

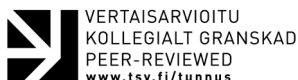
Petro-populism and infrastructural energy landscapes: The case of Mexico's Dos Bocas oil refinery

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In 2018, recently elected presidential candidate Andres Manuel Lopez Obrador (AMLO) promised the construction of a new refinery in Mexico. Arguing a lack of energy independence and the urgent need to 'rescue' petro-state giant PEMEX and the state-owned electricity company CFE from the mismanagement and neoliberal policies of previous administrations, the Dos Bocas Refinery (DBR) became one of the main flagship projects of AMLO's administration symbolizing a discourse of energy security and national pride. This paper reviews the process of approval and construction of the refinery by assessing, the material and relational character of energy infrastructure, the "politics and poetics" that are built into the promises of infrastructure projects, and the shifting temporalities of infrastructure and their interaction with emerging 'petro-populist landscapes' which serve as material evidence of oil-led development. Drawing on Anthropology's and Geography's 'infrastructural turn', this paper reviews a series of government documents, speeches and declarations supported by interviews with energy experts to understand the symbolic meaning of energy infrastructure and how the DBR has become deeply entangled with a nationalist political project which has instituted an inertial path-dependence towards the continued use of fossil fuels, off-staging other concerns associated to climate change and the energy transition at the national level.

Keywords: energy infrastructure, petro-populism, Dos Bocas Oil Refinery, promises, politics and poetics of infrastructure



Introduction

Mexico is a highly carbon-intensive country. Its government has committed to domestic climate change and energy transition goals, instituting national laws and subscribing international treaties. Despite the adoption of 'ambitious climate change targets' (UNFCCC 2016) and a high vulnerability to climate change (INECC 2016) the government continues to support the production and use of fossil fuels. It does

this directly by assigning public resources for the exploitation of hydrocarbon reserves, increasing exploration activities and investment in technology, and indirectly, by constructing and developing more carbon-based infrastructure, subsidizing gasoline prices and linking economic growth to the hydrocarbon sector. This apparent paradoxical condition can be explained through an emerging tension between the geological and geopolitical constraints that originate in concerns over energy security

and the energy transitions (Calvert 2016).

In this paper, I argue that the Mexican Government's 2018 announcement of the construction of a new refinery in the Dos Bocas port of Tabasco, is set under a broader national debate over energy security and neoliberal mismanagement of national resources. This process is shaping and sustaining a particular socio-technical imaginary of the future, one in which the development of infrastructure acts as the material and relational representation of a populist narrative over energy security, with independence and sovereignty closely linked to the ownership and management of oil and its revenues. Here, the Dos Bocas Refinery (DBR) is positioned as a highly visible project, one that is tightly knitted with a particular national imaginary of development, growth and security.

Hence, it can be argued that the DBR makes little environmental, economic and fiscal sense in a context with dwindling hydrocarbon reserves and a sustained reduction of Energy Return on Investment (EROI) (Ferrari 2019; Hall *et al.* 2014). To address these arguments, the purpose of this article is two-fold. Firstly, to try to understand how narratives and discourses of oil hold a particular grip in the political imagination of Mexico. Secondly, the paper shows how the construction of 'spectacular' energy infrastructure is articulated through a series of aspirations, anticipations and imaginations of the future (Appadurai 2013) that exalts particular traits of how and why this future is built, while displacing and off-staging other implications and concerns (Jasanoff 2015a).

Drawing on the Cultural Anthropology's and Human Geography's 'infrastructural turn' (Bridge *et al.* 2018; Anand, Gupta & Appel 2018) this article analyses the DBR

from three particular perspectives. First, infrastructure as a terrain of power and contestation, with energy infrastructures as key sites of capital accumulation (Truscello 2020). As Power and Kirshner argue, energy infrastructures are sites that help the state extend the power and reach of its institutions, while they also help create neoliberal subjectivities that "advance neoliberalization whilst creating lucrative opportunities for elite accumulation." (2019: 498). Thus, energy infrastructures represent the site for discipline, struggle and resistance over particular biopolitical strategies and social organizations in modern societies (Appel, Anand & Gupta 2018).

Second, the permanence and obduracy of infrastructure which is made visible by its material and social character, reflects the spatial arrangements of energy systems accumulated over time in particular places (Castán Broto 2019). Taking an energy landscape approach, which focuses on "the assemblage of natural and cultural features across a broad space and the history of their production and interaction" (Bridge *et al.* 2013: 335), shows that energy infrastructure shapes how relations of power and interactions in different places and public arenas are made (Kirshner *et al.* 2019; Bridge *et al.* 2018). Using the concept of petro-populist landscapes I argue that the implications of infrastructure as sites of contestation and as symbols of progress, national pride, development and sovereignty have and continue to play a significant role in framing, resisting and contesting particular sociotechnical imaginaries of the future.

Third, infrastructures are 'spatiotemporal projects', as they produce different spatial and temporal relations. As infrastructures ensemble and interconnect different places they shape both the processes of energy

demand and supply. On the one hand, these spatiotemporal characteristics are the key to understanding how particular inertias and path-dependencies are linked to the development of infrastructure, but also how their deployment produces different perceptions and experiences of time and space. This paper is concerned with the promises of energy infrastructure, that is, with the hopes and aspirations, and the socio-technical imaginaries that are embedded and inscribed into particular energy infrastructures and what they signify about the future (Appel, Anand & Gupta 2018; Kuchler & Bridge 2018). Energy infrastructure holds a promise of progress and prosperity which has been tied to dreamworlds of modern technology and the everyday politics and poetics of hope in the possibility of securing a 'good life' (Schwenkel 2018: 106). In the next section, I describe the materials and methods utilized. In section three I draw on the aforementioned threefold discussion of infrastructure. The fourth section engages with the DBR in conversation with the insights of section three. Finally, section five offers a discussion and concluding remarks.

Materials and methods

Methodologically, the article is supported by critical discourse analysis of government documents, speeches, programs and reports and by 8 semi-structured virtual interviews and conversations with energy experts which includes representatives of academics, civil society organizations, activists and think-tanks between June and September 2020. Critical discourse analysis refers to the ways in which different forms of narratives, stories, ideas and behaviours are less the

result of free choice and more the result of external sociopolitical pressures (Fairclough 1992; Wodak 1996). This paper uses discourse analysis as a heuristic. It analyses how discourses by government institutions and individuals are shaped by ideologies that circulate power in society, and how these discourses are shaped by memories of previous discourses, ideologies, forms of power and with other sources of creativity and constraints (Johnston 2018).

My analytical orientation understands infrastructure as a material and relational concept (Nemser 2017), one that enables circulation and connections of people, things and knowledge from different places. However, it also naturalizes and makes invisible the necropolitical valences and the socio-ecological conflicts and violence that are embedded in infrastructure itself (Truscello 2020). By using the case of the DBR, I show how energy infrastructures are embedded in complex historical and spatiotemporal relations, and how energy infrastructures become embroiled in the material and relational aspects of building and maintaining power relations, and socio-technical imaginaries of the future.

Energy infrastructures: power, spatiotemporalities and promises

The spatial and relational implications of energy are thus materialized in energy infrastructure. The material character of infrastructure shows how physical, aesthetic and political lives of infrastructure are closely embedded to the everyday life experiences and the expectations of the future (Appel, Anand & Gupta 2018). Infrastructures are material (physical) sites of promise:

of development, growth, technological prowess, modernity and progress. However, these promises are often displaced by the political life of infrastructure often revealing infrastructure as “flaky accretions of sociomaterial processes that are brought into being through relations with human bodies, discourses, and other things (sewage, soil, water, filtration plants)” (Truscello 2020: 25). Thus, infrastructures are also the sites of political claims. As infrastructure is being imagined, described, constructed and maintained, it reveals society’s underpinning of structures of power. Here, the relational character of infrastructure displays how they are simultaneously “produced and productive, determined and determining”, or in other words, “infrastructure is both the condensation of an ideological project and a participant in the realization of that project” (Nemser 2017: 18).

Infrastructure analysis is helpful in showing the spatial underpinnings of any biopolitical regime. The production of boundaries and hierarchies in infrastructural projects intervenes and shapes the local landscapes in material ways, simultaneously producing differences as they are established by prevailing forms of structural oppressions: colonialism, white supremacy, homophobia, speciesism (Truscello 2020: 14). Truscello’s (2020: 4) concept of infrastructural brutalism is understood as the aesthetic, political program, psychological and material condition of capitalism’s encounter with the limits of its expansion and domination. It reveals the ways in which energy infrastructures can become visible not only upon their breakdown, as is normally argued. Instead, energy infrastructures remain highly visible through the different forms of violence and through the necropolitical contours through which

infrastructure becomes a site of contestation, differentiating from those to whom infrastructure becomes an enabler and from those for whom it becomes a burden or an obstacle (Star 1999).

This paper conjoins the analysis of energy infrastructures in material and relational terms, with the idea of petro-populism and resource nationalism. Petro-populism is understood as “the economically excessive use of natural resource revenues to buy political support” (Matsen, Natvik & Torvik 2016: 1). The idea relies heavily on rent-seeking behavior by the state, aiming to provide short-term over-provision of goods and services to the public to maintain popularity and legitimacy through resource extraction. The transition from neoliberalism to a new, post-neoliberal version of resource nationalism aimed at destabilizing the prevailing structures of power in some Latin American countries, is exemplary of how petro-populist governments repurposed resource extraction revenues as vital for the recuperation of national sovereignty and the redistribution of national wealth (i.e., Ecuador, Venezuela and Bolivia).

However, the increase in resource exploitation and the search for energy flows has increased socio-ecological conflicts as a consequence ‘of the expanding metabolic profile of the global economy’ (Temper *et al.* 2015: 260), increasing instances of violence against environmental and community activists seeking to resist extractivist forms of development (Middledrop & Le Billon 2019). This process, which fits into the broader rise of forms of authoritarian and populist politics, in the North and South alike, is articulated around ideas such as a resistance to neoliberal forms of governance, where the extraction of resources and environments become inextricably linked to

national identities, fortunes and prospects (McCarthy 2019). In Latin America, the ‘commodity consensus’ (Svampa 2015) allowed the state to develop large ‘strategic projects’ aimed as showcasing the capacity of the government to end resource mismanagement and corruption by neoliberal elites (see Lyall and Valdivia 2019), and the use of oil rents to satisfy popular demands without requiring redistribution or expropriation of priority (Riofrancos 2020: 23).

Finally, it is important to highlight the implications of sustaining a fossil fuel based ‘subterranean energy regime’. As social concerns over climate change and energy security drive energy supplies into contradictory shifts: towards renewable and ‘unconventional’ fossil fuels, respectively (Calvert 2016: 106), “questions of control over land, territory and space will become central” (Huber & McCarthy 2017: 666). These concerns become the drivers of a reconfiguration of spatial relations and new socio-ecological conflicts as energy resources become more diffuse, with lower EROI and power densities (Smil, 2016).

Struggle, contestation and energopower

As Akhil Gupta (2018: 63) argues, infrastructure must be seen as a concrete metaphor: “as a biopolitical project that aims to address the health and welfare of the population while also facilitating discipline and control.” Here, energy infrastructure becomes essential and is often considered necessary for creating an acceptable level of development. Gupta argues that, the pedagogical and performative role played by infrastructure in the biopolitical project of managing and controlling the population of

a nation-state is mediated not just around the provision of goods and services, but in the production of particular ethics that constitute the moral-pedagogical language (Von Schnitzler 2008). This is what Foucault would call ‘the conduct of conducts’ (Foucault 2010; Lemke 2001), a process producing particular characteristics of energy consuming citizens. The biopolitical character of provision through infrastructure also holds a necropolitical aspect – the subjugation of life to the power of death as Mbembe and Meintjes (2003) define it – and offers a way to understand how infrastructure becomes a mediator between class, racialized and gendered politics of separations, a process that is both spatial and historical in nature (Baptista 2018; Kirshner *et al.* 2019).

Anthropologist Dominic Boyer (2014) argues that the advent of the Anthropocene has exposed a weakness in biopower’s capacity to think beyond its narrow anthropocentrism. Drawing on Timothy Mitchell *Carbon Democracy* (2011), Boyer (2014: 323) argues that it is through the materialities, infrastructures and histories of carbon energy that modern democratic power was able to flourish and how, for example, projects like Keynesian welfare systems were drawn with an unconditional promise of endless growth brought about through oil. Boyer (2014: 324) draws the example from Mexico, to reflect on how a biopolitical crisis that consists of ‘a war of drugs gone bad’ is inseparably linked to the “steep decline in petroleum production (over 25 percent in the past seven years) by the giant parastatal Pemex” and the “now fading light of the black sun (oil)”.

Boyer introduces energopower as a bridge concept between discourse, materiality and history. Here, energopower and

energopolitics originate from the rupture of energy from the dimension of biopower. Energopower then traces a genealogy of modern power through the “twin analytics of electricity and fuel” (Boyer 2014: 325). Energopower is thus a concept that allows the tracing of how the projects and strategies of biopower are entangled with the materialities and discourses and histories of energy (for example oil or coal), and how these entanglements reveal the processes and institutions by which biopower is produced (e.g., schools, clinics). Thus, biopolitical projects would not be possible without the material (the pipelines and wires) and relational character of energy flows that sustains concepts such as modernity, freedom and democracy (Huber 2015).

Michael Watts uses the concept of oil assemblages to show the particular set of actors, agents and processes that give shape to our vision of carbon capitalism. Oil assemblages demonstrate how energopower operates through energy infrastructure. These assemblages constitute multiple spaces of visibility and invisibility, with moving boundaries ideologically draped in the discourse of nationalism, security and scarcity. Hence, the development of oil in the Gulf of Mexico could be considered as “a coordinated but dispersed set of regulations, calculative arrangements, infrastructural and technical procedures that render certain objects and flows governable” (Watts 2009: 10).

Therefore, infrastructure is the site of struggle and contestation. As I have argued, energy infrastructure acts as a mediator between the uneven distribution of access to particular goods and services, and hence it stands as a site of struggle as it becomes the physical representation of strategies and projects of biopolitics and necropolitics.

The analysis of energopower produces a parallel understanding of energy infrastructure as sites that are necessary to maintain and support particular political projects, and as sites of securitization as they become necessary in the promise of development in the state pursuit to make society legible and life governable.

Petro-populist energy landscapes

Energy landscapes are understood as “the constellation of activities and natural and socio-technical relations through which energy production and/or consumption are achieved within a given space” (Bridge *et al.* 2018: 16–17). Kirshner *et al.* (2019: 3) engage with the concept of energy landscapes as a way to explore how these are sites that connect infrastructure with wider national building projects and the operations of political economies. Drawing on their analysis, on how landscapes act as “dynamic registers of the energy system and the everyday practices associated with them” (Kirshner *et al.* 2019: 4), reveals how energy infrastructure embeds experiences, meanings and memories into state-led projects, which are themselves embedded into broader imaginaries constituting wider political projects.

In a similar vein, Lyall and Valdivia (2019: 349) use the concept of ‘petro-populist landscapes’ in their analysis of the technocratic populist regime of President Rafael Correa of Ecuador. For them, Petro-populism functions as the promised return of national oil resources to ‘the people’ and inauguration of a ‘post-neoliberal’ era of sovereign, oil-driven development in Ecuador. Thus, the petro-populist landscapes constitute the material verification

of Correa's petro-leadership in volatile markets. In other words, petro-populist landscapes work as the material evidence of showcasing the building of 'spectacular public works' in oil logistics areas, that were meant to serve as a visual emblematic project used "as evidence the proper leadership amid chaining oil markets expands citizen rights" (Lyall & Valdivia 2019: 351).

The material confirmation of the promise of development is articulated as a populist strategy, that is, it is utilized as a strategy to advocate for broader nationalistic goals such as energy security or sovereignty. Here, populism can be defined as "a thin-centered ideology that considered society to be ultimately separated into two homogeneous and antagonistic camps" (Mudde & Rovira 2017). By focusing on the multiple dynamics of power inherent in energy systems, as well as the historical legacies and the operation of political economies in particular spaces, the landscape can be read as the result of particular energy policies and their interactions with socio-technical imaginaries about the future (Kirshner *et al.* 2019). The concept of energy landscapes exemplifies how the promises of infrastructure manifest in material terms, and also how they can work as material evidence of success or failure of a particular socio-technical imaginary of energy futures as they articulate the material aspects of the past and present of the energy system.

Modularities, spatiotemporalities and (in)visibilities

Energy infrastructures are the physical manifestation of the energy system. They are used in a variety of ways throughout the energy value chain and are capable of

linking and dividing people and places creating landscapes of energy circulation. They bind energy consumers and suppliers, and at the same time, "generate sharp inequalities between those that are connected and those who are not" (Bridge *et al.* 2018: 74).

Because infrastructures are key sites of and for the distribution of resources, they are often also the sites for contestation and negotiations between state agencies and the populations they unevenly govern (Appel, Anand & Gupta 2018: 21). Energy infrastructure manifests in different scales, forms of ownership, operation and management, and reflect different patterns of power, authority, expertise and political judgement (Walker & Cass 2007). These patterns are more evident in the way infrastructures are designed, installed and managed in cities where provision through infrastructure also requires defining, delimiting and imagining populations (Appel, Anand & Gupta 2018). In other words, infrastructure is always tied to politics because it favors a set of political actors over others (Gupta 2018: 66). Thus, there is a need to articulate more carefully the link between the "matter of government and the government of matter" (Lemke 2014: 14), or, as Brian Larkin (2013: 329) argues "infrastructures are matter that enable the movement of other matter. Their particular ontology lies in the fact that they are things and the relations between things".

Therefore, energy infrastructures are "connective and circulatory linking different places and joining energy generators and providers to the use of energy by consumers" (Bridge *et al.* 2018). Following these attributes of energy infrastructure, in this section I engage with three particular characteristics that shape the multiple spatiotemporalities of energy infrastructure:

(a) the modular deployments of energy infrastructure, (b) the spatial embeddedness of infrastructure under multiple forms of capital accumulation, and (c) the multiple temporalities that emerge from the (in)visibility and promises of energy infrastructure.

First, energy infrastructure develops through modular increments rather than being built all at once (Star 1999). This means that energy infrastructure usually extends over time. The temporalities of infrastructure often exceed human lifetimes and thus their ‘promises’, or their influence in shaping the meaning of landscapes, tends to persist due to its permanence and obduracy. For example, the development of fossil fuel dependent infrastructure, not only transforms the immediate landscape in which they are built, but the emissions associated with their construction and operations will persist in the atmosphere for decades, even centuries to come (Appel, Anand & Gupta 2018: 19–20). The massive infrastructural network that sustains the oil production is a good example of how energy infrastructures can shape more-than-human lifespans (see Bridge & Le Billon 2013; Appel, Mason & Watts 2015).

Energy infrastructure tends to be locked-in physically and embedded into the ongoing functioning of society (Bridge *et al.* 2018). As Idalina Baptista (2018) argues, energy systems are embedded in space. This embeddedness is key to understanding the uneven patterns of economic and social life, within and between countries. Baptista argues that the technologies and the design of an energy system is greatly influenced by initial conditions and events that lead to its adoption. Therefore, as technological systems mature and become complexly linked to aspects of social life, the greater the chance for technological

lock-in and patterns of inertia and change (Baptista 2018: 31). Historical examinations of path-dependencies, technological lock-ins and the inertia exemplify how energy infrastructures can make technological and social choices embedded into spatial and social patterns that are particularly difficult to break. Or in other words, “the more intricate and complex the system, the greater the inertia to change it” (Baptista 2018:31).

The networked character of socio-technical systems shows how infrastructures are not only limited to the matter that constitutes them, for example the concrete, metals, pipes, roads, and machinery, but also to the software, engineers, operators and administrators that maintain and make them available for use (Latour 2009). This assemblage of *actants* gives infrastructure a particular meaning as an assemblage where *matter matters politically* (Swyngedouw 2015). Therefore, the material aspects of infrastructure are relevant in shaping the politics of the project. These materials, rather than exerting a ‘vitality’ (Bennett 2010) or agency in the assemblage of infrastructure, must be understood as historical forms that emerge through and with social systems of ideology, meaning, and imagination (Appel, Anand & Gupta 2018: 25). In other words, the material aspects of infrastructure do not do anything by themselves, instead, they become political through the interaction and relations with ideologies and publics (Barry 2013).

Second, the deployment of energy infrastructure is key for the processes of capital accumulation and lays the spatial-material foundation that makes actually existing capitalism possible. The deployment of particular biopolitical projects and economic policies in the 20th Century depended on securing and accessing the availability

of ‘cheap’ energy through fossil fuels (Huber 2013; Boyer 2014; Moore 2015). On the one hand, the ability to conduct real-time financial transactions across the globe (Harvey 1989) and the supply chain changes that allow for a particular form of extraction to be articulated around the ‘just-in-time forms of production’, are essential for the current logistical organizations of capitalism (Appel, Anand & Gupta 2018: 15). These increasingly automatized and logistical interactions with forms of extraction and operations of materials and labour entails a space-time compression, allowing for financial capitalism to rapidly change spatiotemporal relations across the planet (Mezzadra & Neilson 2019; Arbolada 2020). The processes that sustain these different temporalities are crucial in the expectations and promises of infrastructure, as they slow down or speed up capital accumulation, but they are also crucial in the creation of spatial patterns of living, working and entertainment (Appel, Anand & Gupta 2018: 17).

On the other hand, energy systems are embedded in space, which is notably the case for physical infrastructure but also for other unevenly distributed components. For example, the proximity to polluting infrastructure and the distance from the systems of consumption, as well as the costs of generating electricity by region (Bridge *et al.* 2013). As Huber (2013) argues, energy underpins the aspects of everyday social life, where the spatial character of the energy system produces particular patterns of economic and social life underpinned by capitalism. Thus, energy infrastructure is instrumental in shaping modern social life, as it is constitutive of the social production of space (Lefebvre 1991). Here, the consumption of energy in particular

ways makes specific spatialities possible. Huber (2013) eloquently articulates how the access and abundance of ‘cheap’ fossil fuels energy in the post-war United States became a fundamental prerequisite for the development of spatial organizations like the suburbs. Hence, the subsumption of life under capital, a process through which one’s own life appears as capital itself, shows how ideas of freedom became synonymous with “the material transformation of everyday-life centred upon reproductive geographies of single-family home ownership, auto-mobility, and voracious energy consumption” (Huber 2013: 23).

Third, once installed, infrastructures introduce new temporalities. As Appel, Anand and Gupta (2018: 17) argue, the capability of slowing down (i.e., through technological lock-ins and inertial use of materials and technologies) or speeding up (through telecommunications and new technologies for logistics), creates new forms and patterns of living, working and entertainment, which itself holds profound social and political consequences over time and space. Energy infrastructures hold a particular character over time: they become highly visible in stages of construction and development, and gradually become ‘invisible’, once the project is ‘finished’, only to become visible again upon their breakdown (Star 1999). A process commonly referred to as ‘blackboxing’ in Science and Technology Studies (STS), understood as “the way scientific and technical work is made invisible by its own success” (Latour 2009: 304), unearths the biopolitical projects embedded in infrastructure and the conditionality on their (in)visibility.

When infrastructure maintains access to indispensable services such as food, water, electricity, gasoline, and sanitation,

it becomes hidden in ‘plain sight’. However, the biopolitical project embedded in infrastructure fails when infrastructure breaks down. For Brian Larkin (2013), this ‘invisibility’ is problematic. Infrastructures are ‘metapragmatic objects’, meaning that the effects and conditions of infrastructure become objects and part of manifold discourses. For example, the deployment of energy infrastructure is normally associated with symbols of state modernity and development (see Von Schnitzler 2018; Schwenkel 2018; Power & Kirschner 2019; Power *et al.* 2016). Hence, visibility is necessary to continually renew the political legitimacy of the government, where infrastructure acts as a remainder of the promises attached to the project.

Nevertheless, infrastructures are often imagined or thought of by the public in static terms. Support for infrastructure projects is not forged once and for all, but it takes time to be formed (Larkin 2013). Hence, the construction of infrastructure resembles the construction of a population, as it is a “work-intensive endeavor that is often sporadic and stuttering” (Appel, Anand & Gupta 2018: 23) revealing how politics and publics are shaped by particular projects and the imaginaries and discourses attached to them.

Furthermore, the temporality of infrastructure is presented as the symbols “of a future being brought into fruition” (Gupta 2018: 65). These symbols are generally attached to projects embroiled with particular socio-technical imaginaries which act as “collectively held and performed visions of desirable futures, (...) animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology.” (Jasanoff 2015a:

19). These sociotechnical imaginaries appeal to the promise and ‘poetic’ characters of infrastructure (Larkin 2013) which refers not only to the material promises of infrastructure (i.e., growth and development), but to the affects and sentiments invoked by infrastructure: a sense of belonging, accomplishment, or loss. Here, infrastructural projects are associated with particular desires and aspirations of what the future might be. These affects and sentiments are normally disassociated to the factual conditions under which infrastructure is being developed, and hence are attached to discourses that shape and support among populations, regardless of the costs and distribution of benefits. In other words, infrastructure projects become placeholders for the state and the future of the community or the nation. (Appel, Anand & Gupta 2018).

The Dos Bocas Refinery: exploring the tensions between energy security and the energy transition.

Mexico has been an oil producing country since the beginning of the 20th Century. The 1917 constitution established and intricate twin narrative between land ownership and energy development (Baker 2015). Thus, concerns over energy development have always gone hand in hand with self-made narratives of the Mexican identity and tensions of land and resource ownerships. As Charles and Maria y Campos (2015) argue, “Mexico’s oil and gas industry has long been a sensitive activity from a social perspective [for] years it has been linked to ‘Mexicanity’ and sovereignty”. In 1938, the Mexican oil industry, along with

all other properties belonging to foreign companies was nationalized by President Lazaro Cardenas, who also granted the then recently formed PEMEX the exclusive right to exploit the country's oil and gas resources (Baker 2015).

In 1976, the discovery of Cantarell, the largest oil field in México – and one of the largest oil fields in the world at the time (Hook, Hirsch & Aleklett 2009) – signified an oil bonanza for the country, anchoring its own national economic security to the development of the field (Breglia 2013). However, the progressive decline of Cantarell since its peak production with 2.1 million barrels per day (US EIA 2017) in 2004, has played a significant role in the relationship between Mexican industry, politics and imaginaries. As promises of growth and development stemmed from the 'administration of abundance' as then President Lopez-Portillo called it in 1977, the oil bonanza of Mexico and the promise of development during the 1970's and 1980's proved to be a short-lived endeavor (Breglia 2013).

Once dubbed 'the savior of the country' (Ortiz, Romero & Díaz 2010), the decline of Cantarell substantially reshaped Mexican politics as the promises attached to the materiality of oil and the imaginaries of development dwindled. As Cantarell became a poster child for Peak Oil concerns (Payne 2008), living in the 'post-peak condition' (Breglia 2013) quickly reflected how the dwindling hydrocarbons reserves in the country signified a progressive opening of the energy sector to private investment in exploration and production. This was a process that was established by the neoliberal governments in Mexico since the beginning of the 1990's and culminated in a Constitutional Energy Reform in 2013 (Baker 2015).

Parallel to the steady decline of hydrocarbons, previous government administrations adopted a series of climate change and energy transition targets. In 2012, the Mexican Congress approved the General Climate Change Law (GCCL) setting clear targets for the reduction of 30% of greenhouse gas (GHG) emissions by 2020 and 50% by 2050 based on GHG emissions from the year 2000 (Cámara de Diputados del H. Congreso De La Unión 2012; see Averchenkova & Guzmán 2018). The aim of the law was to reduce emissions in all economic sectors, but paying particular attention to the energy sector, which accounts for 70% of total GHG emissions in the country (SEMARNAT 2018). Subsequently, in 2013, the government, under the guise of rising international crude oil prices, passed a sweeping energy reform which allowed private interests to further exploit the oil and gas sector as well as the electricity sector (Baker 2015). However, a drop in international oil prices radically reconfigured the energy sector in Mexico, pivoting on the approval of the Energy Transition Law (ETL) in 2015 and the submission of an Intended Nationally Determined Contribution (INDC) before the signing of the Paris Agreement that same year (Tornel 2020).

These two events, along with a particular drop in hydrocarbon production in the country, marked a turning point for Mexican energy transition: on the one hand, Mexico's NDC established targets to unconditionally reduce 22% of emissions by 2030 and 50% by 2050¹. The ETL, on the other hand, compromised the country

¹An additional conditional target based on international support of 36% by 2030 and a long term reduction goal of 50% by 2050 were also adopted (see UNFCCC 2015, 2016).

to a 35% generation of clean electricity by 2024². Somewhat circumstantially, the adoption of renewable energy and climate change mitigation targets became a source of opportunity for the federal government. Since the approval of the ETL and the Electricity Industry Law (LIE) in 2014 (DOF 2014), renewable energy auctions reached some of the lowest energy prices in three consecutive years (SENER 2016a, 2016b, 2017), allocating nearly fifty-six large-scale renewable energy projects. The added capacity accounted for roughly 3% of the total added installed energy capacity of the country, which also accounts for the yearly increase in demand of energy in Mexico (SENER 2018).

The push towards an energy transition has been built on the foundation over the last sixteen years of living under the Cantarell's post-peak condition and the increased awareness of Mexico's contribution and vulnerabilities towards climate change can arguably be considered as drivers towards an energy transition in favor of renewable energy³. However, the expansion of renewable energy projects under a set of neoliberal policies and practices driving the energy transition, has increased socio-ecological conflicts fueling the discussion and exacerbating a dichotomous tension between the energy transition (under neoliberal policies) and energy security (based on fossil fuels and state led development) (see Baker 2015; Avila-Calero 2017).

² With incremental goals since 2018 (see DOF 2015).

³ According to the Ministry of Environment and Natural Resources (SEMARNAT), Mexico is highly vulnerable to the associated impacts of climate change, while the country is also one of the top 20 emitters of GHG emissions (see SEMARNAT 2009, 2018).

Petropopulism in the post-peak condition

In 2018, the then recently elected presidential candidate Andrés Manuel López Obrador promised the construction of a new state refinery in the municipality of Paraíso, Tabasco (EJAtlas 2020), arguing a lack of energy independence and the urgent need to 'rescue' petro-state giant *Petróleos Mexicanos* (PEMEX) and the state-owned electricity company *Commission Federal de Electricidad* (CFE) (AMLO 2018a) from the neoliberal policies of previous administrations. This project, along the president's other spectacular fossil-fuel based mega-developments⁴, was promised as a solution to address the mismanagements of previous neoliberal governments, increase the production of fossil fuels and reduce government corruption and looting in the energy sector (AMLO 2018). The new government publicly expressed disdain for the previous government's administration of oil and gas reserves and the development of renewable energy projects as a field capture by private finance, with little to no regard for human rights and with high socio-natural costs (AMLO 2020b).

Concern over dwindling fossil fuel reserves is old news in Mexico. During the last decade, oil production has dropped nearly 40%, with the production of gasoline and diesel dropping to its lowest level in 2018 with 70 and 76% imported fuels, respectively (SENER 2020a). Concerns over the dwindling reserves of hydrocarbons production has also been evident in the

⁴ Which include the construction of a 'Mayan train' in the Peninsula of Yucatan, a train that crosses the states of Oaxaca and Veracruz (Transoceánico), a new airport for Mexico City and the Dos Bocas Refinery in Tabasco (see AMLO 2018^a).

public contribution from the energy sector. Revenues from oil accounted for 36% of public spending in 2004, and by 2018 revenues dropped to 19% (Fundar 2019a).

Part of the dwindling production of hydrocarbon reserves in Mexico also affected the National Refining System (SNR for its acronym in Spanish). The six existing refineries had been operating in precarious conditions, reaching an operational capacity as low as 31% in 2018 (SENER 2020a). The decline in oil extraction in the last fourteen years has also impacted the output of processing crude oil through the SNR. In 2018, the refineries processed a total of 612,000 barrels of crude oil per day, producing less than a third of the actual demand of gasolines and diesels in the country (SENER 2020a). Hence, the DBR was announced as part of a broader program to ‘rescue’ the energy sector. The plan, which included the investment of public funds into PEMEX to build a refinery, also included an announcement of investing \$3.5 billion USD for explorations and drilling activities seeking to increase oil production from 1.9 to 2.5 million barrels per day by 2024 (Martínez Riojas 2018). The DBR would account for an additional 340,000 refined barrels per day (SENER n.d.).

A month before his inauguration, over Twitter, the president announced that the fact that PEMEX agreed to buy the equivalent of 1.4 million USD of foreign oil showed the enormous failure of the neoliberal economic policy over the last 30 years (AMLO 2018b). Just two weeks after his inauguration on December 1st, 2018, the president announced publicly that the new investment plan to rescue PEMEX would account for something similar to what “we had to do in 1938 [the nationalization of oil]. This is a new rescue of Mexican

Petroleums” (Singlér 2018). The plan mostly consisted of deep-water exploration of twelve new oil fields and eight in-land fields in the states of Tabasco, Campeche and Veracruz (PEMEX 2019). Similarly, during one of his daily morning press conferences, as AMLO was being questioned on the drop of the rate of financial qualifiers like Standard and Poor’s for PEMEX, the president declared that “The country is being forced to pay for the neoliberal policies of the last decades”, adding “we know how to cover the costs of what was an inefficient economic policy, characterized by corruption and looting” (AMLO 2019a).

Since his triple run for president starting in 2006, AMLO’s candidacies have outlined a political course that “seeks to diverge from the neoliberal agenda of his predecessors since the 1980s, with emphasis on the need to curb corruption from the top down” (Tetreault 2020: 8). In fact, it could be argued that AMLO’s political career has been closely linked to the promises and a particular sociotechnical imaginary of oil. Since 1995, AMLO has expressed public concern over the privatization of the energy sector. That year he led mass marches for the *Exodus for Dignity and National Sovereignty* from the oil-production centre Villahermosa to Mexico City (Breglia 2013: 204). In 2006, after his defeat in one of the most contentious presidential elections of the country, with only 235,000 votes out of nearly 42 million cast (Klesner 2007), AMLO constituted the *Movimiento Nacional en Defensa del Petróleo* (*Nacional Movement in Defense of Oil*) through which he opposed President Felipe Calderon’s attempt to reform the Mexican Constitution to allow private involvement into the energy sector (Muñoz 2008). The movement mobilized around the slogan ‘El petróleo es nuestro!

La patria no se vende se defiende!⁵ (Berglia 2013). That same year, in a demonstration in the Zocalo public square in Mexico City, AMLO celebrated the 70th anniversary of the nationalization of oil, by defending the principles of resource sovereignty inscribed in the 1917 Mexican constitution (Berglia 2013).

Once inaugurated, AMLO announced a series of twenty-five ‘priority programs’ of the administration which were submitted through national consultation processes (AMLO 2018a). These public consultations included a series of large-scale, fossil-fuel dependent infrastructure projects, one of which was the proposal to build a new refinery in the municipality of Paraíso, Tabasco (AMLO’s home-state), an area that is historically linked to the oil assemblage of the Gulf of Mexico since the 1970’s.

AMLO publicly announced the inauguration of the project on June 2nd, 2019 pledging a swift and transparent construction that will take only three years and will cost no more than \$8 billion USD. During his speech, the president argued that the refinery was proof of the “democratic triumph of the people of Mexico.” (AMLO 2019b). The declarations were contested publicly as a clearance of mangroves in the area was conducted before the Environmental Impact Assessment (EIA) was released publicly and before the mandatory lapse for public consultation was initiated (Interview 2). As a result, the Agency for Energy and Environmental Security (ASEA for its acronym in Spanish) fined the construction company in charge of clearing the terrain (CEMDA 2019). However, construction did not

stop (CEMDA 2019b). Other concerns surrounding the rapid deployment of machinery and the construction of the refinery were highlighted by several civil society organizations who pointed out that even previous government administrations who considered building a new refinery were discouraged to build it at Dos Bocas, because of the high risk related to environmental and social concerns, as well as the inadequacy of terrains and soils which are swampy and prone to flooding (IMP 2008; CEMDA 2019c).

In spite of this, public consultations were carried out by AMLO’s own party (MORENA) to pose the question of whether such programs should go forward. The consultation process yielded a 91.6% of approval for the construction of the Refinery with only 4.6% of votes opposing⁶. This gave the priority programs legitimacy in the public discourse as AMLO was able to swiftly and with relatively little opposition implement them (Interview 3). A year later, a poll conducted by the newspaper *El Financiero* carried over the performance of the AMLO’s government suggested that roughly 48% of the population supported the construction of the DBR, with only 20% of the population showing any signs of disapproval (32% was neutral) (Moreno 2019).

However, the legality and legitimacy of these consultations were contested as AMLO himself made no secret that he opposed certain projects (like the new airport for Mexico City) while he actively presented his own projects as decisions

⁵ “Oil is ours! Our patrimony is not for sale?”

⁶ The consultation took place on November 24 and 25, 2018 at the national level with roughly 946,081 citizens participating. This accounts for roughly 0.89% of the registered electorate. 3.8% of the votes were nullified (See: Monroy, 2018).

supported by the electoral majority that voted him into office (Interview 2). Concerns and the stakes were elevated as the consultation for one of the projects – a thermo-electrical plant in the State of Morelos – was carried out just three days after one of the most visible leaders of the resistance, Samir Flores Soberanes, was shot dead outside his home (Cullell 2019). The project received an approval in the public consultation of 60% of the population (Lopez Ponce 2019). After the incident AMLO referred to the opponents of the thermo-electrical plant in Morelos as ‘leftwing radicals’, who he considers to be “no more than conservatives” (Tetreault 2020: 8).

Attacks against environmental defenders in Mexico have highlighted the increased violence and socio-environmental conflicts associated with the expansion of commodity frontiers, to what Mariastella Svampa (2015) refers to as the *commodity consensus*. National and international non-government organizations in Mexico report at least five hundred attacks against environmental defenders (CEMDA 2020) since 2012, with at least nineteen assassinations of environmental defenders in 2019 alone, a year after AMLO’s inauguration (Global Witness 2020).

AMLO’s plan to strengthen the role of PEMEX and CFE through increasing hydrocarbon extraction has also been supported by concerns raised by the government over the participation of privately-owned renewable energy projects in the electricity grid. AMLO publicly denounced the auctioning process that allocated fifty-six large scale energy projects (SENER 2016a, 2016b, 2017). In April 2020, the National Center for Energy Control (CENACE for its acronym

in Spanish) published a national policy in which it detailed the need to guarantee the quality, reliability, continuity and security of the electricity national system. In the document CENACE detailed that, because of the COVID-19 pandemic, all renewable energy projects integrated into the electricity grid would be de-prioritized because of their possible impacts over the reliability, sufficiency and continuity of the national electricity system (CENACE 2020).

The president publicly addressed the issue saying that “contracts given to individuals and companies for electricity generation were granted in a fraudulent manner” (AMLO 2020b), arguing that these contracts forced the federal government to a bidding process to buy electricity from private companies, while carrying the responsibility of dealing with the intermittency of renewable energy and addressing peak demands (Ferrari 2019). In May of 2020 the Ministry of Energy (SENER) published national policy guidelines echoing these concerns (SENER 2020b). The transformation of these discourses into public policy has led the president to scale-up his attacks against renewable energy, by presenting it as a cause of the neoliberal mismanagement. During a public event in the carboniferous state of Coahuila, the president called renewable energy “a sophism used by the private sector to sustain abuses during the neoliberal period”. Immediately declaring afterwards that the government would be “promoting the purchase of more coal to help and rescue state producers and rescue the energy sector” (Cedillo 2020). These declarations bring to the fore the contentious nature of the petro-populist discourse of the Mexican government and the wider biopolitical project embedded in the DBR.

Discussion – The Dos Bocas Refinery and the promises of oil

Using critical discourse analysis, this section seeks to understand how the discourse surrounding the DBR is constructed, what are the material and relational implications and how the project is articulated with a broader petro-culture that continues to capture the imaginary of the future in Mexico (Kuchler & Bridge 2018). Drawing on the above discussion over energy infrastructure, the interviews with ‘energy experts’ and public declarations by the President of Mexico, I assess how the symbolic or poetic meaning of the DBR is shaped by a broader discourse of resource nationalism and energy security, and its tensions with the deployment of large-scale infrastructure as a biopolitical project to maintain legitimacy in a post-peak condition.

The analysis of the DBR shows that the project stands as both the material and relational embodiment of a strategy towards a recuperation of national sovereignty and the redistribution of commonwealth (Riofrancos 2020: 14). Based on the aforementioned, the refinery can be understood in three ways: a) as the symbolic embodiment of a renewed form of a biopolitical project built around national and resource sovereignty; b) as the result of material, spatial and political legacies of a particular nation building project embedded into a specific location; and c) as the hyper-visible embodiment of a promise of development, growth, resource and national sovereignty, and an accomplishment of ‘the democratic triumph of the people’, resisting neoliberal policies.

First, the aesthetic, political, psychological and material condition of the DBR

reveals the paradoxical condition in which the massive demands of fossil fuel energy are required to sustain the promises of modernity, development and economic growth. These are met with the necropolitical valences that become clearer as industrial capitalism is confronted with climate change, ecological collapse and growing social and environmental injustices (Truscillo 2020: 15). In Mexico, the increased violence towards environmental defenders, the turn towards resource nationalism and an increase in the extraction of resources through the *reprimarization* of the economy (Svampa 2015) as the government continues to integrate into the global capitalist economy,⁷ points towards an increased form of violence attached to the historical legacy and continued production of these forms of energy infrastructure. Ultimately, infrastructures are always tied to politics, and the future they bring about always favors one set of political actors over others (Gupta 2018: 66).

Hence, the biopolitical project of the DBR is simultaneously linked to a double crisis of biopower and energypower, as the dwindling reserves of fossil fuels continue to maintain the biopolitical project of a state that has been hollowed out by over thirty years of neoliberal policies and a crisis of legitimacy “over a war on drugs gone bad” (Boyer 2014: 323). The discourse of the DBR operates simultaneously as a pedagogical project aimed at delivering certain goods that maintain the population under discipline and control (Gupta 2018: 65), and as a symbol that seeks to reaffirm nationhood and sovereignty (Riofrancos

⁷ In 2020 the Mexican government signed the renegotiated version of the North American Free Trade Agreement (NAFTA) now called the United States, Mexico and Canada Agreement (USMCA).

2020). Its aim is to produce a certain type of citizenry through fossil fuel consumption. This process entails certain spatial organizations (i.e., the development of large urban and sub-urban areas) and certain behaviors in the population (auto-mobility) not only to sway the population on the promises that the infrastructure entails for the future, but to ‘build’ citizens who share a goal of inhabiting that future (Gupta 2018: 68).

Living in the post-peak condition means that the materiality of oil will have a contentious political character and ambiguity in the coming years. As concerns over climate change are exacerbated and the necessity to address the ever-increasing demand of energy in Mexican societies forces the government to increase spending to exhaustion of its already dwindling hydrocarbon reserves. The materiality of oil, which has enabled the democratic and populist project in Mexico (Mitchell 2011); the spatial organizations of cities (Huber 2013) and a national-identity building project over the use of hydrocarbons (Boyer 2014; Power & Kirshner 2019) will become contentious as other sociotechnical imaginaries to address the unwanted characters of oil, begin to emerge. These narratives might seek to maintain the oil industry afloat, namely through technological and technocratic approaches that sustain the economic status quo through technologies and discourses such as ‘clean fracking’ or geoengineering (see Sapinski, Buck & Malm 2021) or to challenge its dominance altogether through claims of energy autonomy and sovereignty led by local communities (see Del Bene *et al.* 2018; Avila-Calero 2017).

Second, the petro-populist discourse associated with the DBR reveals how the government used AMLO’s leadership and his capacity to navigate and overturn the

neoliberal forms of resource management as a way to legitimize the need for a new refinery (Lyall & Valdivia 2019). Despite criticisms from environmentalist groups about the contribution of the project to greenhouse gas emissions and indigenous and community activist’s opposition to large infrastructural projects (Interview 5), the DBR landscape stands as the ‘material evidence’ of this leadership and as a form of political legitimacy over these claims.

The production of spectacular infrastructures speaks to the ‘emergent problem among contemporary petro-states of how to project authority over national resources in increasingly unpredictable conditions’ (Lyall & Valdivia 2019: 356). These strategies are part of a broader trend of populist authoritarian tendencies related to environmental politics and resource governance. As James McCarthy (2019: 306) argues, the DBR stands as a case of “conflation of nature and nation” where “environments and resources become politically understood as inextricably linked to national identities, fortunes, and prospects”. The intensification of resource extractivism and its linkage to nativist, masculinist and other deeply intertwined ideas of racialized, gendered and national identities become linked to specific resources (in this case, oil). Extractivism is also articulated through forms that sustain the violent dispossession of environmental activists and defenders (McCarthy 2019: 307; Middledrop & Le Billon 2019; see also Daggett 2018).

As I have argued, the material characteristics of both infrastructure and oil have to be taken into account when we address the role of energy infrastructure. First, as energy saturates all aspects of social life (Bridge *et al.* 2018: 17), the spatiotemporal character of energy infrastructures

becomes relevant. Thus, the obduracy and progressive rollout of energy infrastructure shows that the development of fossil-fuel based infrastructure will sustain an inertial tendency of fossil fuel use that will continue to shape landscapes, social regimes and power relations (Haarstad & Wanvik 2017). Here, the relational character of energy infrastructures enables us to see not only how infrastructure shapes and is simultaneously shaped by the everyday lives and the management of difference in societies (Nemser 2017), but it reveals the necropolitical and biopolitical projects embedded in energy infrastructures (who is counted and who is not, what is made public and what is fractured). The inertial use of fossil fuels in Mexican society will continue to produce a landscape of ecological, political and psychological brutality towards those affected by the rising intensity of fossil fuels in Mexico (Truscillo 2020).

Energy landscapes reveal the material evidence of historical legacies, previous forms of spatial organizations and the political economies of oil in Mexico (Kirsher *et al.* 2019). The DBR exemplifies the material aspects of a broader political economy and nation building project, where infrastructure acts as the material evidence, and as the verification of the leader's dexterity of convoluted oil politics in a time of neo-liberal governance (Lyll & Valdiva 2019). The resulting path-dependencies and technological lock-ins have to be accounted for in both material, socio-technical, historical and spatial arrangements of society (Baptista 2018). Hence, through the provision of fossil fuels, mainly for transportation, and electricity generation, the DBR will continue to shape the rhythms of daily social life, creating inertial patterns or path-dependencies expressed in the spatial

organizations of society, in the cultures of energy consumption and by creating the material forms that enable the relations of domination and accumulation.

Third, the modularity of energy infrastructure that emerges from its progressive deployment over time (Larkin 2013) holds a particular temporality and is promise oriented towards the future which is perceived differently as infrastructures 'change' over-time. The capacity of infrastructure to link and divide people and places (Bridge *et al.* 2018) over their multiple facets of visibility and invisibility, becomes ideologically draped in multiple discourses of nationalism, security and scarcity (Watts 2009). Here, the spectacular announcement of the DBR, with a pledge to be finished in unprecedented construction time and processing capacity – along with AMLO's democratic support – have made the project hyper-visible with very little contestation (Interview 3). However, the promises may fail, and its legitimacy may dwindle over time, which gives the project and its promises a particularly contentious and political character associated with its shifting temporalities and ruin.

The visibility of the DBR speaks to the promises of development and progress linked to oil. However, it is also through that (in)visibility that the necro- or biopolitical project of infrastructure materializes. As I have argued, the notion that infrastructure becomes visible only upon breaking is problematic. The many ways in which infrastructure is made visible, either as material proof of development and progress by the state, or through political contestations by social movements or local populations during the many stages of infrastructure, reveals that infrastructure is always visible, but only for some (Anand 2017).

Drawing on the literature of socio-technical imaginaries, the promise of the DBR can be understood as the embodiment of a particular sociotechnical imaginary of the future by encapsulating a particular promise of democratic development and post-neoliberal strategy through oil governance. The refinery holds a promise of energy security and sovereignty of the oil reserves of Mexico which is tightly entangled with Mexican identities and ideas of sovereignty and independence (Breglia 2013; Baker 2015). While the origins of this particular imaginary can be traced back to the 1938 nationalization of the oil industry, and the 1917 Constitution's promise of resource sovereignty, the 2013 energy reform can be seen as a catalyst for the rising socio-technical imaginary resisting the privatization and neoliberal management of the energy sector (Jasanoff 2015b) embodied in slogans like *'el petróleo es nuestro! la patria no se vende se defiende!'*. AMLO's political career has been articulated with these sentiments over a nationalistic pride in the management and exploitation of oil resources as the 'threat' of private sector involvement and management has been occupying space in the oil and gas, as well as the electricity sector since the 1990s.

As Jasanoff (2015b: 329) argues, imaginaries move in the realm of resistance in a double guise, as they can become "obstacles in the creation of new ideas" or they can "crystallize dissatisfaction of the present into possibilities for other futures that people would inhabit". Interestingly, the DBR embodies both characteristics simultaneously. The DBR holds a promise of progress and prosperity which can be associated to the promise of 'democratic' development and economic growth through the 'adequate' management of

post-neoliberal oil resources management. This promise is aimed at bringing back a pre-neoliberal management of the oil sector (Interview 3), where the state is the only actor allowed in the management and operation of the entirety of the energy sector. Simultaneously, the refinery stands as material proof of the possibilities of other more 'democratic', prosperous and 'just' futures if they are conducted by a post-neoliberal honest government.

The construction of a spectacular infrastructure (in record time and with public resources) constitutes the fundamental aspects of a 'return' of that sovereignty that has been eroded in the last thirty years of neoliberal governments. The 2013 constitutional energy reform parallels broader tendencies of extractivism in Latin America (Svampa 2015, 2018; Tetreault 2020). However, AMLO's policies that aim to place PEMEX and CFE's fossil fuel-based generation is pointing towards new levels of extraction "that tends to privilege the conflict between capital and labour, minimizing or giving little attention to the new social struggles on territory and the commons" (Svampa 2015: 70).

The broader discourse of the AMLO's administration is constructed under a narrative of 'rescuing' the oil and electricity state-owned companies from the previous neoliberal governments, plagued by corrupt politicians and managers that hampered the promises of development and their incapacity to manage the wealth of the country. Ever since President Lopez Portillo's famous speech in which he referred to the 'management of abundance' oil revenues coming from Cantarell, promises, desires and hopes of development, growth, jobs and wellbeing aspirations have populated the national imaginary around oil, and

energy infrastructure development (Breglia 2013). In other words, the DBR acts as a symbol of a revival of those promises. Although the long-term economic, social and environmental benefits of the refinery can be questioned, the project holds a particular poetic meaning, in the emotional, affective and ideological investment that is built on the discourse of national sovereignty and independence.

Simply assessing the construction of the DBR in terms of energy security or transition can appear paradoxical or counterintuitive due to climate change mitigation and energy transition targets. However, looking through the lens of promises, poetics and politics associated with energy infrastructure, reveals that the project stands as a complex mixture of desires, hopes, fantasies and pride that, on the one hand, expose the unsatisfied promises of oil-led development in the last fifty years. On the other hand, the capacity to prove that this lack of development has nothing to do with oil or its assemblages, but with the mismanagement of funds and capabilities by a technocratic elite that has ruled Mexico since the 1990s. In other words, the refinery is seen as a ‘democratic triumph’ as one of the first projects built through an honest and non-corrupt, post-neoliberal government.

Conclusions

Promises of reviving the oil industry in Mexico are not new: President Vicente Fox pledged to increase production in 2003 to 4 million barrels per day, only a few months before extraction reached its historical peak with 3.4 million. President Peña Nieto promised in 2013 to increase from 2.6 to

3 million by 2018. However, oil production continues to decline to its current level of 1.9 million barrels (Ferrari 2018). While AMLO’s government has effectively maintained the production of oil through increased public spending, the decline of EROI, the rising costs of maintaining oil extraction and the power density of diffuse sources, points to diminishing returns in the future and to a rise in social-environmental conflicts in the country. However, the life expectancy of energy infrastructure shows that, while Mexico might effectively reduce the dependency of processed oil products (gasolines and diesels), in the long term the dreams of rescuing sovereignty and energy security through oil might be short lived.

The case of the Dos Bocas refinery stands as material evidence of a ‘post-neoliberal’ era of sovereign, oil-driven development (Lyll & Valdivia 2019). AMLO’s nostalgic promise to return the nation and its resources to the people by inaugurating a post-neoliberal form of governance that will “transform oil into a blessing” (AMLO 2019c), presents the infrastructure and the landscape itself as a space that embodies the government’s honesty, transparency and democratic support. In other words, the refinery stands in as the “will of the people itself”, a process that was effectively consolidated by AMLO and the use of public consultations to submit his priority projects to a vote, and through a growing critique towards neoliberal mismanagement of resources. Here, all aspects of resistance and objections made by environmentalists or critics have been dismissed “through the production a spectacular public work” (Lyll & Valdivia 2019: 356) in a once-contested site for oil refining. The hyper visibility of the DBR and the biopolitical project seeking to ‘build’ citizens under a continued

use of fossil fuels is used as a site and symbol of discipline, where opposition is side-stepped under a veneer of democratic legitimacy (Tetreault 2020).

As Gupta argues (2018: 64) “infrastructure is always on the way to becoming ruins”. The promises, hopes and desires attached to infrastructure are constantly shifting as their temporalities continue to change over time. The case of the DBR shows that, as energy infrastructures become embedded into the cultures of energy consumption and built into the spatial and material aspects of our societies, they hold a particular promise over greater inertia towards change.

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