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It's Not You, It's Me? An Inquiry into the Problems of Philippine-Korean Cooperation for Metro Manila's Rail-based Mass Transit Systems

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Abstract

Japan, Belgium, and the Czech Republic are the countries typically associated with rail-based mass transit systems in Metro Manila. Recently, South Korea has joined their ranks. However, at least in the Philippines, South Korean involvement in Metro Manila's Light Rail Transit (LRT) and Metro Rail Transit (MRT) systems has received bad press. Hyundai Adtranz provided the first air-conditioned rolling stock for LRT line 1 in 1999; of the twenty-eight cars that were delivered, only eight remain in service. Manila-based Busan Universal Rail, Inc., which, until recently, held the maintenance contract for the MRT with the Busan Transportation Corporation of Korea, was often blamed for the MRT's frequent breakdowns of late. South Korea's involvement in the rehabilitation of the Philippine National Railways (PNR), particularly the Metro Manila South Commuter Line, has seemingly yielded little fruit; even after purchasing Korean rolling stock (diesel multiple units) as well as granting loans for rehabilitation purposes via the Korean Exim Bank, the PNR remains moribund. This paper asks, "Why have Korean companies seemingly failed to transfer their knowledge or experience of providing for or operating and maintaining some of the world's best urban rail-based mass transit systems to Manila?" An answer thereto is attempted via constructing a historical narrative based on primary sources (e.g., published first-hand accounts, data from the Light Rail Transit Authority and PNR) and secondary sources (e.g., opinion pieces in newspapers). National leadership transitions and geopolitical dynamics — as well as the activities of certain "dealmakers" within the Philippines — emerge as some of the explanations for Korea's "failed" Manila mass transit ventures.













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Introduction

On 6 November 2017, the Metro Rail Transit Line 3 (MRT3) maintenance contract between Busan Universal Railways, Inc. (BURI) and the Department of Transportation (DOTr)ⁱ was terminated, less than two years after the latter contracted the services of the former (specifically, on 7 January 2016) (Cabuenas, 2016, 2017). Reports stated that these were the reasons for terminating the contract:

- "Poor performance" ("that constitutes derailments, passenger unloading, stoppages");
- "Failure to put in service and subsequently ensure the availability of the contractually obligated number of trains, and failure to put in operation reliable and efficient trains";
- "Failure to implement a feasible procurement plan for spare parts"; and
- "Failure to comply with the contractual requirements of a complete and upto-date Computerized Maintenance Management System" (Cabuenas, 2017; Ramirez, 2017)

Exactly the same reasons were given by DOTr when it gave the notice of termination of contract to BURI on 20 October 2017 (Bacungan, 2017). It was an inauspicious conclusion to a relationship that started with promise—new coaches from China, manufactured by Dalian Locomotive, were set to arrive, and the Korean participant within BURI—the Busan Transportation Corporation (Busan)—had years of experience in managing a multi-line mass transit system (Cabuenas, 2016). But the MRT3 continued to decline in terms of quality of service—it is widely considered to be the least reliable among Manila's three segregated mass transit railway lines, given how frequently it breaks down—well into the first months of the Rodrigo Duterte administration.

This paper deals with such Filipino-Korean collaboration in Metro Manila's four mass transit railway lines—the MRT3, the Light Rail Transit (LRT) Line 1, LRT 2, and the Metro Manila (South) Commuter Service of the Philippine National Railways (PNR). As will be detailed here, like the BURI-DOTr deal, many of the major involvements of Koreans in Manila's railways can be considered failures, the common reasons for which are the failure of Korean companies to secure contracts, especially when they are in competition with the Japanese government-business complex—also called "Japan, Inc." (Lee & Yoo, 1987: 73)—which is financed through the Overseas Economic Cooperation Fund/Japan Bank for International Cooperation, and, when













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they do win contracts, are met with mainly governance-related roadblocks/bottlenecks to fulfilling their obligations.

The approach of this paper is primarily historical, focusing on the factual narratives here, what can also be construed as five case studies—than can be drawn from various primary and secondary sources. Among these are materials gathered from PNR, such as financial statements, briefers/chronologies, loan summaries, and a document giving lengthy technical specifications of the Korean diesel multiple units (DMUs) currently in PNR's fleet; documents detailing assets of the Light Rail Transit Authority (LRTA) from the Commission on Audit (COA); studies/documents housed at the library of the University of the Philippines National Center for Transportation Studies; studies and evaluations made by the Japan International Cooperation Agency (JICA) in cooperation with private Japanese firms; various documents—including contracts—from DOTr; and documents from the LRTA. These are all supplemented by interviews, mainly with people (formerly) employed by or affiliated with PNRiii and a BURI executive. Dozens of news articles (from over 4,000 gathered) were also deemed relevant for this study. Lastly, a number of existing studies on or related to the history of rail-based mass transit in Manila were consulted. All of these sources were gathered through a research program headed by Ricardo T. Jose entitled "The Mass Transit System in Metro Manila: From Tranvia to MRT, 1979-2014," funded by an Emerging Interdisciplinary Research (EIDR) Grant from the UP Office of the Vice President for Academic Affairs.

The discussion here will largely progress chronologically, focusing on developments from the latter years of the Marcos regime to BURI's involvement in the MRT3, spanning over three decades. Patterns of involvement emerge in the proceeding discussion: we shall examine cases of unsolicited proposals, private consortium participation, and public-private consortium participation. The type of involvement is tied to the type of bidding and financing for a project, i.e., unsolicited proposals using (proposed) foreign/aid-agency financing, public bidding using foreign/aid-agency financing, public bidding using state funds, negotiated procurement after failed bidding using state funds. Korean involvement was found to be most successful, in terms of consistency of quality of contribution and generation of controversy, in a private consortium participation-public bidding using foreign/aid-agency financing model, wherein the private consortium is stable (i.e., Hyundai Rotem and LRT 2); if the consortium is unstable (e.g., vulnerable to shocks, has undercapitalized constituents), there is a fair chance that the venture will fail (e.g., Hyundai Adtranz and LRT 1 [private consortium with public bidding using foreign/aid-agency













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financing] and Korail and LRT 1 [private consortium with public bidding using state funds). Moreover, that model involves relatively minor participation (limited, say, to the provision of rolling stock) in comparison to others. The other models shown here are unsolicited proposals by private consortia with proposed foreign/aid-agency financing (Yook Sung Mool San Co. the Hanbo Corporation, and PNR [proposal only]) and public-private consortium with public bidding using foreign/aid-agency financing (Rotem and PNR).

Background: Mass Transit Railways in South Korea and the Philippines

Both Seoul and Manila have "firsts" in terms of rail-based mass transit: Seoul was the first in non-communist Asia^{iv} after Japan to have a postwar urban mass transit railway system—the Seoul subway line 1, which started construction in 1971 and was inaugurated in August 1974—while Manila was the first in Southeast Asia to have a postwar light rail transit system—LRT 1—which started to rise in 1981 and was carrying paying passengers by December 1984. The PNR intra-Manila commuter service did start in 1972, but it utilized the same track as the province-bound PNR trains and had only a small ridership share. The possibility of constructing a subway for Seoul was raised as early as 1953 (Deswysen, 1953); in 1961, we first encounter plans to construct a rail-based mass transit system, in the form of an unrealized proposal to build a monorail system, for the City of Manila (Manila Times, 1961). Korea was, in other words, always ahead by about a decade in terms of both planning and construction.

The Korean system was also more "forward-thinking" in terms of connectivity. Seoul's subway was designed to "connect the Seoul Central Railroad Station with the city's eastern outskirts" (AP, 1974), while the World Bank-funded transportation plan that pushed for the construction of a (street-level) LRT in Manila, the Metro Manila Transport, Land Use and Development Planning Project, or MMETROPLAN, did not highlight the necessity of linking an intra-urban light rail system with the PNR (there is still no LRT-PNR interchange to this day). Seoul was also able to construct additional subway lines faster than Manila; by 1985, the year that all of LRT 1's stations became operational, Seoul subway lines 3 and 4 were completed (Pacific Starts and Stripes, 1985). 1985 was also the year that a subway line started to run in Busan, after beginning construction in 1981 (AP, 1985). Today, Manila has a four-line urban mass transit railway "system"—I enclose the word in quotation marks because of the lack of passenger-friendly interconnection among the three segregated lines and the total lack of interconnection with the PNR Metro Manila South Commuter













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Service — while Seoul's subway system has a total of nine interconnected lines (Lankov, 2011).

Moreover, Koreans started manufacturing their own rolling stock only a few years after their first subway was built (Guillen, 2001: 106). The Philippines has never been able to domestically manufacture rolling stock, save for recently built prototypes for the PNR and the automatic guideway train test tracks.

Seoul's significantly faster progress with mass transit railway construction can be attributed to various factors. For one, Seoul does not flood like Manila. Another factor may be the type of technical assistance and financing involved. Seoul was able to build a subway system through Japanese assistance and financing—a plan was drawn up by the Japanese—presumably through the Overseas Technical Cooperation Agency, the predecessor of JICA—who also partly financed the project and connected Seoul to Japanese companies (Lankov, 2011). As previously mentioned, MMETROPLAN was financed by the World Bank; it involved the British consulting firm Freeman Fox and Associates. The recommendation to build an LRT was picked up by various parties, with the Belgians eventually winning favor (Santiago, 1988: 36). Plans had to be continuously modified—significantly, MMETROPLAN's recommended street-level system was declined in favor of an elevated system (Santiago, 1988: 36-37)—partly, it seems, because they were not made by a JICA-like state agency with national business interests in mind in coordination with domestic businesses.

A third factor may be tied to governance. There was a Seoul Metropolitan Government as early as 1949. It was only in 1975 when what was called the Greater Manila Area became Metropolitan Manila, and became administered by a governor. Only one person became governor of Metropolitan Manila throughout the Marcos administration—Imelda Marcos, who later concurrently became Minister of Human Settlements. The mayor of Seoul when the subway project started in earnest, Kim Hyon-ok, had no other distractions. Moreover, Seoul never had to reckon with jeepneys, Manila's still-popular paratransit vehicles, the groups operating which were, both when the construction of a monorail was proposed in the 1960s and when LRT 1 was under construction in the 1980s, understandably averse to new transportation modes that may drive them to obsolescence (Manila Times,1969; VP, 1982). Prior to the construction of the subway, Seoul still had a functional (though aging) streetcar system, which was dismantled a few years before first subway line was constructed (Lankov 2011). Thus, a fourth and fifth factor for the relative rapidity of subway













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adoption in Korea was necessity (there had to be a replacement for the streetcar system) and the memory of rail-based mass transit (Manila's once sprawling streetcar system, already in decline by the 1930s, was destroyed beyond repair at the close of the Second World War).

Perhaps the sixth reason is the difference in national economic policy of Korea and the Philippines. Whereas, under President Park Chung Hee, Korea hewed close to the Japanese model of state-supported heavy industrialization (see Lee & Yoo, 1987: 73-74; Kim, 1991), the Philippines, especially under President Ferdinand Marcos, opted for a murky "balanced agro-industrial economy" thrust (see Reyes and Jose, 2012-2013: 12-13). Whatever the main reason that Korea overtook the Philippines, by early 1988, two Korean companies were already included in a list — dominated by Western firms — titled "Who's who in light rail transit," published in the magazine Railway Age: Daewoo Heavy Industries and Hyundai Precision.

Meetings Leading to Nothing: Yook Sung Mool San Co., the Hanbo Corporation, and PNR

Neither of these companies were involved in a PNR-related proposal in the 1980s. Exploratory meetings were held among representatives of Korean investors, Celedonio M. Javier of CM Javier Enterprises, Inc. and the CMJ Development Corporation, and Ferdinand Marcos in the early 1980s with the objective of rehabilitating the entire PNR system (Javier, 2011: 274). Javier claimed that he and his Korean collaborator, Wel Nam Choi, represented the Hanbo Group, though the primary documents he included in his memoir only mention Wel Nam Choi as being president of Yook Sung Mool San Co. (Javier, 2011: 282-284). At best, Hanbo might be one of the "A-1 Contractors" that will rehabilitate the northbound and southbound PNR lines to the provinces beyond Manila and "supply...new passenger and cargo coaches," which Choi mentions in a letter to Javier dated 9 August 1985 (Javier, 2011: 282). Further meetings were held with the Ministry of Transportation and Communications and PNR (Javier, 2011: 275). The proponents only came as far as securing commitments from other foreign organizations and banks to finance the project (Javier, 2011: 276-278), and to receive a communication from then minister of transportation and communications Jose P. Dans reiterating what railway projects Choi and Javier can engage in (2011: 284).













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Javier, based on communications in files on digitized microfilm from the Presidential Commission on Good Government, indeed served mainly as an intermediary of foreign companies during the latter half of the Marcos regime. One of the files is a letter, dated 3 January 1979, from Javier to the Minister of Foreign Affairs (then Carlos P. Romulo) regarding the offer of Sanwa Construction Co., Ltd. to buy the former Philippine Embassy site in Tokyo. Another letter, dated 5 August 1985, from Roberto Gianzon, president of CM Javier Enterprises, Inc. to Marcos, concerns the offer to buy foreclosed vessels of the National Investment and Development Corporation by a company based in Seoul. Clearly, Javier had some clout, or at least access to Marcos. However, he was not considered among the "major" Marcos cronies such as Rodolfo Cuenca, Dante Silverio, and Herminio Disini; neither he nor any of his companies are mentioned in Ricardo Manapat Jr.'s Some are Smarter than Others, a near-exhaustive book on Marcos's cronies and their dealings.

Ultimately, at least by Javier's account, the reason why the Choi-Javier proposal never became more than a proposal was the People Power Revolution, which resulted in the ouster of Ferdinand Marcos (Javier, 2011: 285). If it was indeed Hanbo that Choi and Javier represented, involvement in the PNR in the 1980s may have changed their fate in the 1990s; in 1997, Hanbo Steel, a major subsidiary of the Hanbo Group, filed for bankruptcy after defaulting in payments of loans contracted ostensibly for industrial purposes but actually given to government officials (Lev, 1997, Reuters, 1997).

Delivered but "Abandoned": Hyundai Adtranz and LRT 1

Neither Hanbo nor Javier ever became involved in LRT 1. After the People Power Revolution, Corazon Aquino became president. A carryover capacity expansion (CAPEX) project for the LRT 1—among other projects—progressed throughout her term until the term of her successor, Fidel Ramos. It was under Ramos when financing for this project was obtained, specifically in 1994 through a JICA official development assistance loan (JICA, 2005: 2, 11). Bidding was held to procure new rolling stock that was compatible with the LRT 1 track. Hyundai Precision, in a joint venture with Swedish firm Adtranz, won the USD 50 million contract in 1996 (Hankyung.com, 1998, Hyundai Rotem, n.d.[a]). Adtranz "was in charge of electrical and other sub systems" while Hyundai "was in charge of the car body" (JICA, et al., 2013: A-24). The cars that were delivered in late 1999—twenty-eight in total, arranged in four-car configuration—were actually "95mm bigger than [the] first generation train [built by Belgian companies] and [the] distance between [the bogies] is 2.5m longer than the













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first-generation train," thus "some stations had to be grinded" (JICA, et al., 2013: A-24). The stainless-steel cars superficially resembled the first-generation trains, but had at least one significant advantage—they came with air-conditioning. The first-generation trains were eventually also fitted with air-conditioning units (replacing their forced ventilation units) through CAPEX Phase II, which was funded by JICA.

Both refurbished first-generation cars and second-generation cars run over the LRT 1's tracks as of this writing. However, presently, the Hyundai-Adtranz trains are less visible throughout a typical operating day. The official reason, as per documents from JICA and the LRTA, is lack of spare parts for these vehicles (LRTA, 2017). As of this writing, only two second-generation train sets are operational: the 1109-1106-1103-1101, and the 1113-1114-1115-1112 (LRTA, 2017). Two cars—the 1107 and 1127—were involved in a collision, while the other eighteen cars are parked at the LRT 1 depot (LRTA, 2017). Public bidding for spare parts has been attempted (see DOTC, 2012), but has apparently been unsuccessful, making it seem as if the Hyundai-Adtranz trains will be retired completely even sooner than the far older Belgian ones.

What accounts for this seeming "abandonment"? The inability to procure spare parts has been connected to the acquisition of Adtranz by Canadian company Bombadier, Inc. in 2001 though precisely how this merger affected spare parts manufacturing is unclear (JICA, 2010: 11). Presumably, Bombardier shut down the manufacture of legacy Adtranz products in favor of manufacturing products of their own design. If so, then studies have to be made to find alternatives—at least based on one document from LRTA, many of the second-generation trains have parts that were only procurable from Adtranz, including crucial brake-related parts (LRTA, 2006). JICA also noted that "suppliers hedge the investment risks [without] considering the financial situation of LRTA" and "suppliers bid [an] unexpectedly high unit price, which causes failure in price negotiation" (JICA, 2010: 11). Another reason may be the fact that the third-generation trains—manufactured by Japanese firm Kinki Sharyo and purchased through CAPEX Phase II—are only 20 percent compatible with the second-generation trains in terms of parts (JICA, 2010: 11).

Thus, despite cutting a rather handsome stainless-steel profile (when not wrapped in advertisements) and, more importantly, having a higher passenger seating capacity than the third-generation trains (JICA, et al., 2013: A-26), one is much more likely to ride refurbished first-generation or third-generation rolling stock than the second-generation Hyundai-Adtranz trains when taking the LRT 1.













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A "Success Story" through the Japanese: Hyundai Rotem and LRT 2

LRT 2 became operational in April 2003. But the planning for LRT 2—specifically as a radial line as opposed to a circumferential one—started as early as the late 1980s. Originally, LRT 2 was to be bidded out as a Build-Operate-Transfer (BOT) project together with the LRT 1 CAPEX project in 1989 (Halcrow Group Limited, 2004: B15). Sixteen firms were reported to have submitted bids for the construction of LRT 2 in 1990, including Hyundai (Cuneta, 1990). The bidding failed (Halcrow Group Limited, 2004: B15). Only one consortium, made up of Japanese-European firms (Marubeni, Leighton, and Tractabel) and another Japanese firm, RRA International, attended the actual bidding (Aglay, 1990). One news item quoted then Department of Transportation and Communications (DOTC) undersecretary Herminio Coloma as saying that then DOTC secretary Oscar Orbos "wants a faster and cheaper solution to the transportation problem in the country" (Lozada, 1990). If true, this means that the bidding for LRT 2 as a BOT project was unilaterally cancelled by Orbos apparently in favor of a "ground-level" transit system (Aglay, 1990). By 1992, the MRT3 had "overtaken" LRT 2 in terms of progress (Ongpin, 1992). However, in that same year, with Fidel Ramos as the newly elected president, LRT 2 was "revived" (Cruz, 1992).

Eventually, in 1996, Japanese Official Development Assistance loans through the Japan Bank for International Cooperation were obtained for the "Metro Manila Strategic Mass Rail Transit Development (Line II) Project," which was de-bundled from the LRT 1 CAPEX project detailed in the previous section (Halcrow Group Limited, 2004: B15; Manila Standard, 1996). Bidding for this project was divided into four packages:

- Package 1: Depot
- Package 2: Substructure
- Package 3: Superstructure and stations
- Package 4: Systems, vehicles, and trackwork (COA, 1998: n.p.)

In 1997, the contracts for the construction of the first three packages was awarded to three Japanese firms (Sumitomo for package 1 and the Itochu-Hanjin joint venture for packages 2 and 3) (Suarez, 1997). The project was significantly delayed when bidding anomalies for package 4, supposedly to favor Japanese firms, were alleged in 1998 (Today, 1998, Danao, 2000). That year, bidding was suspended pending investigation of these anomalies (COA, 1998, n.p.; Abadilla, 2000). This was despite













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the JBIC loan being "untied," or "without conditionalities (e.g., the firms must have Japanese participation)" (Danao, 2000). The project was then "caught in the transition between the Ramos and Estrada administrations" (Abadilla, 2000). When bidding finally pushed through in 2000, the Asia-Europe MRT Consortium won. This group had Korean participation, specifically Daewoo Heavy Industries (Abadilla, 2000) JBIC gave concurrence to the Asia-Europe MRT Consortium's winning bid (Baetiong, 2000). The consortium won over five other bidders, one of which, the MMH Consortium, also had Korean participation — MMH stood for Mitsubishi Heavy Industries, Mitsubishi Corp., and Hyundai Precision (Baetiong, 2000).

The strategy of Korean firms to form joint ventures with Japanese firms resulted in LRT 2's rolling stock being of Korean-Japanese manufacture. Due to the aforedescribed delays, by the time the LRT 2's rolling stock was delivered, the two rivals, Daewoo and Hyundai, had already consolidated their rolling stock units, along with that of Hanjin Heavy Industries, to form Hyundai's current rolling stock division, Rotem, the name under which we associate LRT 2's rolling stock (Railway Gazette, 2008; Hyundai Rotem n.d.[b]). That merger was planned in the wake of the 1997-1998 Asian Financial Crisis (Guillen, 2001: 107); it initially resulted in the formation of the Korean Rolling Stock Corporation or Koros (Kirk, 2001; Railway Gazette, 2008). Hyundai had wanted to acquire a controlling stake in the company early on (Guillen, 2001: 107); that ambition was fulfilled in 2001, when it purchased Daewoo's stake in Koros (Kirk, 2001; Hyundai Rotem n.d.[b]).

The first batch "ultra-modern" cars (Philippine Star, 2002), formally labeled Rotem/Toshiba Megatren Model 2003 (LRTA, 2017), arrived in November 2002. As per the LRTA (2017), ten out of eighteen train sets are currently fully operational. Having a large capacity (they are, properly speaking, not "light rail" vehicles at all), they still seem adequate for the route they ply. Indeed, there are fewer reported operational issues in LRT 2 than in any other line.

Flogging a Dead Horse? The Korean Government, Hyundai Rotem, and PNR

Hyundai Rotem also became involved in the PNR. Initially, in 2002, PNR and Daewoo International Corporation entered into a Memorandum of Understanding "to prepare a Feasibility Study on the South Manila Commuter Rail Project" (PNR, 2002). The completed study — a copy of which I have unfortunately not been able to secure as of this writing — was presented and approved by the PNR Board in July 2002













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(PNR, 2002). The National Economic Development Board approved the project in February 2003 (PNR, 2002).

Funding for the project was obtained in 2004 through the Korean Export-Import Bank (KEXIM) and the Korean Economic Development Cooperation Fund (EDCF) (PNR, c2013). The EDCF "soft" loan was highly favorable to the Philippines — 2.5 percent interest per annum with a ten-year grace period, repayable over thirty years (PNR, c2013). The smaller KEXIM loan was more commercial in terms (PNR, c2013). The project's aim was the linkage of the PNR Northrail and Southrail (PNR, c2013). Though the loans were secured in 2004, the contract with the Korean consortium that undertook the project — made up of Daewoo, Rotem, and Hanjin Engineering and Construction Co., Inc. — was formalized only in 2007 (Olchondra, 2007). This was because of two prior failed biddings because of lack of offers (Olchondra, 2007); PNR was authorized to enter into a negotiated contract after two successive failed public biddings, in keeping with Republic Act 9184, or the Government Procurement Reform Act. PNR made an advance payment of USD 14.7 million to the consortium in June 2007 (Estavillo, 2007). Included in the contract was the purchase of eighteen DMUs or six three-car configuration train sets (Estavillo, 2007). These were delivered in 2009 (PNR, c2015a).

Prior to delivery, there was a "kick-off" meeting held by Rotem at the PNR Office in August 2007, apparently to orient PNR with the technical specifications of the trains to be purchased (Rotem, 2007). Rotem officials were also shown the PNR depot (Rotem, 2007). If they saw what we in our research team saw when we last visited, they must have seen how much of a challenge the project they intended to participate in was. Data from the PNR Corporate Planning Division states that the number of commuters in 2007-2008 dropped significantly, becoming less than 1 million for the first time since 1989 (PNR, c2015b). However, in 2010, the year after the delivery of the Rotem DMUs, the number of commuters jumped to over 9,000,000 (PNR, c2015b). By 2011, it was consistently at the eight-digit level, partly because of the donation of second-hand DMUs and Electrical Multiple Units (EMUs) by the East Japan Railway Company through the PNR Union (PNR, c2015a, c2015b).

However, the PNR remains in a sorry state. It is operating at a loss, and there are insufficient spare parts for all trains, leading to heavy cannibalization (Jose, 2016; Torres, 2016). At times, coaches are hooked up to "ancient" locomotives simply to ensure that there are trains running (Castro, 2016; Regulto, 2016). What happened? Again, a number of factors can be cited. As always, there is the difficulty in obtaining













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spare parts through the public bidding system. Also, in terms of manpower, PNR was heavily affected by rationalization in 2009. From 1,083 permanent, nine temporary, and 428 casual/ "job order" employees in 2008, come 2009, in accordance with Gloria Macapagal Arroyo's rationalization order (Executive Order 366, s. 2004), PNR's complement became 191 permanent and 592 casual/job order employees (PNR, c2013). Numbers returned to pre-rationalization levels in 2011, under Benigno "Noynoy" Aquino, but only because of an increase in casual/job order employees (PNR, c2013). Few of these employees are engineers or otherwise know how to repair and maintain PNR's trains (Jose, 2016; Tuazon, 2016). Lastly, as can be plainly seen, any relocation of those living by the railroad — a prerequisite for rehabilitating the PNR's rails — has not been successful, despite KEXIM initially finding relocation efforts in 2006 to be "impressive" (Balana, 2006). Thus, we can say that Korean government-industry cooperation for saving the moribund PNR — the closest approximation of how JICA and Japanese companies work — was unsuccessful partly because of seemingly insurmountable problems that PNR has been facing for decades; the Korean loans were but the fifteenth out of sixteen contracted between 1975 and 2007, all for improving the PNR (PNR, c2013).

Irregular, Anomalous, Superseded: Korail and LRT 1

The PNR project, despite how it concluded, may have at least shown that Korean firms can win major railway-related contracts in the Philippines besides those for the provision of rolling stock. Indeed, within the administration of Macapagal Arroyo's successor, many Korean firms won LRT/MRT3 contracts, including two massive contracts won by the Korea Railroad Corporation (Korail) — which runs Korea's national railroad system — as a member of a joint venture with the Oriental and Motolite Marketing Corporation (OMMC), Erin-Marty Fabricators, Co., Inc., and Jorgman Construction and Development Corporation. Through public bidding, OMMC-Korail-Erin-Marty-Jorgman won a PHP 269,050,987.00 contract for what DOTC referred to as LRTA Project No. 1 (Rail Replacement at LRT 1 Revenue Line) on 17 October 2012; earlier, on 10 September 2012, the joint venture won a PHP 104,762,325.00 contract for what DOTC labeled LRTA Project No. 2 (Systematic Replacement of Gantry Anchor Bolts at LRT 1 Revenue Line and Connecting Line). The Notice of Award for both contracts can be downloaded from the DOTr website. One can also find amended contracts for both projects (both dated 20 December 2013). The contracts explain what happened in between late 2012 and December 2013 — modifications to the original contract had to be made because of "some













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issues [that] cropped up" — i.e., by the Commission on Audit (COA) — which "resulted to complications in contract documentation and implementation."

News articles also detail that within the abovementioned 2012-2013 timeframe, DOTC had actually threatened to have OMMC-Korail-Erin-Marty-Jorgman blacklisted because it had failed to follow the schedule to implement Project No. 1—track replacement was supposed to start in May 2013, but by August 2013, the project was still stalled (Agcaoili, 2013). OMMC-Korail-Erin-Marty-Jorgman stated that the delay was due to difficulties it was experiencing in "obtaining financing from financial institutions" (Agcaoili, 2013). By 10 February 2014, Notices to Proceed for both projects were released (again, these are downloadable from the DOTr website). But by July 2015, the projects still had no progress, though the notices for Project No. 1 and Project No. 1 do state that "delivery of the items" should be made within twenty months and thirty-six months, respectively, after receiving the notice,

Why did that happen? As previously mentioned, COA had noted a number of irregularities in the bidding documents of OMMC-Korail-Erin-Marty-Jorgman. Some of the anomalies pertain specifically to Korail, e.g., "bidding was conducted for one of the projects on Feb. 16, 2012 yet the Tax Clearance Certificate submitted by Korea Railroad Corp. (KORAIL) was valid only until Dec. 15, 2011" and "the names of the board of directors of KORAIL even differed from the names in the company profile and in the minutes of the firm's 102nd board meeting" (Punongbayan, 2015). However, it appears that what primarily led to the failure of the projects were two interrelated developments 1) the declaration by the Supreme Court that the Noynoy Aquino administration's "savings generation"/fund reallocation scheme, the Disbursement Acceleration Program (DAP) was unconstitutional (both projects were DAP-funded), which led to revisions in LRTA's priority projects; and 2) the decision of DOTC to enter into a "Concession Agreement on the Maintenance and Operations of Line 1 under the Public Private Partnership scheme" (currently held by the Light Rail Manila Corporation) which effectively led to the cancellation of the projects (apparently, LRT received the bulk of disbursed DAP funds because it did not have a concessionaire) (Manila Times, 2015; Punongbayan, 2015).

It should be noted that in all of the abovementioned documents from DOTr, the joint venture's representative is one Jorge B. Aquino, who appears to be primarily affiliated with Jorgman. Thus, at the very least, we can say that the joint venture was not primarily led by the Korean participant. Based on the irregularities noted by COA, it is also conceivable that Aquino/Jorgman had documents from Korail for public bidding,













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but these documents were not updated, perhaps because the (minority) Korean participant had already been assured of the sufficiency of these papers.

Challenge Accepted, Contract Rescinded: Busan Transportation Corporation and MRT3

We now return to BURI and MRT3. I was able to briefly interview and listen to a brief address by Eugune Rapanut, managing director of BURI, on 25 July 2017 at the Second UP Korean Research Center Workshop and Roundtable. In our brief conversation, he revealed that he was involved in Systra, the consultancy firm that served as an inter-agency liaison for the consortium that built MRT3 while the line was under construction. He also mentioned that he was once president of the now defunct Metro Manila Transit Corporation. He admitted that he approached the Busan Transportation Corporation to participate in the bidding for the maintenance contract for MRT3, confirming a longstanding rumor (Bondoc, 2016b). Lastly, he confirmed that many of the employees of BURI, especially those with technical knowledge, were involved in the country's light rail systems since the 1980s, or were otherwise legacy employees of the previous maintenance contract holders. A particular highlight was project manager Roseller Mendoza, who was once Assistant General Manager of METRO, the Operations and Maintenance (O&M) provider for LRT 1. I was also briefly able to exchange pleasantries with the representatives of Busan. Unfortunately, due to recent developments, I have been unable to do a more in-depth interview with Rapanut or anyone else from BURI.

Rapanut and BURI faced a system in decline. MRT3 is different from the LRT lines and the PNR in that it is not directly administered by a Philippine government authority. MRT3 was built via a Build-Lease-Transfer agreement with the Metro Rail Transit Consortium (MRTC), which meant that "MRTC finances, constructs and maintains the project for 25 years and implements commercial developments for 50 years, in return for which it receives a fixed revenue stream and annual rental payments (for property)" (Halcrow Group Limited, 2004: 12). Despite the government currently owning "about 77 percent of MRTC's economic rights," which it obtained through bondholders, majority of the voting rights remain under the control of local private shareholders—none of which are Korean, most of which are into property development — headed by Robert John Sobrepeña (Camus, 2017; Marasigan, 2016). This division of control has been criticized as grossly disadvantageous to the government, as it entails guaranteeing profit for MRTC even if the line is operating at a loss — a 15 percent return-on-investment (Salamat, 2014).













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As was mentioned earlier, MRT3 has a reputation for frequent breakdowns and generally poor service. An MRT3 train even overshot the tracks at the Taft terminal in 2014. This was partly tied to alleged maintenance "schemes" by unscrupulous individuals who only wanted to secure lucrative contracts despite not having any capability to maintain MRT3 (e.g., Bondoc, 2014). It has been alleged that BURI is still linked to those unscrupulous individuals (e.g., Bondoc 2016a, 2016b). Such allegations, however, as mentioned in this paper's introduction, has not been the reason for BURI's recent termination.

Time will tell if, despite the apparent technical advantages BURI had coming in, if BURI was treated unfairly. For now, aside from looking at the various claims about BURI in the news, it is worth closely examining BURI's contract with DOTC-MRT3. About half of the seven-page contract contains prefatory "whereas" clauses, all explaining how BURI obtained the maintenance contract. The narrative starts an invitation to bid for a three-year maintenance contract, advertised on 30 August 2014. Supposedly, between 28 October 2014 and 20 January 2015, the bidding failed twice. Again, in accordance with Republic Act 9184, DOTC-MRT3 was authorized to enter into a negotiated contract. It took up to August 2015 for DOTC-MRT3 to have full authorization (i.e., from the Government Procurement Policy Board) to enter into "Negotiated Procurement under Emergency Cases."

Of particular interest is the list of prospective offerors/service providers that DOTC-MRT3 invited to participate in negotiations for the MRT3 maintenance contract: Busan Transportation Corporation, SMRT PTE Ltd. (which runs Singapore's mass transit system), Korail, and the German firm Hamburg-Consult GmbH. Korail had actually already won an MRT3-related contract: as a stop-gap measure, between the awarding of the long-term contract and the expiry of the contract of the previous maintenance provider, DOTC entered into numerous maintenance contracts, including one with a Jorgman-Korail-Erin-Marty joint venture for "general maintenance of the rails" (Rappler, 2015). German-Philippine joint venture Schunk Bahn-Und Industrietechnik and Comm Builders & Technology (SBI-CB&T)—the previous maintenance provider — Manila Electric Company subsidiary Miescor, and Mosa-Inekon were also allowed to participate. The Inekon group of the Czech Republic is the manufacturer of the current MRT3 cars.

The contract then states that, after pre-negotiation conferences, only the following submitted proposals: Busan, accompanied by the other firms that make up BURI, namely Edison Development and Construction, Tramat Mercantile, Inc., TMICorp Inc.,













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and Castan Corporation; D.M. Consunji, Inc., Beta Electric Corporation, Baudis Bergmann Rosch Automation GmBH, and Hamburg-Consult GmbH; and SBI-CB&T. Supposedly, "after compliance with eligibility and technical requirements" for the maintenance contract, the only proposal meriting a passing evaluation came from BURI. After refining terms, as well as assessing BURI's technical, legal, and financial capabilities, a Notice of Award was sent to BURI on 23 December 2015.

Based on the contract, the total amount of BURI's offer was PHP 3,809,128,888.00, which was about PHP 400,000,000.00 lower than the Approved Budget for the Contract. In other words, at least based on the contract, there does not appear to be anything particularly curious about the award of contract to BURI, save perhaps for one detail: the fifth provision of the contract states that Busan "shall increase its equity share [in BURI] to Twenty Percent" by the second year of the contract. This means that for the first (and only) year that BURI held MRT3's maintenance contract, it had less than one-fifth of the total equity in the joint venture; one post-termination allegation states that Busan's share in the joint venture was only 4 percent, even if it was the only firm in BURI that had any experience in railways (Nonato, 2017). Moreover, in the same provision, this increase in equity was supposed to be done with the assistance of the Hanwha Corporation, which is not a party to the contract. Hanwha reportedly won a contract to provide a new signaling system for MRT3, and subcontracted that responsibility to Korean firm LSIS (Lee 2016). LSIS was formerly a member of the LG group; they separated in 2003. It has been alleged that the system LSIS was set to install — a communications-based train control system should not be combined with the existing automatic train protector system (Bondoc, 2016b). Rapanut has also been connected to Hanwha (Bondoc, 2016b).

Again, it would take a more in-depth study, an investigative project, or a detailed legal memorandum — preferably by a researcher, journalist, or prosecutor who can communicate in Korean — to accurately map the aforementioned network of interests. Again, what we can say with certainty is that BURI was portrayed to be a failure. BURI has repeatedly defended itself through press releases, highlighting that it cannot be solely blamed for all of MRT3's problems, as well as its supposed fulfillment of minimum deliverables (e.g., Desiderio, 2017). Is it, as it now claims, being unfairly "demonized" (ABS-CBN News 2017)? Was Busan perhaps better off initiating contact with other firms instead of the consortium it ended up with? Or, in minimizing their participation in BURI's first year as MRT3's maintenance provider, was Busan in fact knowingly protecting itself from potential losses, fully aware of the risks involved in trying to restore a dangerously ill-maintained system?













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Conclusion

It is difficult to dwell into that last counterfactual premise without adequate information, i.e., without knowing the side of Busan. Again, I was able to see them being cordial to Rapanut, listening to his defense of BURI during the abovementioned Korean Research Center event. Yet I have thus far been unable to hear from them, or even peruse any statement made by them from the time BURI and DOTC-MRT3 consummated their contract to the time when the contract was terminated. Perhaps there are statements made in Korean media, though my linguistic limitations keep me from examining those; as some of the material cited here shows, English-language Korean media are ready to laud Korean "success stories" in winning contracts for Manila's railways, but understandably remains silent about the failures.

We certainly hear little from the Koreans who have been involved in Philippine mass transit railways in Philippine media. But it seems that the previous failures have done little to lessen the interest of Korean firms in becoming involved in Manila's railways. There are at least two Metro Manila railways that are set to have Korean involvement: MRT 7 and LRT 2. Involvement in the former is by Rotem — they will provide the rolling stock, which, based on mock-ups, will superficially resemble the DMUs/EMUs that are already running in the country — and by Korail, which won a consultancy contract for the line. Korail and San Miguel Corporation, which is the parent company of the firm implementing the MRT 7 project, had previously tried to obtain the O&M contract for LRT 2 (Dela Paz, 2015). Given this history, there is a possibility that Korail will provide O&M for MRT once it is operational. That would make it Manila's first mass transit line that originally has relatively heavy Korean involvement.

For now, it seems that LRT 2 will be set to have the highest level of Korean involvement among Manila's railways. Besides exclusively utilizing Rotem cars, it has been reported that the Daegu Metropolitan Transit Corporation (DTRO), which currently runs a three-line rail-based mass transit system, has been named the "preferred bidder" for a five-year maintenance contract of LRT 2 (Woo and Choi, 2017). That would make DTRO the third Korean government-controlled corporation to win a mass transit railway-related contract in Manila. Hopefully, DTRO will have less exposure to controversy than Busan.

Which is not to say that Korean railway firms have immaculate records. In May 2014, a signaling failure resulted in an incoming train crashing into a stopped one in Seoul, injuring 200 people (Kim & Kim, 2014). DTRO operated the subway train that was set













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ablaze by an arsonist in February 2003, wherein over 120 people died; supposedly, the fire would have been contained sooner, had it not been for "sprinklers and ventilators that did not work and poor radio communications" (Brooke, 2003). Further back, we have already mentioned what became of Hanbo, once linked to a potential PNR project. Even further back was a major scandal directly tied to Korean subways. In 1978, it was alleged in Japanese media that funds from Seoul's subway commission were utilized for "intelligence activities in the United States" as well as to help President Park Chung Hee win the 1971 elections (AP, 1978, 22). While US investigators did not find evidence supporting the former claim, the investigation showed that Japanese suppliers of equipment for Seoul's first subway line did transfer funds to US accounts for Park Chung Hee's campaign (AP, 1978, 22). Park Chung Hee had been assassinated by the time that that investigation was conducted; South Korea proceeded to develop into the industrialized country it is today without him.

However, the subway fund scandal suggests that Korean firms did not only inherit Park Chung Hee's industrialization thrust, but also his willingness to engage in informal dealings — which, as the scandal shows, Japanese firms are also willing to engage in — or what one writer referred to in 1995 as "cordial contacts, flexible contracts" (Smith, 59). Perhaps this is why, considering the risk, Korean firms remain interested in entering into contracts for Manila's railways; in the Philippines — a land of failed biddings and negotiated contracts, unconstitutional actions, and the Japanese lobbying to assert regional dominance — informality reigns. Perhaps the country should consider it a blessing that despite or precisely because of this, the neighboring railway industry giants are willing to try making a profit in the course of providing Manila with (generally) safe and efficient rail-based mass transit.

Korean firms made numerous attempts to become involved in Manila's railways for over three decades. They have shown an appetite for taking on risky projects, but often with a means to minimize their exposure (e.g., working with Japanese firms — especially when the project is funded by the Japanese — and minimizing their equity in joint ventures solely with Philippine nationals, especially when the latter have (next to) no experience in railways). They have also shown a willingness to replicate the Japanese technical assistance model, as can be seen in their involvement in the PNR. The Philippines is somewhat of a rail-based mass transit business testbed for them; Hyundai Rotem's website highlights that the "contract from Manila, Philippines for building [light rail vehicles]" is their first (international) contract for building that type of rolling stock (Hyundai Rotem, n.d.[a]) Japan also had a similar view of the country (see Black & Rimmer, 1982; Rimmer, 1986). As long as appropriate and sustainable













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mass transit solutions are the result of such "experimentation," such should be continued; for maximum benefit, however, certain internal problems have to be addressed.

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Notes:

¹ In May 2016, the Department of Transportation and Communications was split into the Department of Information and Communications Technology and DOTr through Republic Act No. 10844. Throughout this paper, I use the temporally appropriate name of the Philippines' national transportation agency.

There is inadequate space here to detail this; for a historical overview of the development of this complex, which includes a discussion (in pages 39-40) of the Japanese government's shift from openly focusing on "economic penetration and domination" to incorporating a "technological transfer/technical cooperation" thrust regarding international assistance—thus giving birth to the Japan International Cooperation Agency—see Black and Rimmer, 1982.

For this paper, information from the following interviewees are cited: Esperedion Regulto (manager, Rolling Stock Maintenance Department); Benedicto Tuazon (mechanic, Tayuman Depot); Sisenando Castro (manager, Train Control and Terminal Operations Department); Diosdado Jose (engineer, Rolling Stock Maintenance Department); and Manuel Torres (former Chairman of the Board).

iv The Pyongyang Metro in North Korea beat the Seoul subway by a year.

The contracted title of the case wherein DAP was declared unconstitutional—which is a consolidation of nine petitions—is Araullo v. Aquino (G.R. No. 209287, 1 July 2014). The full decision can be accessed at http://sc.judiciary.gov.ph/jurisprudence/2014/july2014/209287.pdf. The resolution affirming DAP's unconstitutionality, promulgated on 3 February 2015, can be accessed here: http://sc.judiciary.gov.ph/pdf/web/viewer.html?file=/jurisprudence/2015/february2015/209287.pdf.

vi An excellent source that details how this deal came to be is the case Francisco S. Tatad, John H. Osmena, and Rodolfo G. Biazon, petitioners, vs. Hon. Jesus B. Garcia, Jr., in his capacity as the Secretary of the Department of Transportation and Communications, and EDSA LRT Corporation, Ltd., respondents, G.R. No. 114222, 6 April 1995 (available at http://www.lawphil.net/judjuris/juri1995/apr1995/gr_114222_1995.html.









