Concrete and coal: China’s infrastructural assemblages in the Balkans
Igor Rogelja

Abstract
This paper analyzes Chinese-financed infrastructural projects in the Balkans to further our thinking about how infrastructures shape international politics. By adopting an assemblage approach, which views infrastructures as part of a complex and dynamic interaction of both human and non-human actors and capacities, it questions the vascular trope that sees infrastructures as arteries of influence and power. Building on research into the construction of roads and coal power plants, assemblage analysis provides the nuance that refutes simplistic accounts of China’s grand strategy in its Belt and Road Initiative. Chinese actors are not geostrategic players exerting influence from afar, but have become thoroughly linked to the region’s politics through their specific modes of entry. The business priorities of Chinese state-owned enterprises required formal disentanglements, yet the political arrangements underpinning such deals have ironically caused Chinese actors to become entangled in the Balkans through its political instability, developmental discourses, fiscal exigencies, the traces of previous infrastructures on its society and ecology, and the often overlooked anchoring role of materials such as concrete or coal.

With Chinese and Serbian flags fluttering along the Pupin bridge crossing the Danube near Belgrade, the two countries' prime ministers, Li Keqiang and Aleksandar Vučić, opened in 2014 what was one of the first large-scale infrastructural projects successfully completed by a Chinese contractor in Europe. In neighbouring Montenegro, a Chinese bank is financing the construction of a technically demanding and expensive highway – by the same contractor that built the Pupin bridge. Despite warnings from Western institutional lenders about the road's feasibility, the Montenegrin government has pushed ahead with what it sees as a state-building project. In Bosnia-Herzegovina (BH) meanwhile, Chinese financing and contractors have been attracted to the country's coal-power sector, with one new coal power plant already operating and up to €2.2bn worth of further installations being negotiated in both of the country's constituent parts. This paper argues these Chinese-financed projects should be analyzed as assemblages which do not only convey China's influence and power, but which produce dynamics of dis/entanglement which create separation from national regulatory frameworks and simultaneously entangle Chinese actors with sub-national and even non-human actors. The implications for the study of a geopolitical initiative such as the Belt and Road Initiative are twofold: a methodological and epistemological re-tuning away from grand narratives, and a re-framing of the geopolitical away from the nation-state as the chief unit of analysis. This brings into the fore processes that are explicitly transnational (such as the activities of Chinese state-owned enterprises) yet linked with national, subnational and supranational scales.

1 In 2017, Vučić became Serbia’s president.
2 Chinese company COVEC withdrew from a road-building contract in Poland (Golonka 2012), while the other infrastructural project of note is the Kozjak dam in Northern Macedonia, built in 2004 as a 'reward' for switching recognition from the Republic of China (Taiwan) to the People's Republic of China.
INFRASTRUCTURAL ASSEMBLAGES ON THE BELT AND ROAD INITIATIVE

The three examples above represent themes associated with nationally important infrastructures: corruption, waste, increasing debt burdens, environmental concerns, but also invocations of symbolic or ‘poetic’ value (cf. Larkin 2013). Yet, concerns about Chinese infrastructural investments in the Balkans have taken on wider significance because they are framed by Chinese government entities and companies as part of the Belt and Road Initiative (BRI). China’s new confidence has elicited defensive responses in Europe, most notably in the EU’s investment screening mechanism and fretting over the Balkan states becoming Chinese ‘Trojan Horses’. The notion that China is exploiting ‘divisions’ within Europe has become a well-established leitmotif (Meunier 2014; Casarini 2015; Godement and Vasselier 2017; van Pinxteren 2017; Benner et al. 2018; Karásková et al. 2018), but it is not clear whether EU countries have ever had a unified China policy or indeed whether a one-size-fits-all policy even could exist. What unites many of the concerns is a view of China as a masterful strategist, with little agency accorded to host states, let alone sub-state actors (Rogelja and Tsimonis, 2020). In a similar vein, academic debates on the BRI conceptualize it as a foreign policy narrative that, while addressing domestic concerns over overcapacity, will also challenge or alter the established liberal world order (Ramo 2004; Ikenberry 2008; Callahan 2008; Mearsheimer 2014; Callahan 2016; Beeson and Li 2015, 2016; Ferdinand 2016). While there are many opinions contained within this body of work, the debate mirrors fault lines between offensive realists, liberal institutionalists and social constructivists, in which China is cast either as a ‘challenger’, ‘reformer’, or ‘norm-maker’. More recently, Blanchard and Flint (2017) employed an innovative geopolitical perspective on the maritime section of the BRI, noting it contains ‘multiple agents pursuing different goals with different motivations’ (ibid. 238), yet they do not discuss the agency of host states in much detail. In contrast, Klinger and Muldavin call for researchers to ‘complexify’ actors and erase state-centric accounts of the core-periphery model, focusing instead on rescaling state, capital and elite interests (2019: 4-5).

This paper answers their call and will not engage with statist epistemologies that attempt to measure how power or influence travel down roads and railroads, nor will it use the question of ‘what China wants’ as its starting point. Instead, it looks at micro and macro-scales of geopolitics using an assemblage approach emphasizing infrastructures’ complexity and contingency, as well as their fragility. The term assemblage was introduced by Deleuze and Guattari (1988) in their seminal work A Thousand Plateaus and was later reviewed by DeLanda (2006), emphasizing the ‘externality’ of relations

3 The term ‘Balkans’ is used to signify the wider Southeast European region, including the Western Balkans (WB6: Albania, Bosnia-Herzegovina, Kosovo, Montenegro, Northern Macedonia, Serbia) as well as Croatia and Greece, although Chinese infrastructural financing is residually present in Bulgaria and Romania as well. The article, however, focuses mainly on non-EU members where the bulk of Chinese financing goes.

4 A phrase used among others by EU expansion commissioner Johannes Hahn (Heath and Gray 2018). See also Turcsány 2014; Godement and Vasselier 2017.
that define the whole and its parts, i.e. that the components of any assemblage retain their own properties even as their capacity to affect change differs in any given assemblage. Put simply, the properties of coal remain the same, but whether it is part of a project to burn it or not depends on all parts of a given assemblage (miners and politicians, financiers and furnaces), which are in turn affected by the capacities of coal itself. The paper thus argues for an epistemological shift away from seeing infrastructures as lines or nodes on a map representing vectors of power. It is an attempt to move away from a strategic understanding of infrastructure as a tool of sovereign might, to an understanding of infrastructure variously as fragile, as shown by Star and Ruhleder’s groundbreaking focus on the invisibility of functioning infrastructure (1999), as recursive, as in Mitchell’s 2011 exploration of the apparatus of oil production rather than oil money, or even as communicative, as Bennett (2010) described the failing North American power grid in her work on agency crossing the human/nonhuman divide.

Instead of viewing infrastructures through a vascular metaphor, with China as a beating heart extending its influence, this paper ekes out a way to understand Chinese-built infrastructures without assumptions on the intent of the flows of power that infrastructures supposedly enable. This approach is not blind to power. Unlike actor-network theory (cf. Cudworth and Hobden, 2013: 445), assemblage thinking allows for a less flattened view of agency and power (Anderson et al., 2012: 180), as the empirical discussion below will demonstrate by highlighting synergies between local elites and Chinese sub-national actors that reinforce some constellations of power at the expense of others. With this in mind, my intention was specifically to study how infrastructures, these ‘boring things’ as Susan Leigh Star calls them (1999: 377), shape the presence and modality of Chinese actors’ involvement in Southeast Europe. The empirical research underpinning the findings of the paper comprised a total of 36 sites where Chinese SOEs are involved in the construction, planning or negotiation of large transport and energy infrastructure. Following initial research, twenty sites in Bosnia and Herzegovina, Croatia, Greece, Montenegro, Northern Macedonia, Romania and Serbia were furthermore identified as key cases for deeper analysis because of their importance in the national and international context (value, political exposure, technical challenges), and feature on the map in Figure 1. From here, most of the research was then focused on Serbia and Bosnia-Herzegovina. Due to the contingent and complex nature of assemblages, the analysis of these projects was contextualized using interviews with government officials, engineers, opposition politicians, labour and environmental activists and investigative journalists working in the region, underpinned by two stakeholder workshops, in Athens and Belgrade, organized by the author in 2018. Data gathered through interviews and conversations was furthermore supplemented with parliamentary debate transcripts, recordings of committee discussions, legal documents and their relevant addenda, as well as regional media coverage.

The choice to study the Balkans, an underdeveloped liminal region that plays a minor role in China’s geostrategic considerations, is not coincidental. While Greece and Serbia are leaders within the ‘17+1’ forum of China and Central and Eastern European states in terms of investment received, the region lags behind other European and global regions (Hanneman, Huotari and Kratz, 2019). In the Balkans, China’s involvement cannot be explained only by invocations of grand strategy or of a race to exploit its resources. This forces us to consider a more nuanced set of causalities with a wider set of contributing
actors: state-owned enterprises (SOEs), local elites and interest groups, mediated by materials and practices composing the infrastructural assemblages in question.

An assemblage approach explicitly rejects attempts to describe aggregate intent (‘what China wants’), and focuses on explaining how and why certain infrastructures came to exist in the ways they did, as well as how they interact with pre-existing power relations. Having done so, I argue that Chinese infrastructural assemblages are distinguished by two seemingly opposing dynamics. First, they produce what Appel (2012: 441) calls ‘disentanglement’ – a separation from local political and social contexts – which enables Chinese contractors to gain access to large infrastructural projects. Second, the assemblages also produce an entanglement with the region’s political elites, social contexts and material capacities that is ironically linked to the desire to separate Chinese contractors from national legal constraints. This assemblage being in flux, the dynamics governing the intersection of various scales are therefore best understood as a dis/entanglement, a non-linear and rhizomatic set of power relations produced within the assemblage. Because the politics of infrastructures unfold on several scales (transnational, region, national, local), power relations on one level can have unexpected effects on another. For example, national regulation on coal combustion in China creates synergies with Bosnian politicians eager to maintain electoral support and lucrative positions in national utility companies. Dis/entanglement is not a binary opposition, but a simultaneously existing set of disparate forces characterizing China’s infrastructural assemblage. As subsequent analysis shows, power imbalances between China and host states, regulatory lacunas in bilateral agreements, the multi-scalar nature of infrastructural politics all contribute towards dis/entanglement. The result is a complex set of relations with sometimes contradictory effects: an increase in Chinese investment does not necessarily come with increased clout for China if the projects foster opposition on the local level, as they have in Myanmar (Jones and Zou, 2017) or more recently in the Maldives (Mundy and Hille, 2019). This is because the economic interests of Chinese SOE are not always equivalent to the geopolitical interests of the Chinese state (Zhang and Smith, 2017: 2340).

What utility does this approach have in the examination of China’s infrastructural endeavours in the Balkans? Dittmer (2014) aligns assemblage thinking with complexity theory in order to avoid the pitfalls of materialist determinism of earlier geopolitical work (2014: 386). The attention towards contingency and the complex coalitions of actors and entities allows us to observe the processes of composition and accretion (cf. Anand 2015), rather than interpret finished infrastructures through an abstracted expectation of ‘China’s strategy’. Thus, this paper understands the assemblage of BRI in the Balkans through the composition and accretion of practices such as digging up coal, altering laws, misusing public office, dumping capital, disputing public tenders and cross-border pollution. All these are performed by actors including the Chinese and host state governments, Western and Chinese banks, regulatory bodies, businesses, civil society groups, journalists, refugees, criminal organizations, fluctuating water levels, gravel, layers of lignite and winds carrying smoke across borders.

Assemblages are understood by Deleuze and Guattari as ‘machines’ with a purpose (Deleuze and Guattari 1988: 351-422), but the contingent and dispersed nature of their composition means we cannot always predict what interference may arise from the interaction of each assemblage’s parts.
Working on Chinese dam-building for example, Han and Webber (2017; 2020) designate the collection of rivers, Chinese companies, banks and host state officials as a ‘Chinese Water Machine’, an assemblage characterized by complicated interactions that do not always advance Chinese strategic goals.

The complexity of an assemblage has much to do with the complexity of agents that exert influence on the functioning of the machine. The concept of agency in an assemblage has spurred much debate within (new) materialist circles. Bennett (2010) occupies one extreme in arguing for a flattening of agency between human and non-human actors, what Cudworth and Hobden call a ‘blunt instrument’ for the commendable goal of developing an environmentally aware and cautious politics (2013: 445). Depledge (2015) on the other hand suggests looking at ‘geopower’ as an assemblage in which inert materials can strengthen or weaken geopolitics (2015: 92). Choosing a smaller frame of infrastructural rather than geopolitical assemblages, this paper follows Fox and Alldred (2015) in adopting the notion of affect, which Deleuze and Guattari discuss on the example of a tick’s physiognomy (1988: 257). To understand such infrastructural assemblages, the section on dis/entanglement asks how they came to be and what dynamics hold them together. It does so by examining the preferences of Chinese and local elites in constructing a mutually acceptable mode of entry for Chinese contractors. The subsequent sections on concrete and lignite elaborate on what these infrastructural assemblages do, noting particularly that the exertion of power within them is non-linear, though not equal, and refracted according to the differing affective characteristics of the assemblage’s parts.

If assemblages are ‘machines’ with a purpose, then constructing dis/entanglement appears to be the purpose of China’s infrastructural assemblage. The question of dis/entanglement in infrastructural assemblages contributes to the analysis of transnational power, showing how the specific geopolitical form of infrastructure links various scales and material properties. Approaching infrastructures as assemblages with a historical provenance (Dittmer, 2014: 396), I argue the practices of Chinese actors do not exist in a vacuum, but follow in the grooves left by previous infrastructural projects, plans and dreams. The following three sections show Chinese contractors wanted to be insulated from host state regulatory frameworks to increase competitiveness and profit margins, and that this mode of entry was facilitated by host state elites eager to attain their political goals. Using assemblage theory to inform the analytical approach showed that power in this case was exerted in a complex, multi-directional way. While Chinese actors were able to influence host state legislation to suit their needs, host state elites guided Chinese finance towards politically expedient projects of their own choosing: roads with no Western financial backing and lignite power plants facing Western institutions’ defunding of coal. In both cases, Chinese financing enabled the assembly of actors, ideas and materials to emerge, but was in turn affected by the characteristics of the assemblage’s parts.

This theoretical approach explains how Chinese actors became dis/entangled with the local practices, materials and hierarchies that governed the desired exceptions to the rules. Moreover, an assemblage approach was able to account for both the state-centric level of analysis of inter-governmental negotiations, a sub-national analysis of firm-level activities and elite capture of public spending plans, as well as accounting for the role of non-human actors such as lignite. This interaction has produced an
assemblage whose characteristics (lack of transparency, worrying environmental consequences, tensions between national, European and global political priorities) are not so much a result of a ‘Chinese way of doing things’, but have arisen through the interaction of all its constituent parts/actors.

BUILDING DIS/ENTANGLEMENTS

The modality of entry for Chinese companies emerged out of an interplay of existing weaknesses in the legal and political contexts of the Balkans, the preferences of Chinese actors and local elites, and the exigencies of infrastructure construction. All of the above make up the infrastructural assemblage, explored in this section using the case of a 2009 treaty between China and Serbia. This treaty provided a legal format that has been replicated elsewhere in the region, creating temporary disentanglements within which Chinese contractors operate according to specially agreed rules and norms, usually secured in the form of a lex specialis that circumvents more general national legislation. This assemblage of Chinese infrastructure is therefore underpinned by a legislative and normative framework situated in a specific historical context and shaped by the host states’ developmental and political preferences. Disentanglement is not only the result of Chinese pressure, but is attractive to political and economic elites in host states.

All major Chinese-financed infrastructural projects in Bosnia-Herzegovina, Montenegro, Northern Macedonia and Serbia (see Figure 1) were agreed bilaterally. The resulting legal framework favours Chinese SOEs by explicitly tying financing to their selection. This allows Chinese SOEs to avoid public tender competition and was also the case in Bosnia’s Tuzla 7 coal power plant, where a Chinese SOE was selected over a Japanese bidder in pre-selection because it offered a financing package (EPBiH, 2014). In Bosnia’s Serbian entity meanwhile, the government retrospectively altered legislation on concession agreements to enable the construction of the Stanari power plant (Official Gazette of Republika Srpska, 2011). For Chinese SOEs, the Balkans are a ‘sandbox’ where they can train and gain experience of building to European standards without the hurdle of competitive public tenders because the host states provide the right environment for the SOEs in crucial pre-selection stages, where Chinese construction giants lack experience (Lu et al, 2009: 171-171).

The ensuing financing negotiations, described by a Serbian negotiator as arduous⁵, were led by economic institutions (such as the China Export-Import Bank), and not the foreign policy apparatus. Because Chinese policy banks’ financing activities are intimately tied to the interests of Chinese SOEs (Corkin, 2011; Wei and Wang, 1997), they act as affective links binding seemingly disparate geopolitical scales and actors, as I elaborate in the ‘Lignite Latency’ section below. This is not to say there is no political or economic consideration by the Chinese state in helping its SOEs find portfolio-strengthening work overseas. However, the analysis of the projects’ provenance suggests SOEs themselves have considerable latitude in pitching and negotiating deals. In Kosovo for example (which China does not recognize as an independent state), China Machinery Engineering Corporation (CMEC)

---

⁵ Interview, Official B. (Member of the Serbian loan negotiating team at the Ministry of Construction, Transport and Infrastructure). Belgrade, 24 July 2017.
was selected as one of the four bidders for the Kosova e Re coal power plant (ContourGlobal, 2018). Given the lack of formal diplomatic channels between China and Kosovo, the agency of CMEC in bidding for the project is evident. **Corroborating evidence from other regions highlights the role of SOEs which promote projects by targeting host state officials and lobbying Chinese banks and ministries** (Dornan and Brant, 2014: 353; Zhang and Smith, 2017: 2339).

The 2009 Agreement on Economic and Technical Cooperation in the Area of Infrastructure (henceforth ‘2009 agreement’) covers both the financing (economic) and construction (technical) roles Chinese entities play in Serbia’s infrastructural development. The original wording of the agreement regulates two important matters. Firstly, it expands the protection of the bilateral treaty from government entities to ‘institutions and commercial entities’ working on projects covered by the agreement, meaning both banks and SOEs can act as representatives of China and enter into negotiations with the Serbian government within the framework of the agreement. Secondly, it less clearly defines the criteria used in the selection of contractors, stating only that bids will be evaluated in a competitive manner and according to international standards (Official Gazette of the Republic of Serbia 2009).

In May 2013, the two countries agreed on the first annex to the 2009 agreement, which was concluded during the construction of the Pupin bridge in Belgrade – the largest infrastructural project undertaken by a Chinese contractor in the region up to that time. Annex no.1 replaced a vague reference to both sides ‘lending support’ to projects by reducing administrative barriers with a more precise article that exempts all goods and materials from import tariffs and value-added tax, as well as provides for immigration clearance exceptions for staff working on site (Official Gazette of the Republic of Serbia 2013). An official at the Deputy Prime Minister Zorana Mihajlović’s office confirmed the annex was agreed because of the contractor’s concerns over having to pay value-added tax. The annex was ratified by the Serbian parliament in an emergency session alongside numerous other laws, a practice that prevents any meaningful discussion in parliament, given that opposition parties had only twenty-four hours and one minute to read the whole package of proposed legislation before the vote – twenty-four hours being the absolute legal minimum.

Only a few months later, another annex to the treaty was agreed. **The addenda to the bill on the second annex explain the changes were a precondition for the signing of a commercial contract to upgrade the Kostolac coal power plant and were requested ‘...by the Chinese side’** (Government of the Republic of Serbia 2013). Chinese actors therefore had the power to shape the legal environment to suit their needs and did so in a way that suited the requirements of Chinese SOEs. What remains unclear is whether the SOEs themselves exerted influence on the Chinese embassy and negotiation team, or whether their interests were protected as a matter of policy. Either way, because changes were made to the 2009 agreement rather than the specific project contract, benefits will accrue to all future Chinese SOEs striking deals with Serbia, much like a most-favoured nation clause. The second annex, also ratified in an emergency session of the Serbian parliament, changes the agreement in two points:

---

7 Interview, Dušan Pavlović (Opposition MP for the “Dosta je bilo” party). Belgrade, 10 June 2017.
- exempts all agreements, contracts, programmes and projects agreed under the 2009 Infrastructure Agreement from requirements to compete in public tenders or public procurement rules
- procedures for the choice of the contractor and subcontractors are to be outlined in the commercial agreement [which is not normally public record, author's note] (Official Gazette of the Republic of Serbia 2013)

To summarize, Chinese actors used their power to gradually shape Serbian national legislation with the objective of gaining a commercial advantage and reducing costs not only in the Pupin bridge project, but in all projects subject to the 2009 agreement. These changes should not however be seen as odious to host states, as they provide opportunities for political and personal gain to the elites negotiating the projects in question. Nor are all these changes specifically ‘Chinese’ - EU financed projects funded under the Instrument for Pre-Accession Assistance (IPA) framework include provisions that exempt Union contractors from national taxation or customs in order to incentivize the private sector to participate. Yet IPA projects also include detailed and specific instructions on the oversight, management and auditing of projects (European Commission, 2010; 2014). In contrast, the Sino-Serbian agreement of 2009 on one hand mirrors international practices such as taxation and customs exemption, but does not include any details on oversight. The regulatory lacuna left in the wake of such an agreement is what enables the dynamic of dis/entanglement to take hold.

Rather than create a one-way dependency on China, disentanglement springs from existing weaknesses in the rule of law and the weak role of the legislature vis-à-vis the executive. It provides opportunities for ruling elites to benefit from the same lack of transparency desired by Chinese actors, while ensuring the projects advance rapidly and with minimal regulatory obstacles. When compared to a highway from Belgrade to Bulgaria financed by the World Bank (and subject to its rules), the ‘Chinese’ sections have been constructed with minimal delays.8 Deputy Prime Minister and Minister of Infrastructure Mihajlović emphasized the benefits of avoiding public tendering in an address to the Serbian parliament on 26 June 2019, contrasting the efficient Chinese, Azerbaijani, Russian and Turkish projects with delays on the World Bank-financed ones (National Assembly of Serbia, 2019). While Serbia serves as the main case, the contractual form described above is nearly the same in Northern Macedonia’s highway contracts, as well as in the case of Bosnian coal power plants, all of which involve a degree of negotiated disentanglement from regulations or onerous oversight. The case of Montenegro represents a further elaboration of how disentanglement affects not only companies but individual employees. Chinese contractors (and local subcontractors) are exempt from paying taxes and social contributions on salaries (Grđić 2019: 50), with their workers effectively working ‘in China’. This disentanglement reaches beyond the workers’ lives: when several fatal accidents occurred on the construction site, the president of Montenegro’s construction union confirmed his union was denied

8 The Dimitrovgrad bypass, a 5.8km long section of Serbian road corridor 10, suffered considerable delays and saw as many as three contractors being selected in three years from 2013-16 due to bankruptcy (Alpina Bau) and delays (Thrace), before finally being entrusted to Aktor, a Greek company that is still struggling with delays. (Ralev, 2019; SEEbiz, 2015; B92, 2014).
access to the site⁹, and the injured and killed workers were taken care of by the Chinese contractor without any outside involvement. Disentanglement thus affects not only the legal framework, but ensures a physical, bodily separation of Chinese contractors from the jurisdiction in which they work.

Despite the acknowledgement of Chinese SOE interests in infrastructural deals, it would be incorrect to say local counterparts or contractors from other countries cannot profit from this modality of entry. Indeed, a similar disentangled mode of entry was used for Azvirt, an Azerbaijani contractor also selected without a public tender, financed by a sovereign loan by Azerbaijan (Official Gazette of the Republic of Serbia. 2012), and will also be used for US firm Bechtel. Despite a 2018 memorandum of understanding between Serbia and the US affirming the parties’ commitment to open tendering and procurement (Official Gazette of the Republic of Serbia, 2018), Bechtel appears to have been selected for a $745m road project without a transparent selection procedure (Insajder, 2019). Serbian elites do not object to the circumvention of national laws on public tendering, regardless of the contractor’s nationality. Indeed, the stipulations on the use of domestic subcontractors were presented as economic incentives by the infrastructure minister in an address to the Serbian parliament in July 2018, where she also extolled the efficiency of bilateral contracts over open tendering procedures (National Assembly of Serbia, 2019).

This disentangled mode of entry cannot be chalked up entirely to a normative shift led by China, nor is it always beneficial for Chinese companies eager to avoid controversies amid Xi Jinping’s announced cleaning-up of the BRI (Belt and Road Forum, April 2019). Sinohydro, which became embroiled in a corruption scandal leading to the indictment (OSCE Mission to Skopje, 2018) and subsequent escape of the North Macedonian Prime Minister to Hungary, has not been selected as contractor on any further projects in the region. Host state preferences, be they motivated by the personal or political gain, factor in significantly in the structuring of the infrastructural assemblages.

The importance of host state regulatory and political environment is evident when comparing the projects with Chinese involvement across Southeast Europe. There are important cleavages between EU members, where projects tend to be mergers, acquisitions, and greenfield investments, and non-EU members, where the large majority follow an engineering, procurement and construction (EPC) + financing model and constitute either official development assistance or ‘other official flows’ under the OECD classification¹⁰. The gap between the modality of entry in EU and non-EU states can be explained with different opportunities for investment being available in the more developed EU member states, but the regulatory flexibility of non-EU members is a key attractor for Chinese (and other) contractors in the transport and energy sectors. Lastly, because EU states have access to EU structural cohesion

---

⁹ Interview, Nenad Marković (President of the Construction Union of Montenegro). Belgrade, 7 July 2018.
¹⁰ Other official flows (OOF) are defined by the OECD as official sector transactions that do not meet official development assistance (ODA) criteria. OOF include: grants to developing countries for representational or essentially commercial purposes; official bilateral transactions intended to promote development, but having a grant element of less than 25%; and, official bilateral transactions, whatever their grant element, that are primarily export-facilitating in purpose. (OECD, 2018)
funds and grants and have less need for Chinese loans, the advantages of an EPC + financing structure are not as relevant. China’s arrival in the Balkans is not only a matter of a strategic grand design, but addresses a) the political and economic needs of host states and b) the practical demands of Chinese SOEs for portfolio building. It is these two sets of demands which complicate the disentanglement strategies pursued by Chinese actors and host state elites, producing instead a dis/entanglement.

[Figure 1: Infrastructural projects with Chinese involvement in Southeast Europe. Data compiled by author, map by Timmy Huynh.]

CONCRETE DREAMS

Chinese SOEs have been participating in global infrastructure construction for decades, initially within ideologically motivated ‘3rd World Diplomacy’. Since the 1990s, however, the ‘Going Out’ strategy encouraged Chinese SOEs to look beyond their borders and construction enterprises such as China Road and Bridge Corporation (CRBC) were among the first licensed to seek business outside China (Rogelj 2018: 40). Yet for all their successful work in developing countries, Chinese SOEs face severe difficulties in bidding for projects in developed markets, with the possible exception of high-speed rail (Pavlićević and Kratz, 2016). They lack the necessary references to clear the pre-tender selection as, for example, they have not built infrastructure to exacting European standards or managed more complex procurement formats (Lu et al, 2009: 171). This is why the Balkans present an ideal training ground: the legal arrangements detailed above have allowed work to be finished according to high technical standards alongside flexible political arrangements. The resulting assemblage allows both sides to pursue their ‘dreams’; for the Chinese SOEs this is entering developed infrastructure markets, while host states dream of connectivity and a ‘European’ modernity symbolized by transport infrastructure.

Transport infrastructure across the Western Balkans has, since 2012, become the preeminent sector in which Chinese companies and banks are active. At the time of writing in 2019, there was a total of €8.7bn worth of road construction deals at various stages of approval, with about half of this amount already completed, under construction or in advanced stages of planning. The lion’s share (€4.2bn) has been secured by CRBC, now a subsidiary of China Communications Construction Corporation (CCCC). All of the construction projects included in the amount above are financed by the China Export Import Bank (henceforth China Exim), and nearly all follow the formula agreed for the construction of the Pupin bridge. The projects in question carry significant symbolic and political value and have often tried and failed to secure funds from Western funders. In some cases, most notably Montenegro’s €2.9bn project, these projects have even received outright condemnation on the part of Western institutional

---

11 This number includes projects in Bosnia-Herzegovina, Croatia, Montenegro, Northern Macedonia and Serbia. Data compiled by author. The total amount includes completed, ongoing and planned projects, as well as those with only a memorandum of understanding - some of which may not see the light of day.
lenders like the World Bank\textsuperscript{12}. China Exim has become the region’s lender of last resort, supporting Chinese SOEs who have become the builders of last resort.

Serbian officials have been upfront about why their projects have attracted interest from Chinese contractors; the roads are built to European standards and will form part of the European TEN-T transport network\textsuperscript{13}. At the same time, however, the regulatory distance between the EU and Balkan states has allowed Chinese contractors to negotiate deals without public tenders on a bilateral level. The legal framework created through bilateral agreements creates an environment tailored for Chinese SOEs, which have had difficulties reaching the public tender stage in developed countries. Moreover, having transported equipment and personnel to the Balkans, there is now a sunk cost incentive for Chinese companies to bid aggressively for every next project, thereby reducing costs associated with relocation (Grgić 2019: 8-9).

Road construction is prone to corruption, with the World Bank estimating a third of firms operating in infrastructure development in Eastern Europe and Central Asia expect to make informal payments to secure contracts (Estache and limi 2008: 5) and anywhere between 5-20\% of contract value is lost to the payment of bribes (Kenny 2009: 314). Apart from the direct costs of overinflated budgets and bribes, the prevalence of misconduct in infrastructure projects may also result in the perpetuation of clientelist networks with wider repercussions for development. Rather than misconduct being the result of Chinese actors’ normative preferences, it is the product of two compatible political programmes: China’s push for the internationalization of its SOEs, and the Balkan states’ push for the upgrading of their transport infrastructure (ironically connected to their hopes for EU accession). Just as Harvey and Knox (2015) show in the case of Peru’s Interoceanic Highway, roads in the Balkans are replete with symbolism: the ‘enchantsments’ of speed (Harvey and Knox 2012), their nation-building role (Grgić 2019), or simply as a sign of governmental competence. Serbia’s corridors 10 and 11, stretching from Hungary to Bulgaria and Montenegro, respectively, exemplify the longstanding political currency of highway construction. Leaders as different as Slobodan Milošević, Vojislav Koštunica and current president Aleksandar Vučić have all extolled the corridors as signs of Serbia’s strategic position, Europeanization, and self-sufficiency (B92, 2006; Vreme, 2000). Pavličević points out the arrival of Chinese investors and lenders has been greeted with similar enthusiasm, noting how the construction of transport infrastructure is linked to Serbia’s geopolitical dreams (2018: 693). Unsurprisingly, Chinese financing has flocked to projects with strong political backing and shaky (short-term) economic feasibility. For the region’s leaders however, roads are tangible achievements, they change voters’ lives, they bind unruly parts of the country together, they present many photo opportunities. Serbian infrastructure minister Mihajlović may stand out with the pink hard hat she wears on official duties, but leaders from around the region regularly visit construction sites operated by Chinese contractors. When

\textsuperscript{12} The World Bank expressed its dissatisfaction by cancelling a $50m loan to Montenegro after it failed to heed its warnings over the construction of the highway. Reuters, ‘World Bank drops $50mln loan to Montenegro over excessive debt’. March 7, 2014.

\textsuperscript{13} Interviews, Officials A, B and C. (Ministry of Construction, Transport and Infrastructure of Serbia; Cabinet of the Deputy Prime Minister of Serbia). Belgrade, 27 July 2017.
I asked a Serbian transport ministry official about this, they confirmed Chinese contractors were helpful in arranging media opportunities, as long as Chinese banners and signs were also on display.

The roads’ value is not an equation of economic cost and benefit, but a complex political calculation that involves materials and ideas, individual and collective interests, spans across national and historical scales. Such interlocking pressures have led to the massaging of feasibility studies documented by Grgić in the case of Montenegro (2019: 9), to irregularities with subcontractor selection in Serbia (Cosic et al. 2015), and even the indictment of a prime minister in Northern Macedonia (OSCE Mission to Skopje 2018).

As smaller, provincial-level SOEs begin to look for work in minor transportation corridors, ever new forms of dis/entanglement appear. Shandong International secured a lucrative concession deal with a guaranteed income in exchange for building a 42km stretch of highway in the Serbian half of Bosnia-Herzegovina. The exact nature of the deal is unknown as it has been designated confidential at the request of Shangdong international (National Assembly of Republika Srpska, 31 January 2019), another example of how local authorities cater to the contractors’ needs. Despite the secrecy, media reports speculate the entity's government will guarantee an annual income of €30 million - regardless of the road’s actual usage (Šurlan, 2018). While Chinese contractors were involved in each of these cases, what is of interest is not norms allegedly emanating from China, but that dis/entanglement is able to accommodate the many contexts and preference that form part of these assemblages.

On one hand, coordination between financing and contracting parties results in fewer delays on Chinese-run construction sites in Serbia compared to World Bank-financed ones, where contractor bankruptcies have delayed construction. Yet Chinese contractors have become entangled in a series of controversies precisely because of their quest for disentanglement from public tendering. Serbian investigative journalists have tied sub-subcontractors working on Chinese sites to people with close links to the ruling SNS party, with one of the companies’ CEOs going as far as buying 28 plots of land near the site of the proposed route, enabling him to control access to the closest gravel pits (Cosic et al. 2015). In Northern Macedonia, the selection of Sinohydro (another Chinese SOE) for the construction of the €580m Kičevo-Ohrid motorway even resulted in the indictment of former prime minister Nikola Gruevski by the Special Prosecutor’s Office in 2017. The indictment alleges Gruevski gave instructions to three officials in charge of the tendering process to ignore a bid by another Chinese company in favour of Sinohydro, thereby damaging the state budget by over €150m (OSCE Mission to Skopje 2018). While it is by not clear who has corrupted whom, the dis/entanglement central to the road-building assemblage comes with an increased risk of malfeasance alongside expedience for the host state and experience for the contractor.

The case of CRBC is illustrative of how the Balkans has become a training ground for Chinese SOEs. After securing the 2009 contract for the Pupin bridge in Belgrade, the company went on to be awarded the Bar-Boljare highway project in Montenegro. This was followed by the highway’s continuation in

---

Serbia, which brings the total value of the Bar-Belgrade highway to €5.7 billion. In 2018, the company went on to win the contract for the Pelješac bridge in Croatia, the first time a Chinese contractor won a competitive public tender for a project financed with EU cohesion funds. The experience gained through a daisy chain of projects in Serbia and Montenegro was key for CRBC's offer to proceed to the final tendering stage, where it was selected over an Austrian and an Italo-Turkish consortium. The two unsuccessful bidders went on to contest the selection of CRBC, but were rebuffed by Croatia's State Commission for Supervision of Public Procurement Procedures (DKOMHR 2018).

Some Chinese SOEs have done well with their ‘training’ in the Balkans’ sandbox and went on to win EU-funded projects. Others, like Sinohydro, found opportunities petered out after they got entangled in a controversial project (Government of Northern Macedonia, 2018). This variation suggests there is no one form of dis/entanglement that shapes Chinese presence in the region, though the ‘quality’ of local backers has repercussions on the firms’ future business. Sinohydro notwithstanding, dis/entanglement has worked for all but the most compromised companies. Ultimately though, Chinese road-building companies will exit the region with enhanced portfolios once the list of available projects dries up, leaving in their wake not only roads and bridges, but also strengthened clientelist ties between government and local business elites that transcend national borders. Apart from road-building however, Chinese actors have also become premier builders and lenders for an altogether different set of infrastructures: coal power plants.

LIGNITE LATENCY

Despite the green ambitions of the BRI, Chinese-financed energy infrastructure in the Balkans is directed overwhelmingly towards lignite coal power plants. Environmentally destructive on local, regional, as well as global scales, lignite remains (by some distance!) the Balkans’ main electricity generating fuel (REKK 2019: 23). Here, I look at lignite as an example of how Chinese financing has come to be thoroughly entangled with a material whose properties (affects) are highly relevant to how we conceptualize infrastructure in international politics. The latent agency of lignite, with its affective links to deeply rooted political and economic interests, illustrates the multi-scalar, contingent nature of the Belt and Road Initiative.

Unlike road construction, which creates snaking structures using remarkably mundane ingredients, lignite has a more sluggish nature. Hidden just underneath the earth’s surface, these accretions of...
decayed vegetation produce a fuel with a high content of moisture and volatile matter. Its weight means it is expensive to transport, while its propensity for spontaneous combustion means it is dangerous to store. In many ways, lignite is the opposite of oil (cf. Mitchell 2011) and is therefore not often traded. Lignite is, in other words, a fuel whose capacities affect the mode of use and consumption in a way that is limiting both temporally and spatially: it must be used then and there. Lignite-burning power plants are situated in close proximity to lignite mines, constituting assemblages that are connected both physically (through conveyor belts, rail) and institutionally (through ownership structures). Given lignite’s immobility, decisions on the placement of power plants often could not take into account factors such as distance to population centres, availability of infrastructure, or flooding risk. Power plants went up where they must, expanding into their surroundings with dedicated infrastructures: homes for miners, schools for their children, azure-coloured lakes of ‘technological waste water’ alongside deserts of ash. As these assemblages territorialized, they brought into existence political communities that are highly dependent on the continuation of lignite combustion in-situ. All of the mine-power plants that have seen significant Chinese involvement fit this description. Of those, RiTE Gacko and EFT RiTE Stanari (both in BH) maintain the mine-power plant organizational unity (RiTE stands for ‘mine and thermoelectric power plant’), while Kostolac in Serbia and Tuzla in BH operate independently of their lignite mines but maintain ownership connections through the state or the national power utility. New coal power plants with Chinese involvement have been planned in Serbia, Greece17, and Romania, but the most ambitious coal expansion plans are underway in Bosnia-Herzegovina, where a total of eight new coal power plants have been announced, approved or recently put into operation (see Figure 1).

The fragmented political system of Bosnia-Herzegovina creates incentives to preserve lignite plants for local, regional, national and federal politicians, all of whom often extol the job-creating properties of the coal complex. Drawing parallels with Poland’s coal sector, there is a degree of what Kuchler and Bridge (2018) call ‘socio-technical imaginaries’ of coal present in Bosnia-Herzegovina as well. Since the 1950s, December 21 is celebrated as ‘Miners’ Day’, in commemoration of a violent suppression of a miners’ strike in 1920, with local politicians still using the opportunity to praise miners as a ‘pillar of society through their sacrifice’18. Support for the coal sector does not end with rhetorical flurries however, with the same Tuzla assembly calling on federal authorities to expedite the Tuzla 7 expansion of the existing power plant (Tuzla Canton Assembly, 2017). Similarly, during a federal debate on providing state guarantees for the Tuzla 7 loan, none of the representatives opposed the construction (Šajinović, 2019). Despite doubts cast on job creation by environmental NGOs (Ciuta and Gallop 2018), wages in the three municipalities that host TPPs are significantly above the national average, suggesting the coal sector is an important local employer (Republika Srpska Institute of Statistics 2017). This situation is again reminiscent of lignite mining in Poland, where local communities exhibit a high degree of acceptance of the coal sector despite environmental costs (Badera and Koçoń 2014). The

---

17 The New Democracy government led by Kyriakos Mitsotakis has announced it will phase-out lignite production and combustion by 2028, putting the Florina power plant project under question (Tugwell et al, 2019).

mine-power plants are connected to local politics through bonds of employment, and to the national level through direct or indirect state ownership. Moreover, the energy sector in Bosnia-Herzegovina is the country’s largest exporter by type of product" and the largest single source of public procurement spending (around a third of total public spending) – which tellingly increases in election years (CIN 2015). This finding echoes research on Chinese aid and financing in Africa, where Dreher et al. (2019) found Chinese aid is biased towards politically favoured regions, especially before elections (45), suggesting Chinese capital exhibits signs of political capture at a local level.

The ‘pull’ coming from the region is complemented by a ‘push’ emanating from China. Coinciding with the political and economic effort to reduce China’s fossil fuel consumption, the central government began to exert pressure on provincially approved coal power plants to reach targets outlined in the 13th Five Year Plan, which required the cancellation of around 150 GW of new projects (National Energy Administration 2016b). As part of this effort, the National Energy Administration announced a list of projects to be eliminated alongside further bans and updated sanctions for violators (National Energy Administration 2016a). The tightening of the domestic coal market created additional incentives for China’s coal sector to seek work overseas, particularly in Pakistan, Turkey, and the Balkans. Such causal links are not a transmitter of agential power in this assemblage, but they do link seemingly disparate wholes. The regulation on provincial coal power plant construction amid concern over a debt crisis in China does not automatically translate into a new block at the Tuzla thermoelectric power plant in Bosnia-Herzegovina. Yet it does provide additional incentives for sunset industries such as coal to seek work in countries with less stringent emissions goals, thus forming a non-linear causality across countries as different as Bosnia-Herzegovina, China, Pakistan, and Turkey. In this way, the Bosnian lignite assemblage intersects with a global assemblage of Chinese coal power, as well as with other regional and sectoral assemblages.

The keenness of Chinese contractors to secure projects in the Balkans is illustrated by their willingness to accommodate local elite preferences. In the case of Stanari the investor was a private company, EFT, which secured a concession to the lignite mine in 2005, followed in 2008 by a concession to build and operate a coal power plant until 2038 (Commission for Concessions of Republika Srpska, 2018). When EFT was in negotiations with the China Development Bank and Dongfang Electric, the question of guarantees for the loan was solved by using the concession rights as collateral, which required the explicit approval of the entity’s government, as well as changes to the relevant law (CIN 2014; Republika Srpska 2013). Stanari’s design was furthermore downgraded from an efficient (and more expensive) supercritical to a subcritical boiler operating with lower temperatures. In the Tuzla 7 project, state guarantees were unanimously approved by the Federation assembly in March 2019, while the Gacko 2 project in Republika Srpska is set to take the form of a joint venture between the local utility company and China’s Poly Group, a large SOE formerly associated with the military. The variety of entry forms suggests that rather than following a one-size-fits-all approach, Chinese contractors adapt to the requirements and possibilities of the host state and private operators such as EFT. The modality of entry for the Chinese contractors or co-owners also speaks to the theme of dis/entanglement, as the

---

lifespans of the coal power plants (as well as the loans which paid for them) stretch well into the 2030s. While Poly Group’s joint venture is the most obvious form of entanglement, even the Stanari deal comes with a potential quandary: if EFT is no longer able to finance the Chinese loan, its concessionary rights will be transferred to the China Development Bank.

The material, political and social latency of lignite is defined both by the fuel’s natural properties as well as the extractive-combustion systems that emerged around it. The continuation of these infrastructural assemblages is driven by the political dynamics in the region as well as in China. Yet the resilience of this assemblage is crucially affected by the host states’ commitment to European integration. Although coal plants may be profitable now (where data is available), their long-term financial sustainability is a matter of political circumstance – not just domestically, but on the European level. Bosnia-Herzegovina is a signatory of the Energy Community treaty, which aims to integrate the energy markets of the EU’s periphery into the single market. As such, the signatories are bound to gradually implement environmental and competition rules that could eat away at profits predicated on subsidized buy-back prices, lax environmental assessments and state guarantees, not to mention the cost of technological upgrading necessary to meet the EU’s industrial emissions directive. Even the newest of the plants, Stanari, will require significant retrofitting once the full extent of EU directives is applied in national law (Ciuta and Gallop 2017), while state guarantees for the Tuzla 7 project have already been flagged as problematic by the Energy Community through an independent review (Sheppard, Mulin, Richter and Hampton LLP 2019). More than roads, coal infrastructures face challenges that could strain existing arrangements between Chinese actors and host states and frustrate attempts at disentanglement. In a recent report, the Energy Community suggested all coal power plants in the Balkans would be highly unprofitable without direct and indirect state subsidies, raising the question of what Chinese banks will do with such undesirable assets in the case of a private or sovereign default (Energy Community Secretariat, 2019). Unlike similar projects in other parts of the world, the Balkans presents a unique case because of its commitment to European integration. This makes the region attractive for Chinese financing and investment, but highlights the gap between the aspirations of the host states and their continued weakness in matters of transparency and rule of law.

CONCLUSION

In this paper, I have considered how the infrastructural financing and construction by Chinese actors in the Balkans can be conceptualized as an assemblage combining parts that differ vastly in size, influence, location, or power. While Chinese infrastructural investment and financing has been researched using many different methods, from reductive models to case studies, the multi-scalar nature of the Belt and Road Initiative – as well as its vagueness – makes it hard to conceptualize in neat theoretical frameworks, particularly if our starting point is to ask what ‘China’ wants. This paper has not answered how China will use infrastructures or whether it is a threat or not, even though these questions are clearly of interest to the wider policy community. Instead, infrastructures tell us about the ways in which China has come to interact with the world and the Balkan region in particular. Infrastructures reshape the flows of goods, capital, people and norms, but they also provide insight into
the modality of China’s entry into the Balkans, with implications for the BRI as a whole, as well as the field of geopolitics.

The BRI is a contingent, multi-scalar process, which in the case of the Balkans has come to interact with local preferences and incentives, which in turn have been shaped historically by an array of human and non-human actors. The infrastructural assemblages in which Chinese banks, SOEs and government agents take part lead to a simultaneous dynamic of dis/entanglement, creating suitable conditions for Chinese actors at the same time as binding them in relations with local political and economic elites, as well as with complex socioeconomic systems such as the coal industry. Dis/entanglement may also shape China’s relations elsewhere. In Pakistan, a deteriorating security situation has spurred Chinese authorities to take unorthodox actions such as negotiating with tribal leaders in Balochistan (Bokhari and Stacey 2018) to secure access to the port of Gwadar. While an asymmetry of power is evident in the way Sino-Serbian negotiations unfolded, the crucial contribution of an assemblage approach is in accounting for the power of the ‘weaker’ parts of an assemblage. The Balkans moreover presents a somewhat different problem for Chinese foreign policy because of its commitment to European integration and the EU’s ‘structural power’ (Pavličević, 2019). The Balkan states’ strategy of attracting financing through regulatory laxness makes them attractive to investment by Chinese banks and contractors, but is also a source of friction that could render investments (particularly into coal) a loss-making liability and source of tension between the EU and China.

The question of liabilities and entanglements contributes an important new dimension to global debates on China’s so-called ‘debt traps’ (Hurley, Morris, and Portelance 2018; Brautigam 2019) by asking how the mode of entry and the specific type of infrastructural investment affects the relations between host states and China, as well as between China and other powers, such as the EU in this case. The future feasibility of roads and coal power plants affects not only the states and enterprises that commissioned them, but also concerns Chinese financiers and contractors. While the notion of the ‘debt trap’ has gained much traction, experience from states that have had to negotiate Chinese loans is mixed (Brautigam, 2019). Some assets hold identifiable strategic value, but not every item of infrastructure has the economic-military fungibility of a port, nor is every mode of entry the same in the type of dis/entanglement it produces.

The implications for the field of geopolitics stem from the interplay of scales, properties and capacities of the assemblages’ constituent parts. A particularly salient contribution has been examining what holds assemblages together despite their tendency to be in flux. The techno-political assemblages of concrete and coal are held together by coalitions of actors composed of parts that are old (such as lignite), that are transnational (such as Chinese SOEs), that combine individual agency (of local businesspersons, engineers, environmentalists) with compound agency of entities such as states. The approach pursued in this paper is also of use when trying to ascertain the origin of ‘undesirable’ effects of a given assemblage, from pollution to corruption: these are not just side effects of one state’s political and economic system (in this case, China), but are bound with micro- and macro-scales of politics through dynamics of dis/entanglement.
Coal plants constructed by Chinese SOEs, paid for by loans financed by Chinese policy banks will exert an inertia long after they are built and paid off through the materials and technology used, through the standards implemented, through the sunk investment into coal-mining, through sectoral dependence on coal jobs, as well as the pulmonary and ecological fallouts of burning lignite, which will extend far beyond the power plants’ immediate surroundings. But having accepted the power plants themselves as collateral to secure the loans, Chinese financiers will remain bound to their investments and the many problematic practices that originated from subcontractors linked to host state elites. This iniquitous exchange was made possible by an assemblage whose purposes have been analyzed as twofold, geo-economic training of Chinese SOEs and the satisfaction of preferences by host state elites. Through a focus on the contingent nature of this assemblage, it has been shown that China’s newfound role of banker and builder comes with many unpredictable results and roles. By bringing in the widest possible spectrum of actors in the assemblage, what looks like a neat strategy of a rising power has come into view as a messy process shaped by many actors, historical latencies, the properties of materials, and multi-scalar political priorities that connect Bosnian cement mixers to the halls of Zhongnanhai.

**BIBLIOGRAPHY**


---

Zhongnanhai is the seat of China’s government.


EPBiH. 2014. Information on the activities in the selection of a project partner for joint investment into the Bloc 7 of TE Tuzla. Sarajevo: Elektroprivreda Bosne i Hercegovine.


———. 2014. “Framework agreement between the Republic of Serbia represented by the Government of the Republic of Serbia and the European Commission on the arrangements for implementation of Union financial assistance to the Republic of Serbia under the Instrument for pre-accession assistance (IPA II)”.


Mundy Simon and Kathrin Hille. 2019. The Maldives counts the cost of its debts to China. *Financial Times*, 11 February. Available at: [https://www.ft.com/content/c8da1c8a-2a19-11e9-88a4-c32129756dd8](https://www.ft.com/content/c8da1c8a-2a19-11e9-88a4-c32129756dd8) (accessed 20 April 2020).


