ABSTRACT

This paper claims that the way infrastructure is developed, more than a boring and technical topic, demonstrates a regime’s character. As the 20th century was dominated by Western-led infrastructure efforts including such great achievements as the Panama Canal, the U.S. interstate highway system, and the implementation of the Marshall Plan, the 21st century seems poised to be led, at least in terms of infrastructure development, by Asia and a rising China. Policy papers and foreign affairs discussions talk about China’s infrastructure development and also about delays or the “crumbling infrastructure of the West” but rarely if ever are there deeper philosophical and policy questions being asked. This paper sets out to build upon and enhance this deeper discussion by examining the differences between Western and Eastern infrastructure development paradigms.

The paper examines historic case studies related to the building, expansion, and enhancement of the Panama Canal, to provide a constant in a research variable that spans several Western-led projects as well as most recently a Chinese-led infrastructure investment. What was found was that with the growth of democratic standards and more administrative regulations, the Western paradigm has evolved, and only a hundred years ago, the West’s paradigms looked much like the East’s does today. Except for the fact that policy conditions have always been different between the two paradigms. At least from the cases studied, the West has always adhered to some form of liberal enlightenment principles enforced through policy conditions, whereas recently, despite contrary prevailing literature, the Chinese do enforce policy conditions, but on a more singular, grand, and old fashioned scale. Finally, the paper studies what it is about the
development of infrastructure itself that has made it the aid-of-choice for Chinese-led efforts?

Ultimately the paper makes several ambitious propositions, that need further research and study to prove: the current choice between ways of infrastructure development – East versus West – is a choice between despotisms, the Western democratic soft-despotism prophesized by Alexis de Tocqueville, and the East’s older harder despotism, and finally that “infrastructure statecraft” should be studied as a sub-set of diplomacy and statecraft.

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Many times it is through deep conversation with friends that you come upon the seeds of ideas that provide inspiration for further research. It was through classes and discussions with Mark Condit, during those heady days at Ashland University, that made me realize there were some layers to Alexis de Tocqueville I hadn’t even scraped. Connor McClellan aided in listening to some of my initial musings on infrastructure and bringing those thoughts back to our mutual affinity for classical rhetoric and grand strategy. Jeff Reed has been a constant help when it comes to my grammatical shortcomings and inspires my writing as he is the one true great editor I know. Finally it was on an exceptionally muggy night in Charleston, SC that Kyle Kondik decided that he’d like to attempt this plunge into grad school with me. I’m glad we’ve done this together.

Speaking of Tocqueville, when the American family works as one unit of governance and love, a tremendous amount of energy and strength is able to be garnered. I thank my parents for being the foundation to my studies, encouraging a little boy’s dreams that never went away, and always pushing me to “keep going.”
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The Way Through The Woods

They shut the road through the woods
Seventy years ago.
Weather and rain have undone it again,
And now you would never know
There was once a road through the woods
Before they planted the trees.
It is underneath the coppice and heath,
And the thin anemones.
Only the keeper sees
That, where the ring-dove broods,
And the badgers roll at ease,
There was once a road through the woods.

Yet, if you enter the woods
Of a summer evening late,
When the night-air cools on the trout-ringed pools
Where the otter whistles his mate,
(They fear not men in the woods,
Because they see so few.)
You will hear the beat of a horse’s feet,
And the swish of a skirt in the dew,
Steadily cantering through
The misty solitudes,
As though they perfectly knew
The old lost road through the woods.
But there is no road through the woods.

– Rudyard Kipling
Arriving by train into Stuttgart, Germany, not much has changed since the 1950s. Tediously winding rail rolls into the hilly regions of Baden-Wuerttemberg and eventually terminates into a bowl formed by three hills that gather and constrain the historic core of the city. One is immediately rushed getting out of the train as the uninitiated do not yet realize what the frequent commuter does—the long fingers of outdoor platforms stretch so thin that people at the end of the departing peloton of roller-bags finds themselves behind a bottleneck that tacks an additional 20 minutes to reach the station. If one reaches the station at night all that is visible is an old structure in what seems to be a several-decades-long sleep. Upon summit to street level an air of dust permeates. How do first-time travelers know they have arrived in a highly affluent city, home to major internationally renowned corporations, in the heart of the most prosperous and productive country in Europe?

The dust comes from what one sees upon waking high atop one of the hotels close to the station. This is the massive construction site for Stuttgart 21, a €10-billion modernization of the commuter rail system and train station—designed to finally have a station that reflects the outsized economic and historic importance of the region. The project continues to be controversial since its initial conceptual design began in 1994.¹

The project’s name of “21” was supposed to reflect the ringing in of the new century, but

it is now projected to be completed by 2023, 30 years after conception. The
tremendously long delays have also translated into cost overruns as the original
projection for completion was €2.5 billion. What is projected to provide 75 percent of
the Stuttgart region’s residents with much more efficient and timely travel, comprising a
connection to Europe’s premier high-speed rail lines, has instead become a
multigenerational deep scar of earth. Even further delays were caused by legal
environmental conditions stopping construction due to a pair of endangered lizards
making one of the construction walls a temporary residency.

The strip-mine-sized pit of foundational construction becomes even clearer to see
as one ascends Uhlandshohe, the hill that forms the eastern edge of Stuttgart. Toward the
middle of the climb, the author found himself at the Ministry of Environment for the
State of Baden Wuerttemberg to attend a lecture by several prominent regional and state
officials to discuss Stuttgart 21 as well as other environmental initiatives. When two of
the officials were asked about recent initiatives to reduce conditions and regulations to
allow for infrastructure projects to be delivered more quickly and efficiently, the officials
smiled and offered that, yes, they in fact had been involved in these discussions. They
asserted that these investigations did present ways to save time—at least six months off
the top of every infrastructure project. The one gentleman laughed as he said, “So instead

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3 Ibid.
4 Ibid.
6 The author visited all sites and lectures mentioned during a May 2018 Johns Hopkins study abroad trip to Germany related to environmental and infrastructure cross-national knowledge transfer.
of Stuttgart 21 taking 25 years, it will take only 24-and-a-half!’ The officials and most of
the audience chuckled dismissively but not in a matter of profound regret or disdain.

Approximately a year earlier to this lecture, a significant network of rail
infrastructure projects had come to completion. A new freight rail system between China
and Europe, funded and led by Chinese initiative, has provided connections of 35
Chinese cities with 34 European cities.7 But the truly amazing part of this
accomplishment is that only 10 years before, there was no direct freight rail services
linking China with Europe.8 As a generation was born in Stuttgart, coming of age and
adulthood—knowing nothing of the dream of better connections, but passively knowing
only a bottomless pit of public funding and stories of rare lizard habitation—the Chinese
built an entire cross-continent rail network.

_A Choice of Despotisms_

This paper will examine and compare the differences between the infrastructure
development paradigms between the West (America and Europe) and the East (a rising
China) and the choice this presents internationally to other countries looking for
assistance, aid, and partnerships in building public infrastructure projects. The choice
presented has some very technical elements reflecting separate paradigms, but this paper
will propose that, ultimately, the current choice is between two forms of despotism. This
is the choice between a form of Tocquevillian soft-despotism of the laughing German

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7 Jonathan E. Hillman, “The Rise of China-Europe Railways,” Center for Strategic and International Studies,
March 6, 2018, [https://www.csis.org/analysis/rise-china-europe-railways](https://www.csis.org/analysis/rise-china-europe-railways)
8 Ibid.
bureaucrat and the autocratic hard despotism of a rising China swiftly moving across continents.

Alexis de Tocqueville in his seminal *Democracy in America* projected that, within the balance between freedom and equality found in a democracy like that of the American regime, a tilt toward equality could result in an extremely isolated individualism that would give rise to a new form of despotism: a soft despotism that was not cruel but one that allowed for and provided the isolated individual with their petty comforts in exchange for a softening and hindering of any ability to achieve great things. It was in a footnote to the second chapter to follow that the role of soft despotism in the current Western paradigm of infrastructure development arose and, upon reflection of this work as a whole, only becomes more clearly linked.

Tocqueville wrote that, with the growing of industrial development, the need for larger and greater development of roads, ports, and other infrastructure would become too great for individuals becoming more isolated and weak from democratic tendencies to complete or associate to deliver these projects, and these would naturally be ceded to the state for execution.9 Yet one can see the moderating and softening influence working both ways when it comes to the cessation of infrastructure development to the soft despotism of the administrative state. Tocqueville wrote that “the same equality that facilitates despotism tempers it” and, further, that the “universal moderation moderates the sovereign itself.”10 Therefore, the more democratic a regime becomes the more mediocre and less grand of public infrastructure it can build despite the fact that it is the

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10 Ibid., 662.
federal centralized government that many look to for the delivery and execution of large and needed infrastructure projects. Eventually the people of the democratic regime grow complacent in the confines of their small and vulgar comforts and merely shrug their shoulders and laugh—just as the local German officials did that day in Stuttgart—when it came to the generational delays of the Stuttgart 21 project. This is because, for Tocqueville, the new phenomenon of the soft or administrative despot—new today as the progression of democracy was new at the time—“does not break wills, but it softens them,” and, as this paper would propose, when it comes to major and ambitious public infrastructure, the new soft despotism “does not destroy…[nor] tyrannize” but “hinders, compromises, enervates, extinguishes, dazes….”11 The claim here is that this is perfectly demonstrated through the current delivery of public infrastructure. How public infrastructure is developed is one pane of a window that opens to see the character of a regime and how that regime is viewed by others—in this case, developing countries in desperate need still of large and ambitious public infrastructure projects.

In contrast, China disregards the petty and naturally human for grand infrastructure at a grand scale. Theirs are not “hindered” and “dazed” projects in constant delay with only laughing and soft accountability from a comfortable democratic people. China disregards the social and environmental conditions in a more ancient and tyrannical nature to quickly and swiftly deliver projects. And so in our current time, this is the choice presented to developing countries in need of infrastructure: On one side, the daze from a thousand cuts of prying and small conditions delaying infrastructure projects past the completion points originally decided by those who—in defining the projects’

11 Ibid., 663.
benefits—might not even be alive to enjoy them; the other, a swift and quick delivery of the infrastructure project, but in exchange for potentially ancient tyranny and imperialism, or at least the disregard for the rights of people and the preservation of balanced natural environments. It is in the choices being made today around the world when it comes to infrastructure development that Westerners might finally wake themselves from their soft and comfortable slumber and see the unworthy choice they have as a counter offer.

The Research That Follows

These philosophical thoughts were inductively drawn from the case study and analytic research work that follows. In the first two chapters, several case studies of historic infrastructure development by both the West and now the East revolving around the Panama Canal are investigated to show several important ideas. First, the Western paradigm of infrastructure development has matured and evolved, and many of the characteristics of the Eastern paradigm—quick decision making and fast delivery—were demonstrated in the original construction of the Panama Canal by the West. The West, at least in terms of the Panama Canal, has had a 100-year maturation period where—because of the domestic influence of a further democratizing society—many conditions and other processes were put into place that now creates the very slow decision making and delayed final delivery that forms some of the main characteristics of its current paradigm.

One constant characteristic that did not evolve, at least when it came to the case studies, was the placement of fiscal transparency and prudent budgetary policy conditions
reflective of the West’s commercial spirits but also liberal enlightenment principles. By comparison, most of the prevalent literature and rhetoric claims that the Chinese do not impose conditions on countries in exchange for infrastructure development and financing. But this was challenged in the case of their recent work in the Panama Canal, where a major billion-dollar investment followed Panama no longer recognizing Taiwan, but formerly recognizing China as the one and only true China. So in the West, perhaps we see the lack of smaller social, budgetary, and environmental conditions, as there being a lack of contractual conditions, but in this case study China did impose a condition—one grand condition. This shows them as possibly learning better lessons from Western thinkers like Mahan, and Western aid initiatives like the Marshall Plan, than the West itself. Furthermore, the first two chapters’ focus on conditions also demonstrates that, through these conditions placed on infrastructure aid, one can see the differences in regimes being demonstrated: the softer, more commercial, or as Tocqueville says in a different context, “a network of small, complicated, [and] painstaking”12 conditions of the West, in contrast, to the larger, harder, and grander conditions of the East.

The last paper examines a new Eastern institution: the Asian Infrastructure Investment Bank (AIIB), as this bank truly does not impose any conditions, and so it isolates the first two chapters’ focus on conditions and asks, what is it of infrastructure itself that is being presented by the East and China as a focus? Why does the AIIB only lend for infrastructure? Finally, the chapter sees an analysis and some potential answers to the question of whether there might be a subset of economic statecraft specifically described as “infrastructure statecraft.”

12 Ibid., 663.
The final hypothetical answer is that, for the Chinese, infrastructure is one of their best ways of showing their regime’s superiority in contrast to the West. China certainly does not do well as a regime when evaluated by Western standards in regards to human rights or social and environmental justice. But where does the disregard of these subjects of justice, at least temporarily, assist in the speedy delivery of a common public benefit? Infrastructure development. If a new term, “infrastructure statecraft,” would mean using infrastructure means to affect economic or political ends, one can see how beneficial the choice of infrastructure is for the Chinese to be one of the first vehicles they use to go back out to the world and present the positives and superiority of their regime.

After these main chapters, the paper will conclude with a possible policy answer from the West and what that would need to look like to have any real effect and moderation to the current choice of two extremes: the newer democratic soft despotism and the ancient hard tyranny.
CHAPTER ONE

The Western Infrastructure Development Paradigm

Introduction

In the wake of the international financial crisis of 2007-2010, the developed western world came into aligned action to stabilize the financial system and provide fiscal stimulus to try to prevent an even larger economic depression. On the international development front, the World Bank Group organizations made loan commitments to developing countries at a record pace, lending $100.3 billion (U.S. dollars) in response to the crisis.13 Traditionally this record amount of lending would only reinforce the dominant and hegemonic role the western liberal order plays in international economic affairs. But it came as a shock to many in the west when a Financial Times story from January 17, 2011, reported, “China has lent more money to other developing countries over the past two years than the World Bank, a stark indication of the scale of Beijing’s economic reach and its drive to secure national resources.” The Financial Times, adding together lending commitment press releases from the China Development Bank and the China Export-Import Bank (neither organization publishes its total portfolio), revealed that these Chinese state-led organizations committed to at least $110 billion in loans to developing countries, approximately $10 billion more than the World Bank organizations during the same period from 2008 to 2010.14

14 Ibid.
China’s international development has become only more prolific since. *The Atlantic* led with a headline of “China Is Quietly Reshaping the World,” detailing China’s 2013 commitment of more than $1 trillion (U.S. dollars) to a portfolio of existing and future infrastructure projects to better establish sea and overland trade routes to China.\(^{15}\) The Chinese international development push is quickly becoming not so “quiet” and the focus on infrastructure development has become more crystalized in the thought of scholars and policymakers.

A joint study by the Stanford Global Projects Center and the Stanford Center for Democracy, Development, and the Rule of Law is currently potential cultural, political, and delivery differences between the “Eastern” (the newly Chinese-led initiatives) and the “Western” (United States- and European-led) paradigms of international infrastructure development.\(^{16}\) Their hypothesis – to be investigated in the Literature Review – is that the Western paradigm of infrastructure development is too slow and delayed by layers of safeguards, but has less quality issues once completed, whereas the Eastern paradigm is a much faster process, with fewer environmental, social, and labor safeguards in countries with low standards, and tends to take on larger and riskier projects.\(^{17}\)

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Problem

One of the caveats from the first major thesis paper to come out of the study is that the institutions leading the Eastern paradigm – Chinese Policy Banks – are at a much younger stage of maturity than the leading institutions of the Western paradigm – World Bank, USAID, etc. – and have had less political development time to “fine-tune its policies, regulations, and grounding on social and environmental safeguards.” Taking the Stanford group’s critical self-recognition that they are not looking into the stages of political development within the Eastern and Western paradigms, this paper will focus on the potential for maturation and growth within the Western paradigm of infrastructure development. It will seek to investigate whether there are any stable cultural, political, and financial factors that make up aspects of a timeless Western paradigm, or whether the Western paradigm hypothesized by the Stanford study is just the result of a political maturation over decades of historical development.

The importance of such a study cannot be overstated, for if the Western paradigm was just a process of historical development and evolution, then perhaps the Eastern paradigm of infrastructure development will take on similar safeguards and transparency of the Western paradigm over time, easing worries about the Chinese willingness to overlook many critically important externalities to a Westerner’s perspective. But if there are timeless aspects or factors in the Western paradigm, this may be the first piece to establishing a true difference between Western and Eastern paradigms. This would present a much clearer picture for domestic and international infrastructure policymakers in the near future. For as the distinguished engineering and infrastructure scholar Henry

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18 Ibid., 126.
Petroski has said, infrastructure choices will need to be made, and because of infrastructure’s long life, these choices have long consequences. So, “by understanding how historical choices have been made – under what circumstances, under what technical and financial constraints, and under what hidden and overt political pressures – we can better understand what is involved in making key choices that we are faced with today.”19

To study the history of the Western paradigm, several case studies will be evaluated where the infrastructure project has been financed and developed internationally by the United States or a Western international development organization in the same project area at different times in history.

To establish the current literature on the Western infrastructure development paradigm and its historical maturation over time, a literature review will be conducted, followed by the establishment of the paper’s hypothesis to be investigated against Western infrastructure case studies.

Literature Review

Because of the rapid advance of Chinese domestic and international infrastructure development in the past two decades, there is a significant amount of literature investigating the Eastern paradigm of infrastructure development. Unfortunately, perhaps because of the West’s dominant and established role as the traditional developer and lender of infrastructure projects throughout the world, less literature is focused on a Western paradigm of infrastructure development. As the literature on the Eastern paradigm will be reviewed in a paper to follow, only the Western paradigm will be

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reviewed here. To piece together a full picture on the literature analyzing the Western paradigm, this section will first fully detail the Stanford group’s hypothesis. Then additional literature sources will be used to see if there is validation of the Stanford group’s initial hypothesis from its literature review. First, a broad overview of civilizational comparisons will establish some basic potential differences in foreign policy and developmental aid processes. This will then be followed by additional literature linking America’s domestic infrastructure development to its influence on the World Bank and other Western infrastructure development organizations. Finally, literature analyzing historical changes in the Western paradigm will be reviewed to ultimately help establish the paper’s hypothesis.

*Stanford Study*

A joint study between Stanford’s Global Projects Center and the Stanford Center for Democracy, Development, and the Rule of Law has conducted several investigative approaches to Western and Eastern paradigms of infrastructure development. This includes one fully developed thesis paper, a number of case studies, and several different draft presentations that have recently been delivered to scholarly audiences. Within the Stanford thesis paper, a set of hypotheses was established for the differences between the Western and Eastern paradigms:

**H.1 Governance Structure and Project Cycle**

a) Eastern paradigm decision process is faster: Projects are financed faster and delivered faster.
b) Western paradigm decision process is slower: Its projects experience bureaucratic drag.

H.2 Social and Environmental Safeguards

a) Western paradigm projects follow more strict and comprehensive environmental standards.

b) The differences on environmental and social standards compliance are highlighted when borrower country’s standards are low.

H.3 Investment Portfolio

a) Eastern paradigm projects seem to be bigger and more focused in riskier countries than Western paradigm projects.

H.4 Construction Quality and Longevity

a) Western paradigm projects seem to have fewer quality issues post construction.\(^{20}\)

The one released thesis project from the Stanford group is not the only perspective currently being presented by the research effort. Another perspective describes the Western paradigm as “transactional,” and thus concerned with microeconomic cost-benefit analysis contained completely within the project at hand. The Eastern paradigm, by comparison, works on a “relational” basis, and thus looks at a foreign country’s macroeconomic development situation as a whole, and develops projects that begets more projects.\(^{21}\) Another perspective from Francis Fukuyama, one of the co-principles of the Stanford study, says the major difference between West and East is that the West relies primarily on the internal rate of return of the project, and if it

\(^{20}\) Bernet, 50.

doesn’t generate the returns needed by a private developer, the Western agencies will “top off the investment” to make its returns worthy of investment. This differs, Fukuyama says, from the Eastern paradigm, which also takes the internal rate of return into account but then overvalues the positive economic externalities of the project, and also in turn undervalues the negative externalities.22

_Broad Comparative World Power and Civilization Context_

World power and cultural comparison literature shed some light on the Western infrastructure development paradigm’s insistence on liberal conditionality and environmental safeguards being tied to funding, in comparison with the East’s more lax standards.

The Eastern infrastructure development paradigm’s overriding trend of lax standards and non-conditionality will be explored further in the next section of this thesis but, for comparison’s sake, it can be summarized under the broader international development paradigm of the “Beijing Consensus.” In opposition to the “Washington Consensus” of international aid and infrastructure development being tied to neo-liberal, free-market, environmentally safeguarded, and individual rights-focused conditions on funding, the Beijing Consensus has two guiding principles: a large state role in development and non-interference in a nation-state’s governance or broader economic system.23

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The “Washington Consensus” is then made up of an overall basket of political and economic universal principles based on Western liberalism and free markets. These principles are not our concern in this broad overview, but the cultural need to interfere with principles believed to be universal is. As America is the leading nation of what we are considering the Western paradigm of infrastructure development, it is essential to understand the “missionary” role of American principles in its foreign policy to have a broader basis of understanding in the insistence of conditions and safeguards in America’s foreign infrastructure development.

Even early on in America’s history, when it sought as a policy not to intervene in European affairs, it crafted the Monroe Doctrine, with subsequent additions to proclaim a role for America’s right to intervene in the Western hemisphere’s political affairs. This later was translated into a moral obligation to intervene in the affairs of the rest of the world first through Woodrow Wilson, but more fully after World War II.24 And so it seems quite natural that American and Western-led infrastructure development projects and Western aid funding in general have conditions tied to interfering and insisting on liberal governance, free-market principles, and a most recently agreed upon Western ideal of social and environmental safeguards. Of course, many in the West view these not so much as interferences, but as progressive accelerators ushering these nations out of a purgatory of non-Western values and into the democratic, individualist, and free-market societies of a universally beneficial modern world.25

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This is contrasted with the Eastern view – and also other less-developed nations outside the Eastern paradigm – that Western interferences are negatively used against other nations’ cultures and self-determination, and that many times “what is universalism to the West is imperialism to the rest.” Yet the famous international affairs scholar Samuel Huntington wrote in his *Clash of Civilizations* that China and Asia – the East – believe they too have universal beliefs, and they believe that many if not all of those beliefs are better and more applicable than the West. Huntington lays out four major components of the “Asian affirmation,” where Asia has become more confident on the world stage. The fourth and last component is the Asian belief in its own worldly universal principles. Huntington summarizes that “powerful societies are universalistic; weak societies are particularistic. The mounting self-confidence of East Asia has given rise to an emerging Asian universalism comparable to that which has been characteristic of the West.”

Will the Eastern infrastructure development paradigm eventually transition to insisting on Eastern “universal” conditions of principles separate and different from the West, as opposed to the current non-interference principle of the Beijing Consensus? When America was not yet a global superpower it did not look to interfere as much in international affairs or the governance of other counties – outside of the Western hemisphere at least. As Henry Kissinger summarized the early American foreign policy position, “the assertion of a universality of American principles was coupled with the refusal to vindicate them outside the Western (that is, American) Hemisphere.”

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26 Huntington, 184.
27 Ibid., 109.
28 Kissinger, 242.
deeper investigation of the Eastern infrastructure development paradigm, and its lack of direct political, economic, and environmental conditionality, will be further explored in the second part to this thesis. But keeping ever present in mind that this thesis will be investigating the historical evolution and development (if so) of, first, the Western infrastructure development paradigm, and then the East, understanding that the West, too, had a somewhat non-interventionist broad foreign policy agenda early on, might shed additional light on where the Eastern paradigm is currently in its historical development and what potential factors could be evolving – conditionality on infrastructure funding being one major concern.

Additional Specific Literature

Additional literature affirms much of Stanford’s hypotheses. The World Bank’s general slowness in readying projects has been a main criticism of many developing nation clients.29 Overbearing conditions relating to environmental and social standards have been cited as a reason for many developing countries pulling out or seeking alternatives to the Western multilateral development bank loans.30

Fukuyama, in his most recent presentation for the Stanford group’s study, also assumes a link between the American domestic infrastructure paradigm and the Western international infrastructure development organizations like the World Bank.31 Additional literature also establishes the major influence, if not control, the United States has on the

31 Fukuyama (Sokwanlok Lecture).
World Bank and the Western international development agencies. This paper will operate under the same assumption. Thus the final section of this literature review will take into account the studies demonstrating historical changes in the Western paradigm in infrastructure development both internationally but also domestically within the United States.

The rise of environmental impact studies, most specifically the National Environmental Protection Act of 1970, has been a major reason given for the slowing of infrastructure development domestically within the United States. Additionally, the rise of social community opposition, as well as the decrease in federal spending on infrastructure, have also been cited as reasons for the slowing down of infrastructure development domestically in America. As Fukuyama, in a separate piece from the Stanford group investigation, says, the problem with infrastructure environmental impacts is “not in the principle, but in the inefficiency of the review process.” Edward Glaeser showcases that before environmental and community review processes, “Robert Moses built the Triborough Bridge complex, the construction of which got under way on Black Friday in October 1929, in just four years.” Hence, not only do these thoughts affirm domestically the Stanford group’s international hypothesis, but this demonstrates

34 Glaeser, 9.
at least one example of the several factors that have evolved over time to make up the current Western infrastructure development paradigm.

Concerns and pressures from Western and, many times, American-based non-governmental organizations and political agents, have made a similar slowing of process at the World Bank. Additionally, several accounts demonstrate the World Bank slowly evolving away from a pure infrastructure focus in the 1950s and 1960s to less riskier and more measurable public health and micro-poverty measures. This timeline aligns with America’s largest mega-project era, most prominently the initial building of the Interstate Highway System in the 1950s and 1960s. This alignment of the peak of infrastructure development among American domestic policy as well as the World Bank’s international development policy further solidifies a potential hypothesis that many aspects of the Western paradigm of infrastructure development are simply a maturation of policies and political development over time.

**Hypothesis**

This paper positions a hypothesis that much of the Western infrastructure development paradigm has historically evolved and matured over time.

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37 Mallaby, 7.
38 Ibid., 34. / Cohn, 364-365.
Western Infrastructure Development Paradigm Defined

This paper will use a similar definition of the current Western infrastructure development paradigm as that being established by the Stanford project but with several refinements and additions following from the above literature review.

The Western infrastructure development paradigm is defined as a process where: the final decision to move forward is slow and bureaucratic; the final delivery of the project is delayed; conditions placed on the foreign government receiving the infrastructure is based on factors, or at least aligned with the “Washington Consensus” of fiscal prudence and Western liberal political and economic policies; social and environmental safeguards and conditions are adhered to; and the quality of construction is relatively of higher and longer-lasting consistency.

Case Study Design

The hypothesis that the current established Western infrastructure development paradigm has evolved over time will be tested by evaluating and comparing two case studies. The initial construction of a non-sea level lock-and-dam-style Panama Canal by the United States government, completed in 1914, will be compared to a case study of the single largest improvement to the Panama Canal, the building of the third lock system, funded by a Western-aid consortium, including the World Bank and the European Investment Bank, and completed in 2016. Historical and evolving paradigms might have certain fits and starts, or peaks and valleys, along the path of change and are not perfectly linear. The case studies were therefore also chosen to give a large enough time window to allow for any historical changes in the Western paradigm to become fully realized by
comparing two projects related to the same piece of infrastructure – the Panama Canal – but with more than 100 years of time between completion dates.

The case study design attempts to control for the foreign environment of the infrastructure investment by comparing two projects within the same overall infrastructure project – the Panama Canal – and within the same country – Panama. The case study design also controls for the Western-led nature of both investor and development groups: The United States government in the original construction, and a Western-led consortium of development banks, including the World Bank and the European Investment Bank, both to be considered part of the greater definition of the “West” in the Western infrastructure paradigm.

Finally, the case design is aligned along a historical analysis to isolate the variables of the Western infrastructure development paradigm for a study across time. The original Panama Canal construction of 1914 and the Third Lock Expansion of 2016 are the independent variable of the case study being used to understand if there are changes or evolutionary developments among the dependent variables of the paper’s definition of the Western paradigm.

The following sections will include a historical narrative establishing the context for earlier attempts at a waterway connecting the Atlantic Ocean to the Pacific Ocean. Then, focusing on the infrastructure development variables established above, a narrative of the initial 1914 Panama Canal construction will be examined, followed by an examination of the Third Locks mega-project addition to the Panama Canal completed in 2016. Finally, the variables of both projects will be compared to determine whether there has been a historical evolution of practices, or if there are any unchanged variables that
might disprove the paper’s hypothesis and reveal a core constant of a long-term and potentially cultural and civilizational theory to Western infrastructure development paradigm.

**Historical Background of the Panama Canal**

The Isthmus of Central America – modern day Nicaragua, Costa Rica, and Panama – has been thought of as a globally important canal location since the 1500s. Until the advent of the railroads and later the U.S. Interstate Highway System, the ability for human transit and the shipment of goods from the Atlantic Ocean to the Pacific Ocean and vice versa was inhibited by the need to travel by sea around the Cape Horn of South America. Transcontinental transit would greatly reduce the time and cost of travel. The Isthmus, by the simple fact of it being a very thin strip of land connecting the North American to the South American continents, represents the shortest and thus most prominent location for transcontinental infrastructure to connect the waters of the Atlantic and the Pacific.

The Spaniards, shortly after arrival to the Isthmus area, studied the idea of a canal to provide a water passageway.40 The canal ultimately was too ambitious an undertaking and a roadway was built in the area of modern-day Panama instead as a transcontinental connection. The road, in modern terms, was a simple gravel trail but it was the first of three eventual infrastructure improvements to the Panamanian Isthmus area. By the 1800s, the rise of United States as a growing North American power – with new

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settlements along the Pacific Coast and the Gold Rush of the late 1840s – provided a national impetus for the need for transcontinental travel and for the more specific need to build a canal in the Isthmus area. This clashed at times with the interests of Great Britain – the hegemonic sea power of the era. By the mid-1800s, several treaties had been ratified both between Great Britain and the United States and the United States and the independent nations of the Central American Isthmus for concessionary rights to build a canal, and for the U.S. and Great Britain to generally partner in a canal-building exercise. In the interim, an American-financed and -built railroad, the second Panamanian transcontinental infrastructure was completed in the 1850s as a result of the international treaties concerning the Isthmus area.

Despite of, or simply working around the treaties of the United States and Great Britain, France negotiated its own concession from Columbia (Panama was then part of Columbia) in the 1870s to build a French-led canal across Panama. What first was a project of national pride – led by famous Suez Canal builder Ferdinand de Lesseps – became a national shame and scandal for France as delays and costs continued to pile up. Two decades passed without the French able to make significant headway in constructing the canal, and in this time the U.S. and Great Britain agreed to a new treaty in 1901 giving the United States sole authority to build a canal in the Isthmus. The United States, directed by President Theodore Roosevelt, immediately started negotiations not only with Columbia to build a canal, but also with the remnants of the French company that still owned all the assets and concessions for failed canal project of the previous two decades.

The Colombians rejected the United States offer, hoping to negotiate for a better payout. But after the Columbian treaty rejection, Panamanian nationals rebelled, and with
the assistance of American gunboats, the Panamanians were able to achieve national independence. Shortly afterwards, the United States was able to ratify a treaty with the new Panamanian government that gave the U.S. essential sovereignty within a 10-mile zone in which the Panama Canal would be constructed, as well as the right to intervene in Panamanian affairs to protect U.S. national interests. The United States agreed to pay a $250,000 yearly annuity, as well as an upfront payment of $10,000,000 in exchange for the ability to operate the canal and control the zone in perpetuity.

The very brief historical sketch presented above was critical to set the context of the canal’s actual construction and to investigate the canal’s construction as a case study in the Western paradigm of infrastructure development. The fact that the idea of canal had been around for close to 400 years before it was actually successfully constructed is important to understand what might be perceived to be a delayed construction season during the time the Americans directed construction. Also the fact that the United States paid for the rights to the canal in exchange for control in perpetuity differs from many modern foreign infrastructure projects in that generally the foreign country receives aid in a form of a loan from a Western or Eastern development institution to build a piece of infrastructure the foreign country ultimately owns, either immediately or after a concessionary period transpires. Despite this difference, the historic original canal construction case study provides factual evidence of whether or not the variables of the proposed Western paradigm of infrastructure development were being met just over 100 years ago.
Case Study: The Original 1904-1914 Panama Canal Construction

In this case study, each of the five factors established above as making up the current Western paradigm of infrastructure development will be analyzed using historical analysis of the original Panama Canal project completed in 1914.

Slow and Bureaucratic Decision Making

The current established Western paradigm in foreign infrastructure development of a slow and bureaucratic decision to proceed and move forward with investment and construction is not consistent historically with the original Panama Canal’s construction. Upon the treaty with Great Britain in 1901, that gave the United States sole authority in constructing a canal in the Isthmus area, the United States quickly entered into negotiations with Columbia to build the canal. Once Panama rebelled from Columbia, the United States essentially immediately entered into a treaty to build the Panama Canal, and the U.S. Senate voted in favor of ratification within months.41 The decision was quick rather than slow.

Final Delivery is Delayed

Some historians claim the Panama Canal was delivered ahead of schedule and under budget42, while others have claimed the opposite that the final delivery was delayed and over budget.43 This might be from differences in what date the historians

41 LaFeber, 35-41.
actually consider the project to be opened, and therefore accounts for additional years of costs into the initial project delivery budget. But despite these differences, it is important to be reminded of the project’s historical context. Two French companies spent over two decades trying and failing to build a canal. Before that, the idea had been bandied about for several centuries starting with the Spaniards. On top of this the Panama Canal was by far the largest project the Americans had ever attempted.44 The American’s had, unlike all other foreign attempts, opened the Panama Canal to its first ship passage within a decade of the original treaty ratification with Panama. With the historical debate on whether the project was or was not delivered on time and under budget, and with the vast undertaking that was completed within a decade after all other attempts had failed, this paper will rate this variable as neutral in delivery at least, and delivered on time at best, neither vastly delayed or quickly delivered.

_Liberal and Fiscally Prudent Conditionality_

The current Western infrastructure development paradigm assumes that foreign countries receiving infrastructure development will already adhere to, or will further adopt “Washington Consensus” liberal and fiscally prudent policies and procedures. Using the case study of the original Panama Canal construction, and despite frequent interventions into Panamanian politics, the U.S. only intervened to safeguard U.S. national interests and the ability to keep the Panama Canal operational, rather than trying to intervene to promote democratic and transparent political procedures.45 So in terms of

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44 McCullough, 610.
placing conditions on infrastructure funding and development to promote liberal political
policy changes, the original Panama Canal project does not align with the current
Western paradigm.

Yet when it comes to the prudent fiscal policy conditions of the Washington
Consensus, the original Panama Canal project aligns with the current Western paradigm
even seventy years before the “Washington Consensus”. The original Panama Canal
treaty between the United States and the newly formed Panamanian government
exchanged a yearly annuity of $250,000, as well as an upfront payment of $10,000,000.
The $10,000,000 upfront payment was not actually immediately delivered to Panama, a
large portion - $6,000,000 million - was invested on instruction of the United States into
an investment fund ran by JP Morgan, and control and oversight of this fund, as well as
the payments of the annuity, were kept in diplomatic escrow by the U.S. Treasury.46

During and after the completion of the canal, the U.S. controlled the use of the $6
million in the investment fund and how its dividend payments would be used, as well as
the $250,000 annuity. Throughout the early history of the Panamanian nation the U.S.
was constantly denying the use of funds for various development schemes and debt
leveraging drawn up by the Panamanian government, in hopes of keeping Panama on a
fiscally prudent path.47 Despite attempts by the United States to control Panama’s
finances, by 1923 the Panamanian government had borrowed and leveraged so much
against the dividends, annuity payments, and face value of the $6 million dollar fund that

46 Ibid., 128.; McCullough, 329.
47 Major, 129, 132, 135.
they had, “mortgaged her entire patrimony and has no further actual borrowing capacity.”

The United States’ denials to the Panamanian government on using their upfront payment, investment dividends, and annuity payments for what was perceived by the U.S. Treasury as fiscally imprudent schemes and debt leveraging can be thought of as exercising “de jure conditionality.” Trying to persuade Panama through this de jure conditionality to make more fiscally conservative and prudent actions is consistent with at least part of the Washington Consensus. The historic case study of the Panama Canal leaves some room for historical evolution, but also aligns that there were certain fiscally prudent conditions placed on the policies of the Panamanian government.

*Social and Environmental Safeguards*

The current Western paradigm assumes infrastructure projects adhere to social and environmental safeguards. In the case of the original Panama Canal, this is the most glaringly opposite to the current paradigm. The United States allowed for no labor union presence, no ability to strike, and had separate payroll systems based on in many dimensions racist and bigoted views. On top of this there is no record in any of the historical narratives of the original Panama Canal construction of any environmental safeguards to protect the natural environment from harm from construction of the canal.

48 As quoted in Ibid., 146.
49 See Woods, 44. Woods uses the term “de jure conditionality” in the context of the World Bank denying Chile loans because of imprudent fiscal policies and deficit financing in 1947. She then indicates this early loan denial in the World Bank’s history is on similar conditions that become a larger focus of the bank during the beginning the Washington Consensus policies. The term works well in the original Panama Canal case study as it is another example of a historic condition on funds to foreign governments based on fiscally prudent Washington Consensus principles.
50 Major, 78-81.
Under United States leadership, malaria and yellow fever were eradicated by a huge public health effort, but this was done chiefly to make sure these main culprits of construction fatalities were vanquished so as to finish construction. The public health effort, despite having great externality spinoff effects for the rest of the Panamanian nation, was not done with the intention of the greater public good of the Panamanian nation but for construction efficiency.\(^{51}\) The original Panama Canal had none of the current Western paradigm’s social or environmental safeguards.

**Quality of Construction**

The current Western infrastructure development paradigm assumption is there is a higher quality of construction than projects built either by the foreign national country’s own firms and leadership, or Eastern-led infrastructure development. Historically this aligns well with the building of the original Panama Canal. The American-led canal construction was well built for the time and used many recent advances in engineering and construction technology. As one noted historian so succinctly summarized the quality of achievement of the original Panama Canal, “technically the canal itself was a masterpiece in design and construction. From the time they were first put in use the locks performed perfectly.”\(^{52}\) This historic case study aligns with the current Western paradigm of a high quality of construction.

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\(^{51}\) Maurer and Yu, 322.  
\(^{52}\) McCullough, 611.
Summary

The original Panama Canal case study is one example that aligns with this paper’s hypothesis that the Western infrastructure development paradigm has developed and evolved over time. Of the five variables that make up this paper’s definition of the current Western paradigm, three - slow decision making; a delayed final project delivery; and adhering to social and environmental safeguards - were not aligned with the original Panama Canal project completed in 1914. One other - liberal and fiscally prudent conditionality – was partially aligned with the current paradigm. The final variable – quality of construction – was aligned with the current paradigm, as the original Panama Canal was a wonder of the era’s engineering and construction advancements. For comparison, the Third Locks Panama Canal expansion project will be evaluated as a case study to both better prove the current definition of the Western paradigm, as well as show if the variables align with the hypothesis that much of the Western paradigm has evolved over time.

Brief Historical Context of Panama Canal under Panamanian Control

After World War II the defensive and commercial importance of the Panama Canal began to wane for the United States despite its continuing importance as a symbol of American nationalistic pride. Several treaties between the United States and Panama followed, slowly ceding control of the Canal and the Canal Zone until the 1977 Panama

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53 The historical background of the eventual decline in importance of the Panama Canal to the United States is best summarized by Maurer and Yo, 228-332 which this section follows. Maurer and Yo’s account benefits from being written after the actual transfer of the Panama Canal to the Panamanian’s, whereas most other historical accounts were written in lead-up or as reaction to the 1977 Treaty that eventually ceded control from the United States.
Canal Treaty that ceded the entire control of the canal to the Panamanians by 1999. During the transition period, and after control was passed, the Panamanians revamped management, raised tolls, and made many capital investments to transition the canal from being a break-even non-profit institution to a profit-making and financially viable piece of global infrastructure. Since before World War II, the United States government considered adding a set of third locks and widening the canal to accommodate the ever-increasing sizes of international container ships. In 2008, the Panama Canal Authority began the Third Locks capital project, which was the largest expansion of the Panama Canal since its opening. The following section will detail a case study of that project in light of the variables established for the Western infrastructure development paradigm.

**Case Study: The Panama Canal Third Lock Expansion Project of 2016**

Five Western multilateral development banks led the feasibility studies and financing of the Panama Canal expansion. The total project was budgeted at $5.25 billion (U.S. Dollars), and the development banking consortium financed $2.3 billion dollars of the total, with the rest being self-funded through profits from the Panama Canal Authority’s tolling and fees.54

Table 1 shows the sources and totals of the Western financing consortium’s financing syndicate.

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Table 1

<table>
<thead>
<tr>
<th>Western Multilateral Development Financiers</th>
<th>Amount (U.S. Dollars)</th>
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</thead>
<tbody>
<tr>
<td>Japan Bank for International Cooperation</td>
<td>$800 million</td>
</tr>
<tr>
<td>European Investment Bank</td>
<td>$500 million</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>$400 million</td>
</tr>
<tr>
<td>Corporacion Andina de Fomento (CAF)</td>
<td>$300 million</td>
</tr>
<tr>
<td>International Finance Corporation (part of World Bank Group)</td>
<td>$300 million</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$2.3 billion</strong></td>
</tr>
</tbody>
</table>

Despite the World Bank group’s International Finance Corporation (IFC) – as the Panama Canal Authority is a privately run operation, the IFC is the wing of the World Bank group that finances privately-run initiatives – being the smallest contributor at $300 million, a predominant part of the case study will rest on evidence within the World Bank framework as the it was the first and foundational multilateral development bank influencing the rest of the MDBs in the consortium. This similar development ethos is demonstrated by all five MDBs agreeing to a “Common Terms Agreement” with a shared set of terms and conditions on the financing.55

**Slow and Bureaucratic Decision Making**

The World Bank’s “Project Cycle” concedes that the time from identifying a project to completion is “long by commercial standards” and can commonly last longer than four years.56 But even by the World Bank group’s own admittedly long process, the decision to move forward on the Panama Canal expansion project was slow. From the

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55 Ibid.
Panama Canal Authority’s hiring of an international financial advisor to begin conversations with the Western multilateral development financing institutions, to the joint agreement to finance the expansion, was almost two years before construction even started.\textsuperscript{57} These two years in financing arrangements can be stacked on top of the decade or more of studies financed by Western MDBs to determine the feasibility of expansion.\textsuperscript{58} The decision-making alone, with a multitude of economic environmental, and social studies goes longer than the World Bank’s own admitted four year timeline of a slower project cycle process. The slow and bureaucratic nature of the decision-making process aligns with the current paradigm of Western infrastructure development.

\textit{Final Delivery is Delayed}

The Panama Canal’s expansion project was well documented for being delayed and delivered behind schedule and over budget.\textsuperscript{59} After project financing was arranged, the timeline for completion was 2014, coinciding with the 100 year anniversary of the original canal’s opening. The project was not finally delivered until two years later, in 2016. The delayed project delivery of the Panama Canal expansion aligns with the current paradigm of Western infrastructure development.


\textsuperscript{58} Inter-American Development Bank, “Panama Canal Expansion Program (PN-L1032) Environmental and Social Management Report” (Inter-American Development Bank; September 2008), 5.

Liberal and Fiscally Prudent Conditionality

The Western infrastructure development paradigm assumes a large amount of liberal and fiscal conditionality attached to the financing of a project and on the project’s host nation. The Panama Canal expansion project does not disappoint this variable.

The World Bank’s Project Cycle process follows a detailed strategy of project identification through a “Country Partnership Framework”. The Country Partnership Framework for Panama details a three-pronged “Pillars of Engagement” with eight “Objectives”. These objectives illuminate the goals that the World Bank group will partner on with the Republic of Panama. They include the gamut of Western-style goals and variables associated with the Western infrastructure development variables, including prioritizing private sector investment as well as improving fiscal, budgetary, and management transparency. The continuing implementation of the IFC’s private-sector focused investment in the Panama Canal is a large part of the 2015 Country Partnership Framework but so are goals of continued partnering on other private investments as well as including a “Public Sector Efficiency Technical Assistance Loan to support improving efficiency and transparency of budget management”. Since all project and technical assistance loans are viewed by the World Bank as one large program for the Republic of Panama, these liberal – focused on continued private sector investment – and fiscally prudent – focused on public budget management – conditions and goals reflect an alignment with the Western infrastructure development paradigm’s liberal and fiscally prudent conditionality. In addition, the continuation of conditions and goals being placed

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60 World Bank Project Cycle.
61 CPF – 18.
62 Ibid.
63 Ibid., 23.
by Western-lenders and developers on fiscally prudent public management, from the original Panama Canal project and continued through one hundred years later to its expansion, isolates this variable as a constant of the Western infrastructure development paradigm.

**Social and Environmental Safeguards**

The Western infrastructure development paradigm also assumes a large and detailed amount of social and environmental safeguards attached to the financing of a project and on the project’s host nation. The Panama Canal expansion once again does not disappoint this other critical variable of Western conditionality.

Once again, the World Bank’s Country Partnership Framework for the Republic of Panama has partnering goals associated with various financing arrangements for “complementing social assistance with productive inclusion; strengthening resilience to natural disasters; and supporting integrated water resources management in priority areas” as specific social and environmental safeguard goals within its ultimate Framework.\(^{64}\) Also, specific and detailed social and environmental safeguard conditions were placed on and tied to the Panama Canal expansion project by the consortium of MDB financiers. As detailed by the Inter-American Development Bank’s “Environmental and Social Management Report” for the Panama Canal expansion loan, since the 1990s the Inter-American Development Bank (IDB) has been working with the Government of Panama (GPN) on the evaluation and development of alternatives for the

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expansion of the Canal and the management of the Canal’s watershed. This has included various environmental and social studies to identify the potential of the watershed and the Inter-Oceanic Region. The IDB has also assisted with the creation of the National Environmental Authority (CICH). More recently the Bank has assisted the ACP and CICH with preparing a sustainable development project for the Canal watershed (PN-0139), which was approved in February 2005. This project includes a community outreach program for [the] Canal Watershed.65

This section shows the extent and importance of environmental and social safeguard conditions attached to the expansion’s financing. From absolutely no such stated goals and conditions being placed on the original Panama Canal project, to the broad and deeply studied impacts and conditions on its expansion, this is one example of environmental and social safeguard conditionality being the most evolved variable within the history of Western infrastructure development.

Quality of Construction

Despite reports on failing infrastructure on the canal66, the project is still too early in its completion to assess whether it was delivered with a high quality of construction, or whether the infrastructure was delivered in sub-par condition from the onset.

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65 Inter-American Development Bank.
66 Mufson.
Summary

The Panama Canal expansion project is a good sample project to demonstrate the theory of the Western paradigm of infrastructure development established by this paper’s literature review. The decision to initiate the project was slow and bureaucratic; the delivery of the completed project was delayed; there was a vast array of liberal and fiscally prudent conditions; there was a similar importance placed on social and environmental safeguard conditions on the financing; and despite certain quality disputes and issues with machinery, the expanded canal is operational and bringing through the larger container ships that was the impetus to the expansion in the first place.

Comparison

Table 2 below, compares the two major Panama Canal projects as led by Western infrastructure development groups. The projects are the independent variable being used to understand the dependent variable of the Western infrastructure development paradigm.

Table 2

<table>
<thead>
<tr>
<th>Historic Era of Project</th>
<th>Western Paradigm of Foreign Infrastructure Development</th>
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<tbody>
<tr>
<td></td>
<td>Slow &amp; Bureaucratic Decision</td>
</tr>
<tr>
<td>Original Panama Canal Project - 1914</td>
<td>no</td>
</tr>
<tr>
<td>Post-Panamax Canal Expansion - 2016</td>
<td>√</td>
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</tbody>
</table>
As Table 2 clearly shows, much of the current Western infrastructure development paradigm as established by the literature review and backed by evidence from the case studies has evolved over time. Most especially the focus on social and environmental safeguards highlights the increasing role these conditions have become on any physical infrastructure project within the West or being financed or developed by Western governments and multilateral development banks. But perhaps more importantly, in both projects, spanning over 100 years between their completions, there were Western conditions of fiscal prudence and financial management tied to the financing of each project.

These conditions could be claimed as obvious for any financed project – the financier wants the borrower to be fiscally sound so as to pay back the financing profitably, but the original Panama Canal construction was purchased not financed by the United States. De jure conditionality was placed on what the Panamanians could do with their own money they received from the purchase. A partial reason for the United States placing conditions on the Panamanians’ own sale receipt was to make sure the Panamanian government didn’t, “become either a public charge or a charge upon the United States”, as the U.S. had a “personal interest” in seeing these funds spent wisely.67 But the American intervention into Panamanian budgetary and fiscal operations went deeper. President Wilson’s administration intervened often in Panamanian public finances vindicated by their purpose of a “civilizing mission” to instruct the Panamanians in the “basics of good government”.68

67 Major, 129.
68 Ibid., 131.
Several historians of the Panama Canal era agree that the United States intervention was not unwarranted or unduly overbearing, ascribing Panamanian budgetary and fiscal operations as being conducted with “thriftlessness”. Panama, by the 1920s - even after close United States supervision - had pledged all its creditable revenues towards accumulated public debt and it had no borrowing capacity left.69 Noel Maurer and Carlos Yu, critics of much of the way the United States went about the purchase, construction, and administration of the Panama Canal, argue that in terms of financial controls, “American worries about Panamanian financial prudence proved to be well founded.” Maurer and Yu detail several extremely poor financial practices of the Panamanian government, including that Panama, despite the United States’ watchful eyes, had balanced their day-to-day short-term expenses with a long-term capital loan meant for public works.70

In terms of modern liberal Western values, these accounting “sins” were just that – moral and cultural sins of and against the public. MacArthur Fellow, and distinguished historian Jacob Soll, in his *The Reckoning: Financial Accountability and the Rise and Fall of Nations*, tracks the historical development of accounting in the West, but also how it became to be tied in as a part of the mores and values of the West.71 Soll’s thesis is that well executed and transparent public accounting is the very foundation to political stability,72 and, “capitalism and government, it seems, have flourished without massive crises only during distinct and even limited periods of time when financial accountability

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69 Ibid., 133, 146.
70 Maurer and Yo, 203-204.
72 Ibid., xvi.
functions.”73 Also, within the modern liberal West, good public financial management was a foundation stone to sustaining a virtuous and individual liberties protecting government.74 Any further investigation of Soll’s thesis is outside the scope of this study, but we can take his historical account and evidence to back a claim that the United States fiscal conditionality related to the original Panama Canal, and the similar fiscal and budgetary conditions placed on the expansion project, reflect more than a necessity of continued financial portfolio management, but a reflection of Western universal values placed on the trust and morality of well-stewarded public and private fiscal management.

Conclusions

Any comparison study between only two case studies out of a countless amount of infrastructure projects led and developed over one hundred years by the equally broad definition of “the West” can make no claims to scientific proofs. This paper thus does not claim a proof of its stated hypothesis that the Western paradigm of infrastructure development evolved over time as a generally proved rule, but it does provide one specific case where it did evolve. The original Panama Canal construction and its expansion project were selected because they controlled the study to one actual piece of infrastructure – the canal, with an effort being led by organizations generally accepted to be part of the Western infrastructure development paradigm – the United States government, the World Bank, and derivative Western multilateral development banks.

73 Ibid., xii.
74 Ibid., 113. Soll’s discusses how “Cato’s Letters”, a famous attack against the Walpole government in Britain from the 1700s, “equated political liberty and virtue with public accounting.”
This specific comparison brought out two conclusions that can be further studied and refined. The first conclusion is that this study can be used to further the Stanford Global Project group’s research comparing the Western and Eastern paradigms of infrastructure development. The Stanford group has conceded that the Western paradigm has had a much longer time to develop and thus could simply be at a further stage of progression in process and operations than the Eastern paradigm. At least in the example of the Panama Canal projects, there was an evolution to how these projects were done within the Western paradigm. The evolution from zero social and environmental safeguard conditions placed on the original project, compared to the vast and detailed social and environmental conditions placed on the expansion project, showcase a major evolution in Western infrastructure development. And thus perhaps many of the differences between the Western and Eastern paradigms is a matter of the East being at an earlier stage in its progression towards a slower but more modern and higher quality infrastructure development that takes fiscal, social, and environmental safeguards seriously. This topic requires further investigation into potential cultural and civilizational differences between the West and East, as only briefly hinted at in this paper’s literature review.

The second conclusion is that despite many of the variables of the Western paradigm evolving, at least in the case of the two Panama Canal projects, one variable stayed static – fiscally prudent conditionality. Both projects had similar conditions or de jure conditionality placed on the Panamanian government to run a transparent and fiscally sound public budget. As this paper has concluded, this is not out of the simple necessity of ongoing portfolio management of a bank making a loan, but from Western universally-
believed and morally held values that sound and transparent public fiscal management is the foundation to a stable and virtuous government.

The second part to this paper’s research will study the Eastern paradigm of infrastructure development more closely. An aspect of the Eastern paradigm is that there is no intervention or conditionals placed on countries where the financing and development of infrastructure is being done. Is this lack of conditions a static variable of the Eastern paradigm or are certain conditions starting to come forth in a progressive maturation of their process further developing a hypothesis of historically evolving paradigms? Or are there specific static and time-tested variables – like the West’s fiscally prudent conditionality – that reveal true cultural and civilizational differences in the paradigms?
CHAPTER TWO

Grand Conditions: The Eastern Infrastructure Development Paradigm in Panama

Introduction

There is growing competition between Western and Eastern models of foreign infrastructure development. The prevailing literature presents the Eastern (Chinese-led) approach as becoming a more viable choice for many developing countries because the Chinese complete projects more quickly and do not impose conditions on their investment. Many developing countries view the conditions the West places on aid and infrastructure investment to be onerous and intrusive. The lack of policy conditions is often cited as very influential in choosing to receive Chinese aid and investment.

The research question for this paper asks: Does the Eastern foreign infrastructure development paradigm really ask for no policy conditions in exchange for infrastructure development? The recent scholarship of Benn Steil reviewing the history of the policy conditions placed on European nations by the United States during the years of aid provided by the Marshall Plan will be a frame of inspiration for challenging the very nature, implementation, and effectiveness of policy conditions placed on foreign aid. A case study focusing on the recent commitments from the Chinese to develop port and additional infrastructure improvements along the Panama Canal in Panama will support the hypothesis put forward that: The Chinese do, contrary to literature, impose policy conditions; at least one grand condition – demanding the withdrawal of diplomatic recognition of Taiwan – before making major infrastructure investment commitments into a foreign country.
Literature Review

Introduction

Because of the rapid advance of Chinese domestic and international infrastructure development in the past two decades, there is a significant amount of literature investigating at least facets of the Eastern paradigm of infrastructure development, as well as comparing the newer Eastern paradigm to the, until recently, dominant Western methods. As the literature on the Western paradigm has been reviewed in the previous research section, this paper will focus on the Eastern paradigm.

Most of the literature holds a consensus view that the Chinese do not impose conditionality on their aid and, more specifically, on their infrastructure development loans; that’s in contrast to Western aid, which often requires significant policy reforms.

Several facets of the Eastern paradigm will be detailed further below.

Decision-making and Delivery

An extensive recent Oxford University study confirms that Chinese infrastructure projects are delivered quickly, on time or ahead of schedule. The incentive for speed of delivery, though, makes large cost overruns prevalent.\textsuperscript{75} In addition, several scholars of decision-making theory conclude that if the Chinese become more cautious with large projects, this could also slow or delay decision-making considerably in the future.\textsuperscript{76}


Social and Environmental Safeguards

Scholars agree that bilateral Chinese infrastructure development aligns with Stanford’s Eastern paradigm of lower environmental and social safeguards, but some highlight that China’s recently founded Asian Infrastructure Investment Bank (AIIB) – a multilateral infrastructure lending agency essentially modeled to compete with the World Bank – does follow more traditional standards and safeguards of the Western paradigm, while others say the AIIB has a very long way to go to get even close to Western standards. Scholars of China’s role in infrastructure development in Latin America highlight that because China only really started incorporating social and environmental safeguards into its official policies less than a decade ago, it has made a great deal of progress, even if their standards are not yet to Western standards. A further investigation of the AIIB will be made in the following chapter.

Construction Quality

Howard French details the cheapness of Chinese infrastructure development in Africa in his book, China’s Second Continent. He emphasizes that, with all the infrastructure Africa needs, even China’s vast and large lending isn’t enough, so the funds are stretched too thin over too many projects. Despite the low quality of product cited by French and also supported by the Stanford project’s definition of the Eastern infrastructure development paradigm, some of the additional literature reviewed shows

potential progress in China’s infrastructure development methods. This makes some sense as the methods of infrastructure construction are not a matter so much of culture or ideology, but of engineering practice and technique. The sticking point, which is a matter of culture and politics, is the belief in, and the nature of, policy conditionality.

Policy Conditionality

The Eastern infrastructure development paradigm’s overriding trend of lax standards and non-conditionality can be summarized under the broader international development paradigm of the “Beijing Consensus.” In opposition to the “Washington Consensus” of international aid and infrastructure development being tied to neo-liberal, free-market, environmentally safeguarded, and individual rights-focused conditions on funding, the Beijing Consensus has two guiding principles: a large state role in development and non-interference in a nation-state’s governance or broader economic system.81

The broad consensus is that China does not make policy conditions as part of its aid or, more specifically, as part of its loans for infrastructure development.82 Yet many scholars hedge this statement by saying essentially, “China does not place conditions, _but…_” Several scholars and reports confirm the paradigm of no conditionality, but that China does tie its loans to a condition of having to use Chinese firms and Chinese materials.83 One report quotes an foreign official as stating, “They (China) want de facto

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81 Cohn, _Global Political Economy_, 369.
total control over everything (in regards to a project).” Even more important and fascinating for this study is that one important factor that China has made as a condition for receiving its aid and infrastructure development loans is that the country receiving the loans must no longer recognize Taiwan diplomatically and must adhere to the One China Policy, meaning only recognizing the mainland People’s Republic of China as the sole sovereign Chinese nation in the world sphere. How can this not be considered a policy condition? Just because the Chinese do not require reform policies like the West does not mean China is not imposing conditions in the more ancient and blunt style of power politics.

The Beijing Consensus is specifically in opposition to the West interfering with other nation’s cultures and self-determination in the name of universally held values – “what is universalism to the West is imperialism to the rest.” But Samuel Huntington wrote in his Clash of Civilizations that China and Asia – the East – believe they, too, have universal beliefs, and they believe that many if not all of those beliefs are better and more applicable than the West’s. Huntington lays out four major components of the “Asian affirmation,” where Asia has become more confident on the world stage. The fourth and last component is the Asian belief in its own worldly universal principles. Huntington summarizes that “powerful societies are universalistic; weak societies are particularistic. The mounting self-confidence of East Asia has given rise to an emerging Asian universalism comparable to that which has been characteristic of the West.” Or as Martin Wolf, commenting on the rise of China, said, “Like all great powers before it,
China will surely wish to arrange the global order and the behavior of other states (and private organizations, too) to its liking.”

Literature Review Conclusion

Two main themes come out of the literature on the Eastern infrastructure development paradigm. Some aspects of the paradigm are more than likely a snapshot in time of a progressing and evolutionary process. A common complaint against Chinese infrastructure development is that it does not follow social or environmental safeguards, but this seems to be partially evolving toward at least somewhat more stringent requirements, potentially with the new Chinese-led Asian Infrastructure Investment Bank. The evolutionary nature of Western infrastructure development was investigated in a previous thesis paper, and it does at least provide one example by comparing the original Western construction of the Panama Canal, completed in 1914, with the canal’s major expansion in 2016. Over these 100 years, many aspects of the Western infrastructure development paradigm did evolve, and frankly, the American-led effort in 1914 was similar to the Chinese-led infrastructure efforts of today. But one aspect in the Western paradigm that was constant, at least as shown in the Panama Canal case studies, was policy conditionality. The Americans placed policy conditions on the Panamanians from the start.

This policy conditionality merits further investigation, and the consensus in the literature merits challenge. As part of the literature review, a question has already been asked about the nature of the Eastern or Chinese paradigm of requiring no policy

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conditions. Requiring one sovereign nation to no longer recognize another sovereign nation in exchange for infrastructure development seems to be a very significant policy condition. Panama provides a case study to show where the growing Chinese expertise and capacity for infrastructure development was not deployed or offered to nation-states until that nation-state no longer officially and diplomatically recognized Taiwan. A brief benchmark study of the Marshall Plan’s policy conditions will also be used to show what is perhaps a lesson learned by the Chinese on policy conditionality that was seemingly not learned by the West despite the Marshall Plan’s Western orientation and its being used frequently, and often wrongly, as an analogy for all development funding and major development plans.

**Methodology**

This paper will test the Eastern Paradigm of Infrastructure Development – established by both the consensus literature as well as the Stanford Global Projects research team – by way of a recent historical case study. The case study will examine Panamanian foreign policy and statecraft in relation to its being a recipient of Chinese infrastructure investment and development. Choosing Panama for this paper acts as a type of control – as limited as one can be in terms of strict social science research – as it was also the same country studied in the previous section that focused on the evolution of the Western Paradigm of Infrastructure Development. That paper examined the original construction and then expansion of the Panama Canal.

The second reason for focusing on Panama was—as the great historian and geopolitical strategist Alfred Thayer Mahan, writing approximately a quarter of a century
before the building of the Panama Canal, prophetically stated—in terms of American foreign policy, once a canal was built, “it will not be so easy as heretofore to stand aloof from international complications.”89 And once the Panama Canal was built by the Americans, it did become, as Mahan predicted, one of the “great highways of the world,” rather than a “terminus.”90 But now, instead of American statesmen like Teddy Roosevelt reading Mahan, it is Chinese infrastructure experts.91 The Chinese are now more Mahanian than the Americans.92 Panama presents a rather good case study and hinge point in the transitioning of foreign powers strategizing and executing on major infrastructure to attempt to control and influence geopolitics.

Panama 2017: A Case Study

The opening of the newly expanded Panama Canal in 2016 was a tremendous achievement for Panama. The Panama Canal for years was essentially a protectorate of the United States since its original opening in 1914 until 1999. Over 100 years later, an extra-governmental unit, the Panama Canal Authority, was in control of canal operations, and the territory surrounding the Canal was governed and united with the rest of country. This time the Canal expansion was very much a Panamanian project.

It was also still a project of the West. The Canal expansion was financed and procured by Western multi-lateral development agencies including the World Bank and European Investment Bank. With a Western-led project came many of the safeguards –

both social and environmental – that have become standards of infrastructure development. Years of planning and several delays in construction – also becoming “standards” of Western infrastructure development – made the opening of the expanded canal even more of an achievement. Mega-projects – considered to be extraordinary physical infrastructure projects like the Panama Canal and its expansion – many consider synonymous, at least in the Western world, for delay and cost overruns. The West and its paradigm of infrastructure development, from the financing organizations to the delays in delivery, was well represented.

This mega project’s opening was also being observed by what could be referred to as a relic of the Western order, still attached to Panama by its deep ties and founding to the West and the United States, but left behind by the West years ago. This relic was Tsai Ing-wen, President of Taiwan, or officially the Republic of China. When the Panama Canal opened in 2016, Taiwan and Panama were still diplomatic allies, with Panama recognizing Taiwan as an independent nation. Ms. Tsai, unlike other recent leaders of Taiwan, had refused to recognize a “One China” policy at her inauguration earlier in 2016. This policy is one in which the Republic of China and mainland China, or the People’s Republic of China, recognize some sense of common identity and nationhood. She was thus at the Panama Canal expansion’s opening to reassure and maintain alliances in Central America. Yet what she observed was not just an opening of a physically larger canal passageway, but also the opening to the larger commercial and geo-political

influence of the People’s Republic of China. The impetus to the expansion of the canal was to accommodate the much larger cargo ships dominated by China’s international trade and shipping concerns. The very first ship to make its way through the expanded canal, the one Ms. Tsai observed on her state visit, was a Chinese ship, not an American, nor Dutch, nor Taiwanese ship. The expansion of the Panama Canal might be seen historically as one of the last signs of an aging Western-dominated world, and the beginning of the Eastern alternative, and its corresponding Eastern paradigm of infrastructure development. The case study to follow will first briefly outline Taiwanese diplomatic history, and then pick up the story from the opening of the Canal in Panama into the next year, 2017.

Taiwanese Diplomatic History

The Chinese Civil War between the Republicans and Communists split the country in two after the Republicans lost in 1949. The remnants of the Republican forces fled to Taiwan, and the Communists then ruled mainland China. For the next two decades, the West, led by the United States and heeding the concerns of the anti-Communist stance of the Cold War, recognized the Republican Taiwan as the “true” China. But, starting in the 1970s, mainland China began to win diplomatic recognition in the West and most of the developed world. Taiwan and China throughout these times competed in a form of “dollar diplomacy,” investing aid only to countries that recognized

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95 Herein the People’s Republic of China will be referred to as China, and the Republic of China will be herein referred to as Taiwan.
96 Horton.
them diplomatically as the true China.⁹⁷ China and Taiwan called a truce to this type of competitive aid in 2008 to improve relations between themselves.⁹⁸ It was not until Ms. Tsai’s election, and her stance against the more friendly ties of recognition of Taiwan and China as at least heading in the direction of “One China,” that China began to compete again in the great Chinese game of diplomatic recognition.⁹⁹

Restatement of Hypothesis

In 2017, a year after the Panama Canal’s opening, one where Ms. Tsai, representing Taiwan, watched in recognition of a great accomplishment by Taiwan’s most important remaining ally, Panama officially cut diplomatic ties with Taiwan in recognition of China. Immediately, China’s Landbridge firm officially announced a major billion-dollar port investment tied in with the Panama Canal. It is this paper’s hypothesis that, despite their being no formally transparent record of the trade-off between nations, the diplomatic recognition of China and the Chinese infrastructure investment announced simultaneously in June 2017 were not mere coincidence. China does in fact link its foreign infrastructure investment to at least one grand condition. That policy condition is the formal recognition of China as the one official China and to cut ties diplomatically with Taiwan.

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⁹⁸ Ibid.
⁹⁹ Horton.
The Landbridge Firm’s Investment, Its Ties to Chinese Government, and a Project Timeline

Unlike infrastructure investment deals in the West, and especially those led by Western multi-lateral development banks such as the World Bank, many Chinese investments are kept secretive, so this paper’s proposed hypothesis is hypothetical. If there were a clearly laid development agreement open to be read then there would be no need to piece together a case study to support a hypothesis at all.100

A representative firm of the Eastern Paradigm of Infrastructure Development is Landbridge. Landbridge works officially as a private Chinese infrastructure development firm; but the management of the firm is “directly tied to the Chinese government, making it a stepping stone toward diplomatic ties” between countries in which the firm invests.101 So, unlike private firms in the West, that at most might have loose ties with diplomatic offices in terms of general encouragement of investment and transparency, Landbridge can be thought of as an extension of the Chinese government. Landbridge actually invested first in Panama in 2016, before official ties had been cut with Taiwan.102 Other Chinese firms had invested in Panama as well, yet Landbridge’s 2016 buying of the Margarita port facility, the largest in Panama, was at a different and more expansive size.

If Landbridge had already purchased the largest Panamanian port, how can there be evidence of infrastructure investment being tied to the condition of diplomatic

100 Chinese lack of transparency is at the very nature of the definition of the Eastern Paradigm of Infrastructure Development but for a good counter-case of where a deal was actually opened to transparency, a rarity for China, see Graham Bowley, “Cash Helped China Win Costa Rica’s Recognition,” *The New York Times* September 12, 2008.
recognition? The port facility was acquired for $900 million by the Chinese Landbridge company, and it can be said that acquisition itself is not an investment, as it is simply a purchase rather than an improvement of the facilities. What happened then in 2017, within the same time of a week or so, if not exactly the same day, was the announcement of a $1 billion improvement of the Margarita port facilities.\footnote{\textit{Chinese firm starts work on $1bn Panamanian megaport},” \textit{Global Construction Review} June 12, 2017, retrieved August 4, 2018 \url{http://www.globalconstructionreview.com/news/chinese-firm-starts-w7rk-1bn-panama7nian-meg7aport/}} In official recognition, Juan Carlos Varela, the President of Panama, laid the first stone of the port, “commenting that the port was the most important Chinese investment in Panama so far.”\footnote{Ibid.} Despite the lack of transparent evidence, many suspect that Panama’s decision to drop Taiwan for China diplomatically is linked to Margarita infrastructure investment,\footnote{Krishnadev Calamur, “Panama’s Decision to Cut Ties With Taiwan,” \textit{The Atlantic} June 13, 2017.} as well as the now many further infrastructure investments being developed between the two countries.

Since Panama officially recognized China and cut ties with Taiwan in 2017, China has further marked infrastructure commitments, such as starting a feasibility study for a $5.5 billion railway linking Panama to Costa Rica as well as Panama becoming recognized as the first country in the Americas to be part of China’s global infrastructure master plan, the Belt and Road Initiative.\footnote{Jorge Heine, “Chinese inroads in Panama: Transport hubs and BRI in the Americas,” \textit{Global Americans}, June 26, 2018, retrieved on \url{https://theglobalamericans.org/2018/06/chinese-inroads-in-panama-transport-hubs-and-bri-in-the-americas/}.} Similar commitments in infrastructure investment had been made in Nigeria earlier in 2017, with a more explicit statement by the Nigerian government that the infrastructure investment from China was predicated on Nigeria’s
continued recognition of China diplomatically as the one true China.\textsuperscript{107} In the words of Nigeria’s President Muhammadu Buhari:

This administration is very serious about infrastructural development. We want rail, road, power, skill acquisition for our people. We ought to have developed beyond this point, but we neglected infrastructure when we had the resources. Now, we have to collaborate with you, and we will keep our side of the bargain in all the agreements we have signed.\textsuperscript{108}

The main bargain was made clear that same day as it was announced by Nigeria’s foreign ministry that Nigeria had withdrawn all recognition diplomatically with Taiwan.\textsuperscript{109} Despite no clear evidence, all indications point to deals being made: Recent major Chinese foreign infrastructure developments are announced in conjunction with the recipient country withdrawing diplomatic recognition of Taiwan.

\textit{Eastern Paradigm of Infrastructure Development}

The Chinese Margarita Port investment in Panama is too early in its stages to investigate the consensus literature’s definition of the Eastern paradigm of infrastructure development, but one aspect is already clearly aligned. The decision to invest was made quite quickly after the initial purchase of the port. One year’s time to make a $1 billion investment is very fast in comparison to Western standards. Yet one aspect of the Eastern Paradigm does not align and that is the previously mentioned hypothesis regarding


\textsuperscript{108} Ibid.

\textsuperscript{109} Ibid.
conditionality. It is proposed that the Margarita Port’s mega-project investment was predicated on Panama cutting diplomatic ties with Taiwan. This flies against the existing literature’s consensus that China does not impose conditions on its infrastructure investments. Perhaps these are not the types of Western democratic conditions of transparency, puritan budgetary reforms, and social and environmental safeguards, but compelling a foreign country to change a long-standing foreign policy of allegiance is an older and more traditional condition of power politics.

The Marshall Plan Comparison

Chinese officials have compared their Belt and Road Initiative (BRI)\textsuperscript{110} to the Marshall Plan of 1947, America’s large infrastructure and market investment to assist Europe’s redevelopment after the devastation of World War II.\textsuperscript{111} Too many times, the Marshall Plan is used ubiquitously as the analogy for any major foreign-aid investment scheme. Yet in this case, there might be at least one reason to believe the Chinese have truly studied and learned from the Marshall Plan – perhaps more than the West. A majority of scholarly studies shows the ineffectiveness of policy conditions placed on foreign aid including infrastructure development aid.\textsuperscript{112} Yet as Benn Steil tells in his recent history, “one of the great challenges in replicating the Marshall Plan, is making conditionality effective – getting beneficial policy reforms in return for aid,” because even with highly competent and developed countries with well-established state

\textsuperscript{110} Previously in this paper, it was highlighted that Panama was recognized as the first country in the Americas to be a Belt and Road Initiative partner nation with China.
\textsuperscript{111} “Briefing: China’s Belt and Road Initiative – Gateway to the globe,” \textit{The Economist} July 28 – August 3, 2018.
\textsuperscript{112} Woods, \textit{The Globalizers: The IMF, the World Bank and Their Borrowers}, 70-71.
bureaucracies and shared cultural norms and mores, countries can get away with ignoring many intricate policy conditions.\textsuperscript{113} But the Marshall Plan made just one or two of the grandest conditions – German reindustrialization and anti-Communism. As Steil explains,

> Beneficiaries (of aid), however, can distinguish between donor priorities and more preferences, and have their own red lines. The Ramadier, Schuman, Queuille, and Bidault governments in postwar France understood that the Americans would not concede on German reindustrialization or exclusion of the Communists from their coalitions. They therefore adapted to them, even taking control of the integration process… But they understood as well that they were largely free to ignore American demands on domestic economic policy.\textsuperscript{114}

If scholarly literature has shown the ineffectiveness many times of policy conditions, and the Marshall Plan has shown that many of the recipient countries didn’t pay attention to finer American domestic economic reform conditions, why would a country repeat those same mistakes in their foreign development scheme? Why not learn the lesson of settling on one or two grand conditions and leaving the rest to a rhetorical policy of respecting sovereign policy prerogatives of recipient countries otherwise? As the anti-Communist conditionality placed on American investment was to the Marshall Plan, so is the diplomatic withdrawal of support from Taiwan is to the Chinese Paradigm of Infrastructure Development.


\textsuperscript{114} Ibid., 374.
Eastern Challenges to the Western Order

Why is a transition from Western to Eastern Paradigm as the dominant infrastructure development model important? Simply put, infrastructure connects and opens the world. But for those who control them, these connections and openings can be closed, or more lucratively, controlled by way of tolling, tariffs, and agreements. There is also a mercantilist concern that, as the East continues to rise in dominance in infrastructure development, then the number of firms and expertise able to bid and execute on large infrastructure improvements in the West will lag and atrophy. These challenges are able to be remedied by the West quite obviously by maintaining current infrastructure assets as well as understanding that infrastructure development is not a zero-sum game. There is such a large need for infrastructure development that the West can continue to present itself as a viable alternative in development to the East.

The bigger concern is regime influence. This paper focuses on the conditionality placed on infrastructure investment on foreign recipient nations. A consensus in the literature and in on-the-ground interviews\textsuperscript{115} agrees that Western infrastructure aid places an inordinate amount of conditions on its use of infrastructure funding. Not only are the conditions excessive in number, but they are also cumbersome in their execution and compliance. This leads to the other consensus that, in contrast, the Eastern Paradigm has no conditions attached. This paper claims the Chinese do impose policy conditions, but they are simpler, grander, and more traditional in the nature of power politics. If the Chinese exchange infrastructure development for gaining diplomatic recognition, as well as in exchange for the recipient nation cutting ties with Taiwan, this is a policy condition.

\textsuperscript{115} For just one example, see the comments of Mr. Than Swe in “Briefing: China’s Belt and Road Initiative,” \textit{The Economist}, July 28 – August 3, 2018.
And so the lure and appeal of “no strings attached” infrastructure investment from the East can win over nations looking for a less cumbersome investment policy than those imposed by Western institutions, while still falling under a large policy condition, as well as potentially ceding control over the very connective physical infrastructure “tissue” of their nation.

Now that most nations in the world recognize China over Taiwan, will the Chinese impose additional conditions on further infrastructure investment? Further, and even more fundamentally, if more recipient nations continue to view the Eastern Paradigm as a viable and even preferable alternative, what does this say about something more philosophic – what is the best regime? If it is viewed that assuming potentially autocratic elements of a regime in exchange for a more efficient and less cumbersome infrastructure investment, how does this influence regimes across the world? The world is in need of infrastructure. Potentially the comforts and well-developed infrastructure of the West – despite its need of continued repair and maintenance – might influence our thought on the desperate need of infrastructure development in other parts of the world.

At one time, many Americans at least might have understood this, but perhaps it has been too long since those days when one couldn’t sell grain at the market because of getting a truck stuck in the mud, or a woman’s back was permanently bent by an early age from having to carry water from the stream back to her homestead. But with China’s rapid development, the Chinese have in one or two generations felt both the misery of the lack of infrastructure and the joys and expertise of building modern megaprojects. Tom Lewis, in his excellent *Divided Highways* history of the building of the United
States Interstate Highway System, recalls the leadership of Thomas MacDonald, the head of federal highway building for decades leading up to the Interstate Highway System, Given the size and efficiency of his highway machine, it was no wonder MacDonald felt it was his destiny to lead America to highway greatness. “There have been just three great programs of highway building within recorded history,” he told the annual meeting of the American Association of State Highway Officials in 1926, “that of the Roman Empire, beginning with Julius Caesar and extending to Constantine; that of France under the Emperor Napoleon; that of the United States during the last decade.” The first two, he noted, were conducted under the rule of despots. Only the United States had produced a comprehensive system under democratic rule.116

It can now be said that the fourth great builder of highways, but also infrastructure in general, is the Chinese. Will the West wrestle with its democratic nature enough to reclaim its ability to build and execute great projects of the public good?117 Or will the democracies of the West be an aberration in the history of infrastructure development dominated by autocracy and despotism?

117 Perhaps no better place to start thinking about infrastructure in a democracy, as well as be cautioned by its development, is with Alexis de Tocqueville: “In proportion as the nation becomes more industrial, it feels a greater need for roads, canals, ports, and other works of semipublic nature that facilitate the acquisition of wealth, and in proportion as it is more democratic, particular persons experience more difficulty in executing such works and the state has more facility in performing them. I do not fear to assert that the manifest tendency of all sovereigns of our time is to take sole charge themselves of the execution of such undertakings; through that they draw populations more tightly each day into a stricter dependence.” –Tocqueville Democracy in America, 657.
Conclusion

The Panamanian case study shows that China most likely does impose conditions on receipt of its infrastructure development aid, contrary to established literature on the subject. Plus, despite the evolutionary process of the Western Paradigm of Infrastructure Development established in the first paper, it was demonstrated that the American and Western desire to reform foreign government by way of policy conditions was a constant over a 100-year period between the original opening of the Panama Canal and its major expansion. But conditionality is not confined to infrastructure development aid and can be tied to all types of aid. The final paper of this thesis will be devoted to a more philosophical exploration of why infrastructure is a development tool. Is there something unique, apart from the fungible aspects of policy conditionality, to infrastructure development that makes this an important focus for Chinese foreign development aid?
CHAPTER THREE

Infrastructure Statecraft: The Formation of the Asian Infrastructure Development Bank and China’s Geoeconomic Strategy

Introduction and Outline

This paper will attempt to create an analytical framework to analyze the economic and political potential and strategy of the Asian Infrastructure Investment Bank (AIIB). Most importantly, the question of why, with the amount of international lending already being done by the various Chinese policy banks, as well as the long track record and large portfolio of lending being done by the Western multilateral development bank, did China develop a new multilateral development bank?

The framework will first use development economist Dani Rodrik’s article Why Is There Multilateral Lending?, which establishes one of the best theoretical and empirical cases for the rational advantages of a multilateral development bank. Rodrik distills the only reasons for multilateral development bank lending as: an information provider and monitor of a public good – country-by-country professional and in-depth investment and economic analysis; and, as an exerciser of policy conditionality on borrowing nations. Rodrik explains that neither of these rational advantages of multilateral lending - information and conditionality – “has much to do with lending per se.” But the lending of capital acts as a means to trigger and incentivize information gathering and the placing of policy conditions.

A brief interlude will follow, that takes a look at specific AIIB policies, procedures, and the vision of its founding President Jin Liqun. We’ll first assume to take
the vision and intentions of the AIIB “at their word” before jumping to any of the perceived criticisms. Doing that will then make us ask: if other multilateral development banks, most specifically the World Bank, already collects and provides economic and financial information as a public good to the rest of the world, and the AIIB specifically states that it will not intervene by way of traditional western conditionality, why did China develop the AIIB? And why does the AIIB exclusively lend for infrastructure?

If neither of Rodrik’s advantages of multilateral lending are being provided by the AIIB, are there other reasons for the Chinese setting up a new multilateral development bank? This paper will investigate this question via the framework of the concept of “economic statecraft” specifically relying on David Baldwin’s seminal study of the same name, as well as several recent updates, including Robert D. Blackwill and Jennifer M. Harris’s War by Other Means: Geoeconomics and Statecraft. Through this framework of economic statecraft, and being influenced by Benn Steil and Robert Litan’s subset study of economic statecraft titled Financial Statecraft, this paper will investigate if there is a worthwhile reason to add to our analytical framework a concept of “infrastructure statecraft.”

**Multilateral Development Bank’s Comparative Advantages**

By the mid-1990s private markets had become more fully developed for international investment than had been contemplated by the founders of the World Bank and the IMF at Bretton Woods. Literature at the time reflects the “all the rage attitude” for investment in foreign infrastructure and other sectors with cautionary history lessons

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from the likes of the Harvard Business Review with a headline, “Is Foreign Infrastructure Investment Still Risky?” In this context the esteemed development economist Dani Rodrik wrote several journal articles (one co-written by Michael Gavin) investigating whether there was still a need for multilateral development lending to foreign developing countries. Rodrik begins by asking, “Why should multilateral lending exist in a world where private capital markets are well developed and governments have their own bilateral aid programs? If lending by the World Bank, IMF, and regional development banks has an independent rationale, it must rest on advantages generated by the multilateral nature of these institutions.” The initial justification for the World Bank’s international infrastructure lending was that there were “special risks” attached to foreign investment and the World Bank could provide needed capital where there was too much risk for private investment. But by the time of Rodrik’s piece, the foreign investment markets had matured much further than before and Rodrik doubted the logic that a public multilateral bank was needed to invest where the private sector thought too risky, yet the public loans would take first position collateral over all other investments - essentially pushing all private investment into riskier collateral, and creating a self-fulfilling prophesy.

With a better developed international market for investing in “bankable” projects and supplying at least some of the needed capital, there was no longer as much

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121 Rodrik, abstract.
122 Ibid., 1.
123 Gavin and Rodrik, 331.
justification for the World Bank in terms of supplying capital for investment projects. But private markets do not seek humanitarian projects or considerations usually in investing, and thus there is a need still for public or philanthropic investment. But Rodrik asks why this can’t simply be handled by bilateral assistance from one single government’s aid agency? He reasons, “it is not clear that the presence of multilateral institutions would necessarily increase the aggregate flow of humanitarian assistance as concessional flows from multilateral sources is financed by the same donor governments. Once again, we have to ask what additional role there is for multilateral agencies to perform.”

Rodrik proposes that it must be in the “nature” of the multilateral arrangement in itself that provides its advantages. The two advantages he proposes are an informational provision and policy conditionality. By information Rodrik means that multilateral institutions collect broad economic and financial information that is a public good; this is the kind of broad based information private firms would not have the incentives to research on their own nor if for some reason they did do this research, they would not share it with other firms. The incentive to share information across nations is also more likely by way of multilateral institutions by the nature of their broad based membership amongst nations. Rodrik concedes that just because the World Bank gathers, analyzes, and provides information doesn’t mean that it is either better than private information gathering, or was what the World Bank originally set out to do, but it is a rational advantage.

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124 Rodrik, 2.
125 Ibid.
126 Ibid., 8.
127 Ibid., 10-11.
The second advantage is policy conditionality. Conditionality is “specifically directed at changing government policies.”\textsuperscript{128} There is a tremendous amount to be said about the need and the effectiveness of placing policy conditions on loans. But for our immediate purposes we’ll focus on Rodrik’s question of, “why policy conditionality has become nowadays an almost exclusively multilateral affair?”\textsuperscript{129} Policy conditionality attached to lending used to be something applied by bilateral aid or on an ad hoc basis, and as Rodrik explains further along, even occasionally by private creditors.\textsuperscript{130} Rodrik explains that since the Bretton Woods era began “national sovereignty is highly prized and zealously guarded” and bilateral nation-on-nation conditionality is no longer politically acceptable. But with a multilateral lender, nations taking on debt and attached conditionality are also very likely members of that multilateral lender. This makes the extra-national, or international group’s conditionality more acceptable than nation-on-nation perceived coercion. Even with the powerful developed countries having the most votes and largest equity investments into the multilateral development banks, they can be at least viewed as having an arm’s length and technocratic relationship rather than being explicitly political.\textsuperscript{131} Although this technocratic and non-political nature of multilateral development banks should be questioned, Rodrik is attempting to formulate a rationale in which these institutions could have a logical advantage.

Rodrik makes clear that neither advantages: information gathering nor conditionality, need lending “per se”, but the desire to receive and keep receiving loans makes countries more likely to open up their books and also accept – if not ultimately

\textsuperscript{128} Ibid., 12.  
\textsuperscript{129} Ibid., 13.  
\textsuperscript{130} Ibid., 13-21.  
\textsuperscript{131} Ibid., 13-14.
perform well on – policy conditions. And so it is within this framework that Rodrik lays out the rationale for multilateral development bank lending. This paper now will evaluate the newly formed Asian Infrastructure Investment Bank in the light of Rodrik’s rationale.

Formation and Purpose of the Asian Infrastructure Investment Bank

The Rhetoric of Jin Liqun

The Asian Infrastructure Investment Bank (AIIB) is the first new major multilateral development bank formed in decades, and because China’s leadership in forming and structuring the bank that gives China – at least currently – veto power in voting, many view it as a direct challenge to the World Bank and the greater western liberal rules-based order. But Jin Liqun, President of the AIIB, and a former Chinese official at the World Bank and Asian Development Bank, has given several interviews to try to quell the thought of the AIIB as a Chinese geoeconomic and geopolitical power grab. In publications such as Bloomberg Markets, and the Financial Times famous “Lunch with the FT” interview column, Liqun, who is known as one of – and still few – Chinese officials truly comfortable with western banking and diplomatic contacts and topics, paints a strong rhetorical picture of an institution inclusive to all nations. He reinforces it is a lean organization that simply brings the efficiencies of private companies to an public international institution. He repeatedly emphasizes efficient and

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132 Ibid., 2.
133 The New Development Bank or “BRICS” Bank is multilateral and was announced in 2013 but can be considered a smaller sub-regional development bank rather than one with as wide of membership as the World Bank or Asian Development Bank.
lean management in comparison to grand titles and bureaucracy as a core difference of
the AIIB from Western led international institutions, but clearer and starker differences
become evident analyzing some of Liqun’s interviews.

First of all, Liqun insists the AIIB will not be political on either side of the ledger
sheet. Despite his disclosure of his affiliation as a member of the Chinese Community
Party, he asks why would the AIIB be dominated by the Communist Party when he has
spent so much time going out and gathering support and membership from across the
world?\textsuperscript{135} His insistence on politics not coming in to the decision-making of its members
is matched by his insistence on not getting involved in the political affairs of countries
receiving AIIB loans.\textsuperscript{136}

Second, Liqun lays out the focus and philosophy of the AIIB. The AIIB believes
physical infrastructure development – as seen in the rapid development internally in
China, as well as other East-Asian nations – is the key to economic development and that
poverty alleviation is a likely and positive spin-off effect from an upgrade in
infrastructure.\textsuperscript{137} There is a common Chinese saying in development policy, “If you want
to develop, build a road.”\textsuperscript{138} Liqun riffs off this phrase several times in interviews
including going through his own developmental self-dialogue covering the questioning of
early Chinese internal infrastructure development, “It’s interesting to note that when
China embarked on a borrowing program, some people thought it was crazy to put
foreign money on top of dirt. Can a road give you your money back? Never heard of it!

\textsuperscript{135} Jamil Anderlini, “Lunch with the FT: Jin Linqun,” The Financial Times (London), April 21, 2016.
\textsuperscript{136} Ibid.
\textsuperscript{137} Ibid.; Brian Bremner and Miao Han, “China’s Answer to the World Bank Wants Green, Clean Asian
\textsuperscript{138} James Kynge, “How the Silk Road plans will be financed,” The Financial Times (London), May 9, 2016.
Years later, people came to understand the huge difference between borrowing to consume and borrowing to invest."139

Third, Liqun insists on the AIIB being devoted to green and sustainable principles. As China has been at odds with global environmental concerns, this claim is directly aimed at the message of the new and international progress the AIIB has taken despite previous Chinese actions.140

Fourth, Liqun leaves no room for anyone to question the eventual ambitions of the AIIB. Despite the AIIB having a very small current lending portfolio, he points to the fact that eventually he wants to see them have the same annual lending volume as the World Bank.141 Liqun’s and China’s ambitions as well as the cultural and civilizational keystone for the AIIB is best summarized when Liqun explains about the building of a much larger permanent headquarters building, “We’re thinking in terms of centuries.”142

**Western Criticisms and Reality**

As much as Liqun tries to quell western criticisms and make the AIIB inoffensive as an all-inclusive international institution, the main philosophical points of Liqun’s rhetoric directly refutes and presents an opposite philosophy than the Western-led multilateral development banks. First of all, it is rather difficult to fully understand the

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139 Bremner and Han.
140 Ibid.; Anderlini.
142 Anderlini.
realities of the AIIB because its public information and transparency is ranked as the worst amongst all multilateral international development banks.¹⁴³

Unlike the Western insistence on policy conditionality being attached to loans, the AIIB insists on non-intervention. Also, unlike the World Bank’s all-inclusive comprehensive development frameworks that insist on multiple solutions and the stated purpose of the alleviation of poverty in the world, the AIIB has no focus on poverty, and is entirely focused on infrastructure development. Most revealing, Liqun’s comment, “We’re thinking in terms of centuries”, flies in the face culturally of the fast-paced and ephemeral world dominated by the United States and West. Whether its De Tocqueville’s observation of the fast paced and temporary ways of early-republic Americans, to the recent revelations of the Trump Administration’s boosting of equity investment into the World Bank, but with the tradeoff understanding that this large boost may be the last capital injection needed to the World Bank, so that it can be self-sustaining without any more need or budgetary intention from Washington D.C.¹⁴⁴, the United States has many times a temporary or limited time schedule for policies and initiatives. It could be envisioned that Americans are constantly flipping over their hourglass making the hours become minutes, whereas the Chinese inherent their hourglass from an ancestor yet to be flipped and with plenty of sand left to fall.

In terms of an all-inclusive membership, as one report on the development of the AIIB says, “The more countries that join the AIIB, the starker the two big absences – of

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the US and Japan – appear."145 The differences of the AIIB to the Western-led multilateral institution hit at the very core of the Western liberal universal value system. As much as Liqun and others try to paint the difference in terms of better management practices and a lean permanent staff, these are merely common management teachings that any corporation or government at least rhetorically claims to adhere to. The true cultural and philosophical differences are the reason the United States so desperately tried to dissuade its long-time allies and fellow upholders of Western values from joining the AIIB. U.S. officials quickly realized the AIIB was “a deliberate attempt to undercut the international financial institutions established after World War II (and dominated since by the United States, Europe, and Japan).”146 Yet despite pleading and pushing by the United States, many of its longest Western allies including Great Britain, Canada, and Australia, as well as countries like Singapore, Germany, Norway, Ireland, and South Korea, have all joined the AIIB making it a seriously diverse multilateral development bank.147 One of the first book length studies on the development of the AIIB states that future historians will look at the creation of the AIIB as a historical event and, “as a reflection of a changed power equation in Asia,” and, “as a catalyst for further strategizing and action for countries involved.”148

As this paper has now investigated the development of the AIIB as the first new major multilateral development bank in decades, and has evaluated the stark differences between the AIIB and Western led institutions like the World Bank, finally it can be

146 Blackwill and Harris, 115.
147 Kynge, “Special Report.”
asked, but how does the AIIB match up to Rodrik’s rationale for multilateral
development lending? This can be quickly accomplished. Rodrik’s rationale – as detailed
above – says a multilateral bank has two advantages, the provision of information as a
public good and the ability to place policy conditions on countries. The AIIB deploys
neither of these advantages. As previously discussed above, the AIIB is currently ranked
worst in terms of information provision and accountability, and the AIIB adheres to non-
interference - meaning no policy conditions placed on its loans. Hence, the first major
multilateral development bank created in decades does not adhere to either of Rodrik’s
rationale for their need in the world, at least one based in the liberal western value
system. This paper must turn to alternative explanations relying on the analytical
framework of economic statecraft to better understand the Asian Infrastructure
Investment Bank.

*The Economic Statecraft Framework*

As two historians of economic statecraft so clearly summarize, “as long as the
world remains divided into sovereign nations, there will always be a need for statecraft –
the means by which governments pursue foreign policy.”¹⁴⁹ The practice of statecraft is
as old as the state itself, and its practice is for most purposes widely researched and
written about. One important formulation by Harold Lasswell divides the practice of
statecraft into four instruments:

1) **Information**: words and propaganda;

2) **Diplomacy**: negotiations and deals;

3) **Force**: weapons and violence;

4) **Economics**: goods and money.\(^{150}\)

The first three of these instruments, and especially diplomacy and force, have been written about extensively, yet scholars of the instrument of economics and economic statecraft, lament its lack of study, focus, and research.\(^{151}\) The seminal study of economic statecraft is David Baldwin’s *Economic Statecraft*. Baldwin uses Laswell’s four instruments of statecraft to begin to hone in on the instrument of economics.\(^{152}\) Economic statecraft historians Been Steil and Robert Litan are helpful in piecing together Baldwin’s definition of economic statecraft as, “economic statecraft encompasses efforts by governments to influence other actors in the international system relying primarily on resources that have “a reasonable semblance of a market price in terms of money.””\(^{153}\) Economic statecraft has recently been refined in definition by Robert Blackwill and Jennifer Harris in *War by Other Means: Geoeconomics and Statecraft*. Blackwill and Harris refining Baldwin’s “economic statecraft” for “geoeconomics” by defining geoeconomics as, “the use of economic instruments to promote and defend national interests, and to produce beneficial geopolitical results; and the effects of other nations’ economic actions on a country’s geopolitical goals.”\(^{154}\) Steil and Litan give a slightly different nuanced definition to economic statecraft but also clearly differentiate between economic statecraft or geoeconomics from foreign economic policy:

- **Economic Statecraft**: uses economic *means* to effect economic or political *ends*;

\(^{150}\) Ibid.

\(^{151}\) Blackwill and Harris, 21.


\(^{153}\) Steil and Litan, 1.

\(^{154}\) Blackwill and Harris, 20.
- Foreign Economic Policy: uses political *means* to effect economic *ends.*

Using these nuances and refinements it can at least be agreed with Baldwin that economic statecraft and geoeconomics “emphasizes means rather than ends.” (Baldwin 39) The means are economic, and the ends are generally geopolitical in nature, but can also be economic from the guidance of Steil and Litan. The literature on economic statecraft list an abundance of means or tools. One tool all of these scholars agree upon is foreign aid, and especially foreign *development* aid. Though the lens and analytical framework of the concept of economic statecraft or geoeconomics, we can now briefly investigate the various geoeconomic reasons for China forming the Asian Infrastructure Investment Bank.

*The Geoeconomics of the Asian Infrastructure Investment Bank*

One geoeconomic reason for the Asian Infrastructure Investment Bank is the role of the international institution itself. First, China was not seeing its role in the Western multilateral development banks expanding to reflect its own first power economic status. Second, China has been influenced and learned from the role Western multilateral development banks can play in the world. This may be viewed from the rhetorically surface level of learning the positives and negatives of economic development strategy by way of the World Bank to implement a better system, but Liqun says China, “came to understand the importance of multilateralism.” Simply learning from the World Bank and IMF to gather and distinguish economic development best

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155 Steil and Litan, 2.
157 Bremner and Han.
practices is slightly different from understanding their “importance”. Perhaps the importance China feels they’ve learned is that multilateral institutions can be a more acceptable and indirect way to extend influence in a world concerned with national sovereignty.  

The second geoeconomic reason for forming the AIIB is that it creates a multilateral institution with many or most of the developed world, including major western powers, that directly refutes key aspects of the post-war rules based international order as previously investigated above. The AIIB does not intervene with policy conditionality tied to its lending and also the Western social norm of world-wide poverty alleviation - the mission of the World Bank - is deliberately left out. A major cultural and potentially civilization geopolitical difference is being established. Here, one important lesson from Rodrik’s rationale can still be salvaged: that although these are cultural and civilizational differences being pushed by the AIIB, they don’t have anything to do with lending, as Rodrik would say, “per se”. It is the fact that they are providing financing capital for much needed infrastructure projects that these differences have the ability to be influential. Here we can retain that geoeconomic means of lending allows for geopolitical influence despite the absence of conditionality.

Several other more short term and internally pragmatic motivations have been assigned to Chinese foreign infrastructure investment in general, and these are: the need for natural resource extraction in foreign countries; and that overland infrastructure like railroads can divert energy shipments and trade from sea lanes – which are still patrolled by the U.S. Navy and other nations. More so externally, there is a need for

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158 Blackwill and Harris, find this to be one geoeconomic reason for the formation of the AIIB, 114.
159 See Blackwill and Harris, 115-116.
infrastructure development in the developing world and Asia. The legitimate need for infrastructure also aligns with how the current Chinese economic development theory that relies prominently on developing physical infrastructure.

Justin Yifu Lin, a previous Chief Economist of the World Bank, has advocated for infrastructure’s role in economic development. Lin has formulated his “new structural economics” where economic development is the process of incrementally moving up the value chain of industry that “entails structural changes, involving industrial upgrading and corresponding improvements in “hard” and “soft” infrastructure at each [incremental] level.” Lin argues that “hard” infrastructure can be a driver of economic development. Agreeing with, or himself influencing, Jin Liqun’s previous comments, Lin believes that Chinese growth came from infrastructure development “releasing bottlenecks” of endowment advantages that lead to growth. Further, Lin advocates for a worldwide infrastructure investment initiative including both the developed and developing worlds. As Lin summarizes, “if carried out properly, a global infrastructure initiative could raise exports and reduce unemployment in high-income countries while reducing poverty and boosting growth in developing countries.” We see in Lin’s economic development “new structural economics” and his advocacy for a worldwide infrastructure program designed at “releasing bottlenecks” an intellectual foundation to some of Jin Liqun’s AIIB rhetoric. But simply to stop investigating there does not exhaust the possible

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163 Ibid., 84.
motives. This paper will conclude by asking, as Rodrik might, what is uniquely advantageous to a multilateral development bank exclusively focused on infrastructure? Or more pointedly from an economic statecraft or geoeconomics view, what is uniquely advantageous for China’s geopolitical ends, by using the economic means of a multilateral development bank exclusively focused on infrastructure?

*Everything Under the Sun*

Howard French, in his book *Everything Under the Heavens: How the Past Helps Shape China’s Push for Global Power*, attempts to shed light on China’s current foreign policy intentions as well as its global infrastructure investment push by investigating how China used its power in the past. Reflecting his book’s title, he focuses on the concept of “tian xia” which in China means being the dominant power over everything under the sun or heavens. French says that in the ancient Chinese empires this was not directly literal, the Chinese were aware of the Roman Empire and other civilizations, yet they were so distant and far away they were, “both politically and economically marginal.” But in the accessible parts of the ancient world of the Chinese, “for the better part of two millennia, the norm for China, from its own perspective, was a natural dominion over everything under heaven.”164 French shows that the ideals of the “tian xia” system are currently being reimagined in Chinese foreign policy by building up smaller nation’s dependency upon China by peaceful means and by demonstrating multi-faceted dominance and success in technology, economy, and military, and it’s long-term outlook and “patient national will” to show overwhelming strength. This signals to other nations surrounding

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China a fatalism and inevitability to Chinese domination.\textsuperscript{165} Henry Kissinger points out that this Chinese domination and expansion is “not by conquest but by osmosis.”\textsuperscript{166}

It is with this lens that the AIIB’s governance structure and infrastructure focus must also be evaluated through. The U.S. was critical of many of its major treaty allies joining the AIIB, especially Great Britain.\textsuperscript{167} Yet we can see here the slow and patient geopolitics of the Chinese through the AIIB gaining major Western developed countries as members even when the AIIB directly refutes Western values. Second, and more importantly for this paper, Chinese infrastructure investment provides an influence that, “tends to be subtle – more often correlation patterns than clear casual arrows. But it is nonetheless real.”\textsuperscript{168} It is with this statement that brings us to the final question of whether there is an opening for a subset of geoeconomics or economic statecraft that might be termed, “infrastructure statecraft”?

**Infrastructure Statecraft – An Idea in Sketch**

Infrastructure, as previously said, can provide “subtle influence”, but over time, and especially as Jin Liqun referred to over “centuries”, this infrastructure could bind together many layers of influence and power. We know from the study of nation-states that physical infrastructure is one of many factors, but a very important one, to unify territory.\textsuperscript{169} The ability to link territories together and have a centralized state be able to

\textsuperscript{165} Ibid., 56.  
\textsuperscript{166} Kissinger, *World Order*, 216.  
\textsuperscript{167} Chow, 1275.  
\textsuperscript{168} Blackwill and Harris, 131.  
reach far off territory and citizens has been referred to as “infrastructure power”.\textsuperscript{170} Many scholars have understood infrastructure to be more than a question of economics and just as much for a national or territorial political mean.\textsuperscript{171} So perhaps another potential motivation for the AIIB’s focus on infrastructure is in a subtle and indirect way by the legitimacy of partnership with many Western developed nations, to expand and advance influence through infrastructure development. Justin Yifu Lin attributes China’s initial stagnation to its ancient bureaucratic ways that would not accept the experimental nature and testing of the scientific revolution.\textsuperscript{172} Yet now China has full grasp of the scientific and technological process and deployment of infrastructure mega-project development. These modern and scientific tools are now being deployed to link and bind even the areas of the ancient Roman Empire – the once marginal and far off Europe – to the Chinese state.\textsuperscript{173} They might very well rank as the best at this now that the West has in many ways ceded this ground due to the social, environmental, and budgetary risks associated with such projects. So as the modern-state is even more systemically linked through physical infrastructure and deploying modern science and technology, the modern scientific Chinese state expands and slowly ties many nations under its influence by way of infrastructure development. Yet here again, as has dangerously happened before since the advent of the modern scientific world, science and technology are not beholden and

linked like at the height of the Enlightenment to western liberal values of human rights, political representation, etc.

The final hypothetical answer is that for the Chinese, infrastructure is one of their best ways of showing their regime’s superiority in contrast to the West. Infrastructure development is a great collective action that disturbs lives, terrain, and the natural environment. It relocates people from their historic neighborhoods and lands. China certainly does not do well as a regime when evaluated by Western standards in regards to human rights, or social and environmental justice, but what of the major public benefited still in desperate need by developing countries, where the disregard of these subjects of justice, at least temporarily, assists in the speedy delivery of that benefit? – Infrastructure development. If a new term, “infrastructure statecraft” would mean using infrastructure means to effect economic or political ends, one can see how beneficial the choice of infrastructure is for the Chinese to choose to be one of the first vehicles they use to go back out to the world and present themselves and the positives of their regime.

This involves further investigation, but perhaps it might warrant its own subset terminology as “infrastructure statecraft”.

**Conclusions**

This paper has used Dani Rodrik’s rationale for multilateral development lending to show that from at least this Western liberal perspective, there isn’t a natural advantage attributable to multilateral institutions being used by the newest major multilateral development bank – The Asian Infrastructure Investment Bank. The Asian Infrastructure Investment Bank does not currently have a well-regarded public information provisional
capacity, and it does not use conditionality to effect national policy change on its borrowers. The AIIB also has a strict and exclusive focus on infrastructure development. We next used the analytical framework of economic statecraft or geoeconomics to further investigate motivations, means, and ends of the AIIB. Although there was some partial satisfactory linkages between the AIIB’s President Jin Liqun’s interview rhetoric with development economist Justin Yifu Lin’s academic theory of infrastructure investment as a major component of his “new structural economics,” this still left some room for questioning. This paper concluded with the thought that perhaps there could be a subset of economic statecraft or geoeconomics called “infrastructure statecraft”. This derives from infrastructure’s ability to bind and pull territory and people closer to centers of power and to expand a nation’s influence, but this can be achieved by way of relatively peaceful and non-military – geoeconomic – means. More investigation and further building of an analytical framework is needed to truly move forward with “infrastructure statecraft” as a needed and unique subset of geoeconomics. But the use of economic means by way of infrastructure development should be at least thought of in terms of Sun Tzu who said, “the supreme art of war is to subdue the enemy without fighting.” By using the modern technology and science of infrastructure development, the Chinese may be achieving their ancient empirical ambitions by way of the indirect and “legitimate” means of a multilateral development bank focused on the binding and distance shortening aspects of physical infrastructure development.
CONCLUSION

In the preceding three chapters, some of the differences between the Western and Eastern paradigms of infrastructure development are brought to light, at least as they currently stand. In the first two chapters, several case studies of historic infrastructure development by both the West and now the East revolving around the Panama Canal were investigated to show several important ideas. The Western paradigm of infrastructure development has matured and evolved, and many of the characteristics of the Eastern paradigm, quick decision making and fast delivery, were demonstrated in the original construction of the Panama Canal by the West. Domestic influence of a further democratizing society likely created the very slow decision making and delayed final delivery that forms some of the main characteristics of the West’s current paradigm. One constant though was the West’s insistence on placing policy conditions on the infrastructure funding. So, despite the sense that perhaps the differences between East and West are merely evolutionary and technical, we see a steady characteristic constant in the West.

In contrast, prevalent literature and rhetoric claims that the Chinese do not impose conditions on countries in exchange for infrastructure development and financing. But this was challenged in the case of their recent work in the Panama Canal, where a major billion-dollar investment followed Panama no longer recognizing Taiwan but formerly recognizing internationally the People’s Republic of China. History will need to stretch longer to give us a more definitive answer, but Panama’s experience with the slow and painstaking process of the Canal’s most recent Western-led expansion might very well have compelled them to look to China to provide swift and efficient investment and
upgrades to the Canal—Panama’s prized jewel of economic prosperity—even if it meant setting aside one of their longest allies (Taiwan).

The last chapter examines a new Eastern institution: the Asian Infrastructure Investment Bank (AIIB). This bank doesn’t place conditions on its financing and, therefore, one must ask what is it of infrastructure itself that is being presented by the East and China as a focus? Why does the AIIB only lend for infrastructure?

This paper proposes a bold idea and answer: For the Chinese, infrastructure is one of their best ways of showing their regime’s superiority in contrast to the West. Put simply, where does the disregard for social and environmental conditions, human rights, democratic values, and transparent and prudent financial responsibility assist in the speedy delivery of a common public benefit? Infrastructure development. This paper proposes then a term: “infrastructure statecraft,” defined as using infrastructure means to affect economic or political ends. This paper then concludes how beneficial the choice of infrastructure is for the Chinese to be one of the first foreign policy vehicles they use to go back out to the world and present the positives and superiority of their regime.

Perhaps in the West it is easier to see the despotism of the East and the Chinese regime dominated by an oligarchy of the Communist Party and further being consolidated under the rule of Xi Jinping. But it is harder to see ourselves. Clothed in the rhetoric of a restless and innovative bastion of liberty, we’ve grown blind if not willfully tolerant of the long delays and small and petty ambitions of our way of developing infrastructure. The process takes multiple generations to deliver and is weighed down by a hundred paper cuts from conditional policies shuffled by Tocqueville’s new faceless and benign soft despot. This is what is presented to other countries, those still developing and those
already developed and now in need of expansion and maintenance to their already built infrastructure portfolio. The West sometimes still lulls itself into believing they present a “superior product” to the cheapness of the East. This is not a choice that should be desired to continue to be presented to the outside world, let alone domestically.

So therefore, the last question of this paper is naturally: What is the West doing to present a better choice? Is there any way to moderate the extremes of choice between paradigms of infrastructure development?

As part of the United States Build Act of 2018, there were legislative provisions to consolidate certain functions of several existing aid and development agencies into a new agency known as the United States Development Finance Corporation (DFC). Proposed by the Trump Administration as an answer to a rising China and the spreading of the Eastern paradigm of infrastructure development,\(^\text{174}\) one may peg hopes upon this new outfit. The DFC contends to offer a difference from the state-led approach of the East and China with private market solutions and equity investments rather than debt burdening.\(^\text{175}\) But these private sector solutions will do nothing to differentiate this agency from the current paradigm if it does not moderate its ability to deliver projects quickly and in a timely fashion. The agency itself should be infused with an older democratic unruliness and pride in the capacity for a free people to achieve great things for their own domestic concerns as well as internationally. There is a small chance that perhaps a new agency with laser-like focus on a superior democratic infrastructure


\(^{175}\) Ibid.
development—much like how the Forest Service did its work early on\textsuperscript{176}—might be able to bring forth this style of culture and dedication. But how feasible this will be seems slim when, instead of an entirely new agency being formed, the DFC will likely just combine elements of already functioning agencies operating in the current slow and soft paradigm.\textsuperscript{177}

One important item learned from the case studies is that the Western paradigm matured and evolved from the inside out, from domestic reforms then quickly outwards to infrastructure aid projects in foreign countries. What is likely most needed is a moderating reform back to an infusion of local projects backed by independent associations of sponsors and interested residents outside the scope of the current paradigm. These independent associations need to be focused on the old adage of “getting things done” rather than figuring out ways to stop publically beneficial infrastructure projects from happening. This moderating reform may be able to infuse itself into the mores of the Western regimes and then be transferred back out to the rest of the world. Perhaps efforts like this paper will contribute a small part to the ability for self-reflection and to moderate habits formed over years of democratic rule and isolating individualism. This more moderating “get things done” attitude, found among enough Westerners that they come together to deliver beneficial projects, might be the best hope in presenting an alternative to the currently despotic paradigms of choice available to a country in need of public infrastructure development and improvements. Another potential assistance in moderating the current Western paradigm back to some semblance of balance between


\textsuperscript{177} Example: Overseas Private Investment Corporation, etc.
freedom, democracy, and publically beneficially infrastructure improvements would be to study historic cases other than just the Panama Canal, where the liberal democracies achieved and delivered great infrastructure projects in a relatively efficient and timely manner.

This paper brings to light a few actually substantial claims. First and foremost, this paper proposes that the development of public infrastructure—the way public infrastructure gets built—provides a focused and qualitatively calculative way to judge the type, character, and health of a regime. The development of infrastructure is an important story to all regimes, and although it generally gets covered in history and popular biography, infrastructure is never deeply studied in a way to provide substance to philosophical and policy debates. Of course, infrastructure many times is looked at as a lower field of study or realm than, say, diplomacy or civil rights, but one can see from this paper that infrastructure influences and works hand-in-hand with the very heights of diplomacy and foreign affairs.

In fact, the second claim of the paper is that infrastructure informs a subset of diplomatic statecraft and international relations that we should term “infrastructure statecraft.” And this form of statecraft is used at this time most effectively by the Chinese regime because the nature of infrastructure development naturally favors the autocratic versus the democratic.

But these claims are broad and ambitious. They are propositions rather than proofs. This paper’s defense has several thin lines spread in the middle and the flanks that will need future reinforcements. For example, one would either need a portfolio of other case studies to show how the Western infrastructure development paradigm has matured
and evolved, and it may even need a full-blown history of showing democratic evolution and infrastructure evolution marching, if not in unison and linear, close together and in a discernable pattern.

Second, with the lack of transparency in Chinese development matters, it will be difficult to build up the case of whether the Chinese demand policy and other conditions on their infrastructure aid and loans to other nations. In fact, the example used about Panama in chapter two relies on the best-case speculation and reporting of others, rather than cold-hard written contractual evidence. To try to address this would likely mean building a database of a nation’s relationship between denouncing Taiwan and receiving Chinese aid. If there is something like that already produced, then the research for this paper did not find it, and it would have provided great comfort and better work on the study if it had been developed.

Hence the conclusions from the research work within this paper are limited to the scope of its reach. Far more is needed to understand if there is really the need to categorize a sub-field of study “infrastructure statecraft,” but it is this paper’s most audacious claim that it is worth pursuing the need of a new sub-field of international relations in the first place.

The heat from the audacity can be cooled from the quoting of a long passage from The Power Broker where Robert Caro recounts Raymond Moley’s perspective that, from the pyramids of Egypt, the rebuilding of Rome after Nero’s fire, to the creation of the great medieval cathedrals…all great public works have been somehow associated with autocratic power.” It was no accident that most of the world’s great roads—ancient and modern alike—had been associated with totalitarian regimes, that it took a great Khan to build the great roads of Asia, a Darius to build the Royal Road across Asia Minor, a Hitler and a Mussolini to build the Autobahnen and autostrade of Europe, that during the four hundred years in which Rome was a republic it built
relatively few major roads, its broad highways beginning to march across the known earth only after the decrees calling for their construction began to be sent forth from the Capitol by a Caesar rather than a Senate. Whether or not it is true, as Moley claims, that “pure democracy has neither the imagination, nor the energy, nor the disciplined mentality to create major improvements,” it is indisputably true that it is far easier for a totalitarian regime to take the resources to such improvements, far easier for it to mobilize the men necessary to plan and build them; the great highways of antiquity awaited the formation of regimes capable of assigning to their construction great masses of men (Rome’s were built in large part by the legions who were to tramp along them); at times, the great highways of the modern age seemed to be awaiting some force capable of assigning to their planning the hundreds of engineers, architects and technicians necessary to plan them. And most important, it is far easier for a totalitarian regime to ignore the wishes of its people, for its power does not derive from the people. Under such a regime it is not necessary for masses of people to be persuaded of an improvement’s worth; the persuasion of a single mind is sufficient.178

These are sobering words if one is a Western liberal devoutly tied to individualism and freedom yet understanding the need for public infrastructure improvement for a prosperous nation. It brings one to a further study that is well outside the scope of this work but brings out the most basic questions of politics: How was America, leading the Western expansion of democracy, capable of building the canals, the railroads, the dams, the interstate highway system, the electric grid, etc.? What were the political circumstances? In what ways were things different that provided a conducive environment that does not exist today? Who ruled? For whom? What was just then and is not now?

This thesis suggests that understanding the relatively narrow field of infrastructure development can be a way of understanding the broader topic of a regime’s character. But likewise, coming to a better understanding of the theory of democratic soft despotism

as Tocqueville understood it might be a first step towards reforming the West’s practical approach to infrastructure development. Small practical reforms will likely just be trimming around the edges of the process of attempting to find a more efficient and better way to development infrastructure in a democracy. A change in the mores and a certain unruliness or democratic unrest positively channeled into this as well as other practical policy fields may better ensure the sustainability of the western liberal order, and provide a better and more moderate choice for other countries and regime’s looking for partnership, investment, and aid.


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