional voids. The authors suggest working both with traditional intermediaries to promote decentralised solutions and with emergent intermediaries geared to capital-intensive developments – an idea, therefore, that overcomes the organisational incompatibility that underlies the two poles of the duality.

Chapter 7, by Hellowell, looks into a different organisational structure – alliances between the public and private sectors, or so-called public–private partnerships (PPPs). The author grounds his study on a PPP contract for a new hospital and a range of core clinical services in Lesotho; PPP is a form of organising much promoted by the Western intermediaries. But the analysis illuminates how capability gaps got in the way of equitable distribution of value. Specifically, the study reveals how a PPP once labelled 'the future of healthcare delivery on the African continent' became a major source of budgetary uncertainty and a demanding pull on the government's scarce resources. Hellowell traces difficulties in ensuring an equitable distribution in value appropriation back to a failure to first build the state's contractual capabilities.

Along the same lines, Chapter 8, by Stafford, Stapleton and Agyemin-Boateng, reveals the urgency of improving PPP governance. The study looks at five PPPs in Ghana, a country that ranks in the top half on measures of good governance in Africa. Yet the study reveals that in order to accelerate much-needed infrastructure developments, some PPPs have exploited institutional voids to avoid transparency in the processes of project choice and public procurement, or to negotiate contracts in dubious ways. Their findings leave it unclear whether the long-term value of the public goods will outweigh the short-term public bads. But, as the authors claim, without improvements aiming to increase accountability, e.g. the creation of independent agencies staffed with a small group of well-paid technocrats, the situation is unsustainable.

The focal problem informing the last two chapters in Part I is the growth of informal settlements. Here, the beneficiaries of aid are the poorest of the poor, and because investments are non-revenue-generating, solutions cannot be found in market forces. In Chapter 9,

by Nadim, the effectiveness of self-governance is contrasted with failed centralised approaches. The study is grounded on efforts to fill gaps in affordable housing in Greater Cairo, Africa's largest city by population. The analysis shows that centralised approaches undertaken by an authoritarian state produced many 'ghost cities' as a result of ignoring the needs and interests of the poor. In contrast, self-governance enabled the poor to build informal mixed-use buildings, combining residential and work uses – a sustainable, flexible model of zero-commuting housing. But the study does not suggest that self-governance is *the* solution: informal settlements remain a cause of extreme poverty and social inequality.

This part concludes with Chapter 10, by Gil and MacAulay, in which the authors introduce the idea of collective action under the shadow of contractual governance. The research is grounded on a participatory approach to upgrading informal settlements in Greater Cairo. The analysis reveals how multiple resourceful actors – state, donors, intermediaries, suppliers and NGOs – forged a set of legal contracts to upgrade informal settlements. Contractual governance was then leveraged to grant the poor decision rights in resource allocation. The study shows this hybrid structure succeeds in encouraging mutual trust and norms of cooperation to flourish, a prerequisite for the poor to volunteer their knowledge, time and effort – informal resources much needed to identify real problems and co-produce sustainable solutions. Another advantage of this structure is that it economises on the transaction costs that would otherwise be necessary to resolve the ill-defined property rights of the poor. But questions remain as to whether this hybrid structure can be scaled up and remain effective.

We turn now to summarise the findings at the other pole of the duality.

1.3.2 Building Infrastructure before Building Institutions (Part II)

The second part of this book offers a collection of empirical studies on inter-organisational contexts formed to tackle Africa's infrastructure gap, as enabled by Chinese credit. Some studies document the rapid development of new railways, whilst others illuminate organisational struggles and failures in attempts to fast-track new infrastructure developments. In all cases, though, there have been limited efforts to change the institutions in the environment and there is no certainty of the sustainability of the technological outcomes.

Specifically, Chapter 11, by Wissenbach, argues that designing a powerful, centralised organisational structure to fill an infrastructure gap is a double-edged sword. Wissenbach grounds his insights on the

475-km-long railway line linking the port of Mombasa to Nairobi – an infrastructure built by the Kenyan state with Chinese assistance, initially designed as part of a broader railway network to boost transport capacity in the East Africa region. The analysis traces the development of the railway line, which took place in a record four years, to a hierarchical authority controlled by the president of Kenya. This centralised structure had the capability to unilaterally resolve disputes, adapt to uncertainty, mobilise state resources quickly and circumvent problems caused by ill-defined property rights. But the high speed in getting things done was achieved at the expense of transparency, accountability, probity and equitability in value allocation. It also remains unclear whether the railway will ever catalyse broader benefits, since the centralised approach failed to encourage collaboration and coordination with the neighbouring countries and other stakeholders.

Chapter 12, by Musonda et al., offers a more optimistic tone on the concomitant risks and opportunities that derive from ‘looking east’. The authors ground their claims on a comparative study between two cases: the Gautrain rapid rail in South Africa, the continent’s first rapid rail system, and the Addis Ababa light rail in Ethiopia. The first case illustrates a structure by which a democratic state leveraged an emerging market to form an alliance with a private firm – in line with Western standards of good governance. The second case illuminates how an authoritarian state entered into an alliance with Chinese state-owned companies under opaque conditions. It is too early to tell if the public goods produced by both contexts will be sources of long-term value creation, but evidence so far suggests that both partnerships are creating broad societal value. Clearly, though, the state–state approach enabled by Chinese credit is only available to authoritarian states. But if this approach does succeed in boosting economic growth and social development, then, conceivably, the option is open for the recipient state to adopt more transparent Western-style approaches when they seek to tackle other gaps in basic infrastructure in the future.

Chapter 13, by Gil, Pinto and Msulwa, concludes Part II by anticipating the thesis advanced in this book. The authors ground their research on a sample of four inter-organisational contexts formed to fill gaps in very basic transport infrastructure in Nigeria and Uganda; two contexts are enabled by traditional intermediaries and two by Chinese intermediaries. Their research shows that in the contexts enabled by the World Bank, building institutions is prioritised to the detriment of new infrastructure development. When the intermediary is a Chinese actor, the priorities are reversed. Underlying this choice are design attributes that are organisationally incompatible: transparency and orderliness rule as guiding

principles when the focus is on building institutions; adaptability and opaqueness rule when the focus is on new infrastructure development. Crucially, the four cases show that gains from whichever focus may be insufficient to achieve the ultimate goal, socio-economic development.

1.4 Duality by Design: Between Building Institutions and Building Infrastructure

The idea that institutional voids can be navigated in different ways is not new. We know that institutions are more than just background conditions; institutions directly influence the choices available to an organisation, and organisations are known to achieve and sustain competitive advantage through strategies that overcome, shape and capitalise on the nature of their institutional environments.³³ Furthermore, studies of firms entering in emergent markets show some organisations see institutional voids as ‘opportunity spaces’, which they choose to strategically either exploit or overcome.³⁴ Other organisations see the very same institutional voids as constraints that need to be mitigated first, before taking any further action.³⁵

Yet we still know little about how the choice between differing approaches to navigation of institutional voids affects the organisational design choices made in order to navigate those voids. We can expect, though, the two sets of choices to be interdependent, since organisation design is contingent on the environment to which the organisation must relate.³⁶ So a choice between intermediaries that espouse differing principles in order to navigate institutional voids is, necessarily, a choice between differing organisational designs used to relate the intermediated systems to their intermediaries. In other words, a choice between competing systems of intermediation is a choice between organisational contexts with differing architectures in terms of their system components, their relationships to each other and to the environment, and the underlying principles that guide organisation design and evolution.³⁷

In agreement with these precepts of organisation theory, the body of evidence curated for this book is suggestive of an organisational duality.

³³ Khanna and Palepu (1997, 2010); Henisz, Dorobantu and Narthey (2014); Khanna and Rivkin (2001).

³⁴ Mair, Marti and Ventresca (2012).

³⁵ Doh et al. (2017); Luo and Chung (2013); Pinkham and Peng (2016).

³⁶ Lawrence and Lorsch (1967); Thompson (1967); Scott (1981).

³⁷ Simon (1981); Fjeldstad et al. (2012).

In the group of organisational contexts enabled by traditional credit, the system should evolve step by step and engage openly with government at different levels and within the legislative environment. These principles also offer a basis on which to evaluate organisational performance. That is, the difficulties with implementing these principles explain delays, cost over-runs, and other forms of organisational failure. In marked contrast, underlying the design and growth of the organisational contexts enabled by Chinese credit are the principles of opaqueness and adaptability. Engagement with stakeholders is seen as an unnecessary source of confusion and delays, and adaptability is regarded as desirable to enable quick capital investment. For the participants in the contexts enabled by Chinese credit, high performance hinges on getting the new infrastructure put in place quickly. And this focus on quick technology development restricts the efforts to build institutions to building only those institutions that are necessary to ensure that the technology can function and is sustainable. This therefore excludes efforts to build institutions with a view of meeting the Western good governance ideals during the infrastructure development process.

If we accept that these two forms of organising are pursuing objectives that are jointly desirable – and, we argue, they are – the empirical studies here show that these two objectives are organisationally incompatible. The two objectives are hard to reconcile because the design attributes that underlie one pole of the duality cannot be reconciled with those of the other pole. And consistent with predictions of organisational theorists, the organisational designers choose to focus on only one or other of the poles of the duality.³⁸

We turn now to examine in more detail the choices at each pole of this duality.

1.5 Organizational Design for Building Institutions before Building Infrastructure

The choice to focus on building institutions in the pursuit of development is rooted, in Western scholarship, on the contribution of institutions to economic growth and market development. This large body of literature traces economic growth to the way evolution in institutions has allowed states to credibly commit to upholding property rights, to the quality of the rules governing economic exchange, and to governing how these rules are enforced and may be changed. From this perspective, other key

³⁸ Gulati and Puranam (2009); Birkinshaw and Gibson (2004); Smith and Tushman (2005).

markers of modern societies are the separation of policy interests from the personal economic interests of the elites, and the quality of regulation.³⁹ These ideas as a whole apply pressure to traditional intermediaries and recipients of assistance to extensively carry out tasks associated with planning and cost–benefit analysis before allocating capital, procuring suppliers and transforming designs (the instructions by which we can get things done) into usable technological artefacts. Furthermore, the organisational participants must ensure that value creation goes beyond the value that is created and appropriated by the restricted set of participants in the focal interorganisational context.

An organisational system that fails to meet these principles compromises its ability to claim positive performance and legitimacy because it fails external validation relative to the norms that Western actors deem appropriate. Hence, if the recipient state lacks regulation to acquire private resources, e.g. land and supplier capabilities, this void needs filling first, in a fair and transparent way, before the system can grow further. If the state lacks local capabilities to write and administer contracts to govern buyer–supplier relationships and PPPs, organisational evolution becomes contingent on building these local capabilities first. Engaging with stakeholders is also a prerequisite to encourage norms of cooperation to flourish; setting up efficient markets pre-empts illegal activity, and projects are expected to keep the scope stable, and be delivered on time and within budget.⁴⁰ So, under this approach, filling the institutional voids has priority over infrastructure building.

Implicit here is the acceptance, socially constructed, that socio-economic development is a *slow* process. And so, accordingly, the time that elapses between identifying an infrastructure gap and allocating capital to fill that gap is ruled out of performance evaluation. What matters here is that organisational growth is orderly and transparent. A substantive delay in allocating capital – to the extent that the focal infrastructure gap widens rather than shortens before the capital is invested – is not a failure per se. Rather, this outcome is attributed to exogenous factors that prevent the adoption of forms of organising that have been tried and tested in advanced economies to develop similar

³⁹ North and Weingast (1989); North, Wallis and Weingast (2009).

⁴⁰ Professional project-management norms are still rooted in classic scholarship that associates high performance with stable scope, budget and schedule (Morris 1994; Flyvbjerg, Bruzelius and Rothengatter 2003). But these ideas have been refuted on the basis that they underestimate interdependencies between projects and the environment (Miller and Lessard 2000; Lenfle and Loch 2010). More recently, scholars have suggested that performance assessments need to account explicitly for whether slippages in targets do or do not allow for social value creation (Gil and Pinto 2018; Love and Ahiaga-Dagbui 2018; Lavagnon, 2018).

technologies. In other words, a failure to build infrastructure is attributed to a failure to build local institutions and capabilities in the context, not to a failure of this form of organising to navigate the institutional voids in the environment.

1.6 Organisational Design for Building Infrastructure before Building Institutions

The sense that the organisational choices espoused by the traditional intermediaries are at odds with the urgency of filling Africa's infrastructure gap has encouraged African governments to 'look East' in their search for other actionable solutions. With the economic rise of China and its novel approach to foreign policy, epitomised by its Belt and Road Initiative, African states gained the agency to choose between alternatives. The fact this edited collection offers a smaller number of empirical studies on organisational contexts enabled by Chinese credit is irrelevant from a theoretical perspective. Our purpose here is not to test the statistical significance of our insights, but instead illuminate a duality in designing organisations to navigate institutional voids. Furthermore, the lack of transparency in the decision making that guides organisational choice in contexts enabled by Chinese credit is a real obstacle to negotiating access to these sites.

When the focus is on exploiting institutional voids – or overcoming them by avoidance through artful manoeuvring – organisational growth is opaque and adaptable. By rejecting Western governance ideals, or any sense of a moral mission to change the ways Africans live, the Chinese intermediaries win the political favour of the sovereign-conscious states.⁴¹ And by limiting the engagement with external stakeholders, the Chinese intermediaries opt for narrow searches for solutions to focal problems, trading off less exploration for quick stability in the solution of the focal problem. Bluntly stated, the idea here is not to tackle a grand challenge in innovative and cooperative ways; Chinese-enabled organisational contexts are not designed to cope with turbulence and complexity in the stakeholder environment, but rather discount the importance of stakeholder acceptance and of enlisting stakeholder support for any proposed solution. Instead, the objective here is to quickly mobilise resources in order to build a new infrastructure. And, of course, it would be disingenuous not to recognise the opportunities that such an approach creates for informal private gains to the political leadership and public bureaucracy – on both sides of the bilateral arrangements.

⁴¹ Tull (2006); Brewer (2008).

This organisational choice centralises decision-making authority in a tight-knit coalition of actors involving the state, the intermediary and private firms chosen by the intermediary. Such centralised structures exploit weak institutions that govern the acquisition of resources in order to fast-track organisational growth. Price setting happens, not through the market, but through opaque decision-making processes. Enfranchisement of primary stakeholders is ruled out to accelerate the decision-making process. Improvisation and ingenuity are then employed to eliminate any bottlenecks that may emerge along the way. These contexts are not, then, constrained by accountability pressures: budgets and timescales are negotiated and renegotiated behind closed doors; participants act without pressure to justify slippages in cost and schedule targets; and the lack of local capabilities is circumvented by importing these from outside markets. Performance is tied to the speed at which the infrastructure gets built and to the building of the institutions that are strictly necessary to operate the new infrastructure.

Importantly, though, the evidence here suggests that there is no guarantee that an organisational context designed to exploit institutional voids to quickly build a durable and shareable technology can meet this objective. For example, institutions protecting property rights and customary rights may be fragile, but they can still get in the way and stall organisational growth. This is often the case with efforts to compulsorily acquire land. Often, the land is protected by customary tenure regimes structured around tribal, clan or village entities, as well as by an incipient legal framework and judiciary system left behind by the colonialist.⁴² And landowners will not, therefore, part ways with their land without first putting up a major fight. Organisational growth may also be stalled by difficulties to pay back the loans due to poor planning. So this approach to organising may fall foul of the very same institutional voids that it seeks to exploit.

Complicating matters further, even when a centralised and authoritarian approach succeeds in quickly building an infrastructure, it remains unclear whether it has created value beyond the private value that was appropriated by its participants. There is a risk that the infrastructure, once ready to be used, will fail to meet the local needs because key stakeholders were disenfranchised in the development process. Which does not mean this design choice cannot create shareable public goods that add value for end-users and other beneficiaries. It can. But because

⁴² Less than 10 per cent of the African land estate is subject to formal entitlement; Wily (2011).

stakeholder enfranchisement is limited and decision making is opaque, it is harder for third parties to see if the outcomes are a source of broad value creation or not. Exacerbating the difficulties in evaluating performance is an attribute of the main objective itself: infrastructures are durable assets that operate enmeshed within the environment. If demand for a new infrastructure does not materialise straight away, it does not mean that demand will not pick up later on. Furthermore, a new infrastructure may not be financially self-sustainable, but it can still be a source of social value creation if it catalyses economic growth and social development. More theoretically, any capital investment in a new basic infrastructure works like a real option in that it creates the right, but not an obligation, to take an action at a price – the exercising cost – in the future.⁴³ New transport infrastructure creates the opportunity to access and build new markets; new power plants create an environment for accommodating economic growth; water desalination plants safeguard against climate change, and so on. There is, of course, uncertainty about when and if these scenarios will be realised, and about the cost of exercising the option, which loads uncertainty on whether the capital investment will ever pay off. But if the infrastructure is not there, no option is open to create social value should the uncertainties resolve favourably in the future.

However, there is a catch. Building and maintaining infrastructure is not free. It is an investment that uses capital resources that could otherwise be mobilised to tackling competing needs. When the needs are many, a question arises about priorities. If strategic planning is rushed, if information flows are hidden and decision making is opaque, the leaders who sanction investments are asking third parties to put their faith in the good judgement of those same leaders – assuming that the leaders care about third parties. Third parties may be willing to give the leaders the benefit of the doubt, even amid rumours of corruption and bribes, if the state is not too fragile; that is, if the state remains fundamentally able and willing to operate in the public interest, albeit with weak institutions.⁴⁴ Such environments, for example, are not dissimilar to those that surrounded infrastructure development in the nineteenth century in the United States.⁴⁵ But trusting leaders is hard if state fragility is very high, for example in settings with high levels of conflict and

⁴³ Trigeorgis (1996); Gil (2007, 2009).

⁴⁴ State fragility research comes from efforts in the development literature to understand how the world's least developed countries, such as Somalia and Sudan, differ from developing countries that seem to be advancing much more rapidly, such as Mexico and China; Collier (2009); Marshall and Cole (2008).

⁴⁵ Levy (2014); Chandler (1977).

instability in political and economic life, and where the lack of basic bureaucratic capacities leads to a fundamental disregard for the rule of law and a lack of public services. In these conditions, policy decisions and the personal interests of local elites closely intertwine. Under these circumstances, expecting third parties to give the leaders the benefit of the doubt is asking too much.

1.7 Towards a Theory of Designing Organisations for Development

Taken together, our insights reveal an important duality in designing organisations to pursue development by means of building basic infrastructure. On one pole of the duality are the organisational contexts that choose to focus on building institutions before building the technology. The degree to which these contexts succeed in building the infrastructure varies, and progress is invariably slow. Yet the delays are attributed to difficulties in building the institutions and not to the choice of focus. In other words, it is not the organizational design choices that are inadequate, but rather that it takes time to build institutions. And at the other pole is an organisational choice that takes the institutional environment as it is, and, indeed, takes advantage of weak institutions in order to pursue quick infrastructure building. Our findings also suggest substantive variation in the extent to which these contexts succeed to achieve their main objective.

Strikingly, this duality invigorates a debate that is central to the development literature, and that has been unresolved for decades: Albert Hirschman's seminal idea that assistance to development should put less emphasis on planning activities so as to undercut the propensity of the borrowers to underestimate their own ability to tackle all the difficulties and troubles that future events may bring.⁴⁶ Hirschman claimed that had it not been for a lack of awareness of the difficulties encountered in the course of many development projects – the 'hiding hand' principle – people would not have embarked on those projects, as they would not have been viewed as feasible. In other words, Hirschman suggested a 'bias for hope' could be advantageous to induce action through error in institutionally underdeveloped settings. As he put it, 'the hiding hand does its work essentially through ignorance of ignorance, of uncertainties, and of difficulties'.⁴⁷ Furthermore, he challenged the value of conditionality tied to assistance disbursed by the traditional intermediaries, claiming that a 'failure complex' was a socio-psychological obstacle to the effectiveness of development policy and assistance.

⁴⁶ Hirschman (1967, 1975). ⁴⁷ Hirschman (1967, p. 35).

Hirschman's ideas were dismissed, however, by the institutional prescriptions of the multilateral lenders and Western development agencies, based on the argument that he ignored the difficulties on the ground. So it is striking that, to a degree, the choices of the Chinese intermediaries conform to Hirschman's ideas. When the focus is on quick infrastructure building, organisational choice escapes from the straitjacket of preconditions for receiving Western assistance.⁴⁸ Instead, organisations are encouraged to take risks and be pragmatic, and organisational choices rely on the participants' capacity for improvisation, ingenuity, creativity and flexibility in solving problems. In alignment with Hirschman's prescriptions, these organisational contexts evolve by trial and error, and rely on learning-by-doing to eliminate bottlenecks to their evolution and growth.

Our collection of studies reveals mixed results about organisational contexts wholly focused on infrastructure building. Whilst the surrounding institutions may be weak and under-developed, these organisational contexts rarely operate in a vacuum. And when creativity, improvisation and flexibility fail to eliminate emerging bottlenecks, these contexts unravel and fail. Still, faced with the certainty that a focus on building institutions cannot offer quick solutions to urgent problems, many African policy makers are happy to take the potential bargain offered by Chinese actors. This suggests a duality, in that both objectives are desirable. The challenge remains that organising for one pole of the duality is incompatible with organising for the other. However, there is equifinality in that the higher-order goal unifying the participants in both forms of organising is the same – socio-economic development. And neither approach is superior to the other. The traditional approach struggles to tackle basic infrastructure gaps; as for the emergent approach, it is too soon to know how its outcomes will play out in the long term. But the evidence assembled here is suggestive of mixed results.

More certain seems the fact that this duality is here to stay, as China emerges as the world's biggest economy, and its more transactional-based, mercantilist order gains traction. Amplifying this duality are the fiscal pressures on advanced economies, and the doubts about their own models of liberal democracy, individual freedom, rules-based order and market economies in the context of successfully managing their own affairs in the aftermath of the financial crisis and the rise of populism.⁴⁹ For certain, this new global order takes us beyond traditional boundary conditions in organisational studies. It also suggests a trove of new

⁴⁸ Hirschman (1971).

⁴⁹ We leave it to historians to strike potential parallels with the way in which the rise of Japan also challenged the global uniformities in the state, political ideologies and economic life imposed on the world by Western domination centuries before; Bayly (2004).

research questions to enable us to further our understanding of designing organisations for development and to navigate institutional voids more generally. These might include:

- When does stakeholder enfranchisement cause more harm than good?
- Can too much transparency and accountability become hindrances to value creation?
- Is orderly and transparent growth worth the added transaction costs and delays?
- Is fast-tracking and opaque growth worth the risk of disarray and value destruction?
- Can ambidextrous systems be designed to address both poles of the duality?
- Can informal activities be leveraged to compensate for the less desirable effects of formal activities?
- How does the quality of the institutions influence the choice to focus on one pole of the duality to the detriment of the other?
- Are there merits in the co-existence of the two forms of organising?

It is not the purpose of this book to provide the answers to these, and other, emerging complex questions. But, by illuminating this design duality, we hope more research will ensue on designing organisations to tackle grand challenges albeit institutional shortcomings.

1.8 Final Considerations

Our focus on how intermediaries directly influence choice in organisational design should not be interpreted to mean that we feel this is the crux of tackling grand societal challenges in institutionally under-developed environments. Choices in organisational design are not only determined by institutions, and institutions are not the single cause that determines how actors behave.⁵⁰ For example, some studies here make clear that modular technologies that require less cooperation and coordination, e.g. off-grid solar power, change the structure of the focal problem. And though we do not have a case on telecom infrastructure development, the rapid expansion of mobile phone use in Africa can be attributed in part to its more decomposable architecture. Modular technologies may thus hold one key for effective alternative organisational solutions. Nonetheless, institutions are an element that directly affects organisational design, and we still know little on designing effective organisations when there is a need to overcome institutional shortcomings.

⁵⁰ Ostrom (2005).

Our choice to focus on logic linking intermediation and organisation design choices also reflects our sense that, with China's economic rise and the advanced economies hobbled by populism and fiscal pressures, a new global order is setting in. And this raises new questions that require major attention. The Chinese involvement in Africa is historically unprecedented and likely to remain opaque – as the China Eximbank president said, 'If the water is too clear, you don't catch any fish'.⁵¹ This sentiment could not contrast more with the Western approach, which is also unlikely to change if we go by the words of the World Bank's 2017 World Development Report (p. 27) – 'Development assistance can be more effective when donor engagement supports the emergence of more accountable and equitable governing arrangements that become embedded in the domestic context'. By foregrounding this duality, we are not suggesting the abandonment of the principles entwined within the traditional approach. But neither does it mean we do not see value in the emergent approach. It may well be the case that superior solutions lie in organisational designs that combine the two approaches. It may also be the case that different approaches are better suited for differing infrastructure developments, according to the attributes of the focal problem. We can also expect the quality of the institutions to determine whether organisational designers have agency at all. To sum up, we leave this book with a new set of research questions for which we do not yet have answers. But we do claim that there is a fundamental duality in designing organisations to navigate institutional voids, which presents new opportunities to reset the debate. A new dawn awaits; it is up to us to find ways to make the best of it, and prepare for it today.

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⁵¹ Bräutigam (2009, p. 296).

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