Notes to Prospective English Translators and Interested Readers

March 2021

Preface

This document is a collection of notes that I made when reading *Maitetsu: Last Run*. These notes born out of a discussion about the efforts required to do a fan translation of *Maitetsu: Last Run* over on Discord *Maitetsu Fan Server* and are meant to benefit future fan translation teams and readers who are not merely interested in the story itself alike. To benefit any possible translation efforts, a part of the notes would be about terminology, cultural references, and related context. However, a significant portion of this document would also be devoted to information that may not directly relate to any translation efforts, such as Japanese and Chinese railroading practices, railfan memes, and technical, cultural, and political background knowledge. This document also assumes basic to intermediate understanding of American railroading jargon and practices.

I will be writing from the perspective of a reader who is a native Chinese speaker and have used English extensively in both the academia and in the railfan community, but with near-zero Japanese knowledge except limited Kanji decoding capabilities. Therefore, this document will mainly be based on the official Chinese translation of the game, made by Hikari Field. While I will attempt to provide dual Chinese/Japanese text in my references to the original text whenever possible, please bear in mind that my Japanese readability is very limited, and I only have limited knowledge about the Japanese railway system and Japan in general (compared to my knowledge about the Chinese railway system and China). Therefore, for the main story, I will only be able to provide short notes with references and sources (many will be Wikipedia, but this document is not meant to be an academic paper) which are meant to be directions for in-depth research if one is interested. For the China story, I will be able to provide a more comprehensive and structured teardown, but due to time and knowledge limits, it should also not be considered as a full research paper.

Since English is my second language, and my English writing skills are probably below that of the best native speakers, I will try to focus on providing background information and directions for in-depth research, instead of directly providing translation advice. However, for occasions that I feel obligated to provide such

advice, I will also provide the reason behind my suggestions, and some possible alternatives, but they may not be accurate at all. Therefore, whomever is attempting to translate *Maitetsu: Last Run* and happened to run into this document should take my suggestions with a grain of salt.

Moreover, while I consider that I have understood *Maitetsu: Last Run* well enough to provide some advice to aid any possible translation efforts, my understanding to the game itself and the English language is ultimately limited. Therefore, despite my efforts, I expect this document to contain issues and inaacuracies, and I would welcome valuable discussions and feedbacks on them. But it is worth repeating that this document is not meant to be an actual academic research paper, but rather a collection of notes that I had gathered while reading *Maitetsu: Last Run* during my leisure time. This document also highly relies on the *duck test* principle when decoding real-world references, and readers should understand that the results of *duck tests* are just educated guesses and are limited by my knowledge and the sources I could access.

And finally, any political views that are expressed in this document, unless explicitly specified, are not my personal views, nor do I endorse them. All views and comments, unless otherwise specified, are merely my best-effort interpretations of the original political views presented by *Maitetsu: Last Run*, which are in turn based on the information provided in the text itself and/or any other related source or research that I can gather. Such interpretations are provided as-is, without any opinion and implied warranty or endorsement.

Assumptions and Conventions

This document was originally meant to aid any possible fan-translation efforts of *Maitetsu: Last Run*. As a result, this document assumes a reasonable English readability and writability. Besides, to keep the total length under control, this document also assumes a basic understanding of railroading, especially North American railroading practices. Finally, this document also makes several references to Kanji and Chinese text. Therefore, it is best to have some Han character readability, but this is not strictly necessary.

Unless otherwise specified, this document prefers North American (US) railroading terminologies. However, when the US terminology might cause ambiguity or is not available, such as the abbreviation MU for multiple-unit, equivalent British terminologies would be used (in this case, $multiple\ working$ for train control, and MU for rolling stock such as EMUs). For terminologies that do not have direct US or UK equivalents, a best-attempt translation would be provided along with a short explanation. This document defaults to the Whyte notation for classifying steam locomotives, and the AAR wheel arrangement system for other rolling stock.

While this document would mainly be based on the Chinese text, screenshots provided would be either in Japanese or dual language. Also, the Chinese text did minimal obfuscation for names of places that are not in China, while the Japanese text obfuscated everything. Since this document is based on the Chinese text, references to places would consequently defaults to un-obfuscated names (including in the China story, since

a complete list of un-obfuscated places are available at the beginning of the respective section), except for Ohitoyo¹, which is a well-known obfuscation of the city of Hitoyoshi, that had been kept in both the Chinese and Japanese texts.

This document mainly focuses on some of the denser stories, including Niiroku, Hachiroku, Hibiki, and China stories. For the stories that contain less references and are self-explanatory, such as Paulette, Nagi and Fukami, and Grand, notes for important items would still be provided, but would be less granular, and this is to help keep the length of this document in check.

Notes for the Niiroku Story

The Niiroku story is a short prologue of the main story. While this story itself is a breathtaking tragicomedy, it also serves the role of providing background information that is crucial in understanding other branches of the plot. As a result, the Niiroku story also contains references to historic people, events, and conspiracy theories. I will do my best attempting in presenting them without any opinion, but please understand that the limits of my presentation.

Niiroku / KuHa 26

Though the game never made it clear, KuHa 26 is technically the first car of a complete 20 series (reclassified in the real world as the 151 series) EMU (1). KuHa indicates that the specific car is an unmotorized (trailer) coach class car with a control cab. Similarly, the MoHaShi 21 car is a motorized coach class car that also has a small café that resembles the café cars seen on Amtrak corridor trains such as the *Acela Express* or the *Pacific Surfliner*.

¹ Kumamoto is also obfuscated, but the obfuscation only resulted in different Kanji writings, and the romanized versions have the same spelling.



The Track Closure Conspiracy

While the Japanese text have mangled nations, the Chinese text made it clear that the Track Closure and the dissolution of the Imperial Railway was the order given by both the Japanese and American government authorities. While there are multiple explanations on what exactly this is modeled after, a possible candidate is the General Motors streetcar conspiracy (2), which has apparently extended beyond just the US, but into many other countries in the world of *Maitetsu*. In the real world, General Motors also produced world-class diesel locomotives under the brand EMD until 2005 (3), and in the *Maitetsu* universe, Airctech, the company that is responsible for the development and marketing of Airca, eventually also invested in the Ohitoyo Railway and intermodal freight transportation.

The Spin-off of Rail Freight Division and the Privatization Proposal

While the Niiroku story only briefly mentioned the spin-off of Imperial Railway's freight division and did not provide enough context on the incident. It can be inferred that it may be referring to the spin-off of JR Freight as an individual company of the JR Group following the privatization of the Japanese National Railways.



Unlike the railways of the United States of China, rail freight in Japan is not a cash cow, but rather a source of loss. In the real world, JR Freight is still running at a loss and rely on government subsidies while JR East, JR Central, JR West, and JR Kyushu, for passenger-only carriers, have succeeded in profiting.

Continuing the theme of privatizing JNR, the proposal that the unnamed sienpei and Akai had proposed was very similar to the dissolution process of the JNR. Instead of following the British practice, where an infrastructure company was set up to maintain the rail network, and train operating companies would lease passage rights from the infrastructure company (the model proposed in both the Kisaki story and Hachiroku After story), their plans called for establishing regional passenger rail systems, and have the already spunoff freight carrier who is required to lease passage rights from the passenger systems. This is analogous to the current relationship between the five JR passenger companies (JR East, JR Central, JR West, JR Kyushu, JR Hokkaido, and JR Shikoku) and JR Freight, who owns some dedicated freight lines, but mostly relies on leasing passage rights from the sister systems. This plan also calls for selling and decommissioning lesser-used and unprofitable lines, which is what JR Hokkaido actively does (caused by operating in the extreme cold climate of Hokkaido and low ridership across most of its network which mainly serves rural regions) to cut operating costs and attempt to maintain a profit margin.

Labor Unions

In the Niiroku story, Akai's unnamed sienpei mentioned about his position as a member of the Imperial Rail Workers' Union and stated how this could make him unsuitable in launching petitions of keeping the railway alive, because of conflicts with not only the management of the Imperial Railway, but also other labor unions.



In the real world, there had been historically two major labor unions related to the JNR system. These two unions were the National Railway Workers' Union (国鉄労働組合) (4) and National Railway Motive Power Union (国鉄動力車労働組合) (5). Not only both labor unions had conflicts with the management of JNR, but they also had conflicts with each other, which is exactly the situation depicted in game.

Hikari

The executive express *Hikari* that Niiroku was designed for is a reference to the real-world named passenger train *Hikari* (6), which was the fastest express on the Tokaido Shinkansen, before being superseded by the even faster *Nozomi* (7) service in the 1990s. It is also worth noting that both *Hikari* and *Nozomi* names were inherited from WWII-era service that were ran by the South Manchuria Railway, which travelled across northeastern China and the Korean Peninsula which were under Japanese occupation back then.



Besides being directly referenced in the Niiroku story, *Hikari* is also the name given by Sotetsu and Paulette to their daughter, who appeared in the Paulette After story.

The Death Deity / Thanatos / Mors

In the Niiroku story, the engine D6o 46 and the respective raillord, who was regarded by Niiroku as the big Sissie, was called by others as the death deity or Thanatos because she was hauling all the decommissioned rolling stock that were about to be scrapped.



This is a reference to a Japanese railroading tradition in the real world. Usually, JR Freight will have a few rarely used engines on their roster, that mostly hauls either decommissioned rolling stock for scrapping, or MOW trains. And as a result, Japanese railfans started to call these engines the death deity or Thanatos.

Keita Goto²

Keita Goto (後東 慶太 Goto Keita), also known as Gangster Keita because of how he behaves, is Akai's colleague, and he played a key role in saving Niiroku from being scrapped. His name is a direct reference to the Japanese businessman and politician Keita Goto (五島 慶太 Goto Keita) (8) whose name happen to sound the same in Japanese. As a businessman, Goto founded the Tokyu (東急) railway system, and is famous for being aggressive and capable of exploiting loopholes of regulations and policies. People called him Gangster Keita³ not only because of his business strategies, but also because the Japanese of "gangster" is also pronounced "Goto" (9).

² Here the western order of given name then family name is used, unless when transcribing Kanji.

³ Apparently, this phonetic pun will only work with the eastern order of family name then given name.



In the Grand route, Goto will appear as Akai's old friend who founded his own railway, Gotokyu (後東急), despite the national policy of deprecating railways, and become a major stakeholder of Sotetsu's *Nine Stars* luxury train service. The name of his railway is an obvious to the Tokyu system that was mentioned earlier in this section.

Notes for the Hachiroku After Story

The Hachiroku after story is an extension of the *Maitetsu* Hachiroku story. Therefore, this section assumes that the reader possesses knowledge related to the Hachiroku story of *Maitetsu*. The Hachiroku story of *Last Run* is somewhat politically charged and contains many references. Therefore, I will attempt to interpret such political and cultural references within my knowledge and abilities, but please view my interpretations through a lens of skepticism.

Iyo Mikan Railway⁴

Appearead in *Rail Romanesque* as Iyo's home railway. Iyo herself is also nicknamed by the passengers of Iyo Mikan Railways as "the lady."



D₅1 840

That is a reference to Ran, who appeared in the short anime series *Rail Romanesque*. The Takasaki Railway is a fictional railway system in the *Maitetsu* world that inherited trackage from the former JGR (Japanese Government Railways) and is Ran's home railway.

⁴ Known in the real world as Iyotetsu.



Nagoya Railway⁵

A privately-owned railway system serving the greater Nagoya region and directly competes with JR Central (JR Tokai). Appeared in *Rail Romanesque* as Kiko's home railway.

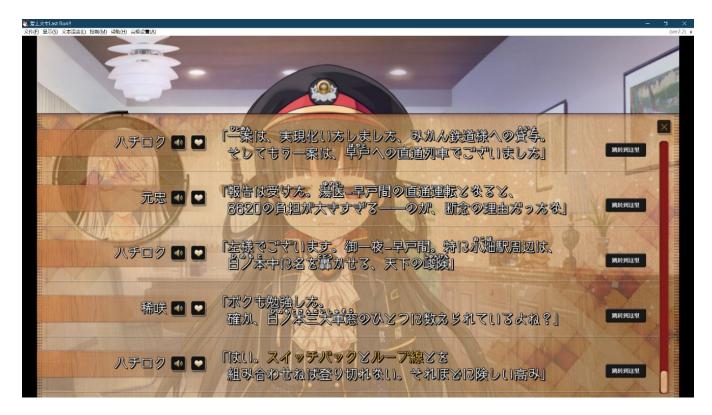
⁵ Known as Nagoya Railroad or Meitetsu in the real world.



Hisatsu Line

The Hisatsu Line (10) was built as an overland route that connects the northern and southern parts of Kyushu, complimenting the seaboard Kagoshima Main Line. Though shorter than the Kagoshima Main Line, the Hisatsu Line was a secondary line because of a steep ruling grade of 3.03% (despite using a combination of both a zig zag and a spiral which is covered extensively in later parts of the game).

While the steep ruling grade limited the usefulness of Hisatsu Line in general, the combination of a spiral and a zig zag also made it a tourist attraction, and that was the main motivation of Ohitoyo Railway's attempts rehabilitate this line.



In game, the section between Yatsushiro and Ohitoyo (or Hitoyoshi in the real world) was not open for service, and only the segment south of Ohitoyo is open to tourist and commuter services. Though in reality, the segment from Yatsushiro to Yoshimatsu (four stops south of Hitoyoshi) is indefinitely closed due to the July 2020 flooding.

Universal 8620

The JGR Class 8620 was originally designed for express passenger services, like Amtrak's Siemens ACS-64 and The MPI MPXpress family that are in service with various North American commuter rail system. However, her design was well thought out and resulted in surprisingly good adhesion properties despite being a 2-6-0 and was even praised by engineers back then to "never slip" (11). Therefore, she was also used for various freight services, analogous to how Conrail operated their inherited PRR GG1s as freight engines on the Northeast Corridor.





Despite having amazing adhesion properties, a single Class 8620, however, would still struggle with the 3.03% ruling grade between Ohitoyo and Yoshimatsu, mainly due to the limited rated power output of only 558kW or 748hp.

Bunker Fuel Boost System

The Bunker Fuel⁶ Boost System (or literally Bunker Fuel Auxiliary Burner), being mentioned several times throughout the game, refers to a retrofit that was done to some steam locomotives. While nearly all Japanese steam locomotives are coal fired, some engines, especially those with requirements for extra power output, were fitted with auxiliary bunker fuel burners. These burners are designed to operate for short amounts of time, providing an extra boost to handle transient power needs, like the afterburners of some jet engines. When the boost burner is operating, the engine will output significantly more smoke than it would normally. Therefore, a modern application of this boost system is to use it to intentionally create extra smoke, to please railfans who might be expecting smoke.



However, engine No. 9 (a JGR Class 1240 that was not even superheated) was unlikely to be fitted with such systems, and no records indicate that No. 9 was ever fitted with an auxiliary bunker fuel burner either.

⁶ Japanese: 重油

Baldwin Locomotive Works

Probably an error introduced by the Chinese translation team, it was misspelled as "Aldwin" in the Chinese text. However, H.K. Porter Inc., another American locomotive builder referenced in the game, was spelled correctly in the Chinese text.



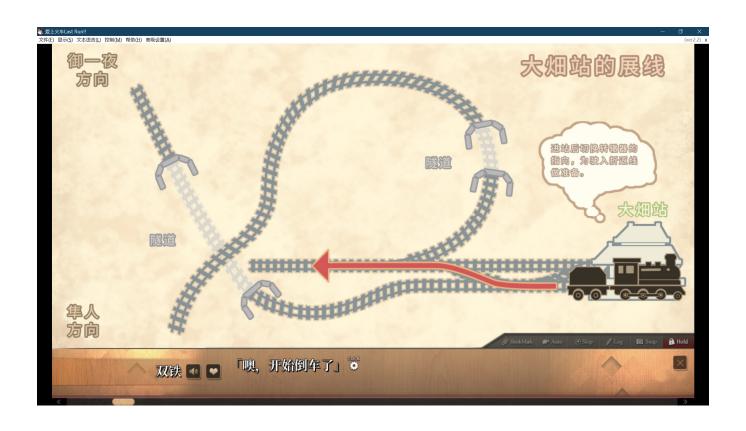
Fuji Minobu Railway

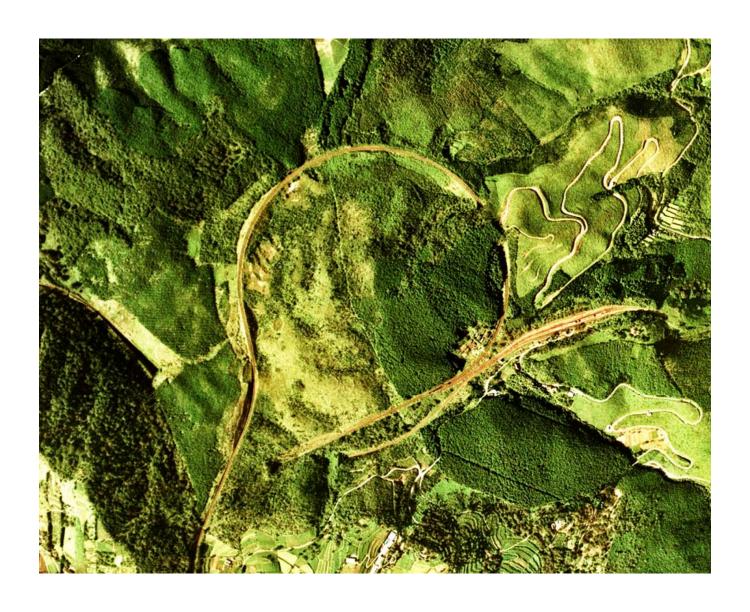
Fuji Minobu Railway, the railway that Olivi first served, is now known as the JR Central (JR Tokai) Minobu Line.

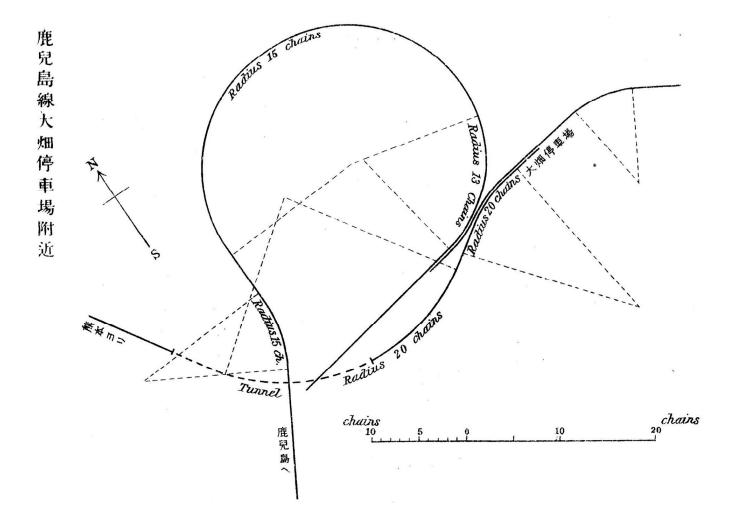


The Spiral of Okoba

The game described the route near the Okoba Station as a spiral, but this is somewhat inaccurate and contradicts with the detailed explanation given. Technically, when departing Okoba Station (assuming southbound train, everything gets reversed for northbound trains), the train will have to first back up onto a zig zag and then continue onto the spiral. This combination was necessary, as even having both a zig zag and a spiral in place, the minimal gradient immediately south of Okoba is still 2% and the route reaches a ruling grade of 3.03% when approaching Yatake Station (the station with the highest elevation on the entire Hisatsu Line). Also refer to the aerial photograph (10) and engineering drawing (10) below for details.







SL Ohitoyo

SL Ohitoyo, the name of the proposed express service between Kumamoto and Ohitoyo utilizing the thenclosed (in game) northern portion of the Hisatsu Line, is a reference to the *SL Hitoyoshi* excursion service between Kumamoto and Hitoyoshi, operated by JR Kyushu using engine 58654, the only mainline-certified Class 8620 in the world. However, due to the July 2020 floods, this service had been suspended indefinitely.



It is also worth mentioning that the entire story of *Maitetsu*, especially the Hachiroku story, is clearly inspired by JR Kyushu's efforts to restore and mainline-certify engine 58654, and the operations of *SL Hitoyoshi*.

Quote: Discourse on Teachers

The real fact is that one might have learned the doctrine earlier than the other or might be a master in his own special field. – Discourse on Teachers, Han Yu (12)

闻道有先后,术业有专攻,如是而已 - 韩愈《师说》

When chatting with Hachiroku and Olivi during the preparation of No. 9's trial run with Ohitoyo Railway, Sotetsu quoted a line from *Discourse on Teachers* (12) (13) (14), an essay in Classical Chinese by Han Yu (15), a writer and philosopher from the Tang Dynasty.



Unfortunately, I am unable whether did Sotetsu directly quote this line in Japanese or was it just Hikari Field's approach of translating a Japanese phrase. While well-educated people in Japan do study and often quote Classical Chinese works, they generally only encounter these works in translated forms, either by contemporary Japanese scholars who would have used classical forms of Japanese, or by modern scholars, who might use a more modern form of Japanese. And the Japanese text in this case look very different from the Chinese quote in its original form.

I would personally suggest the English translation team either use an equivalent English idiom or borrow an existing translation of the original Classical Chinese work, instead of attempting to come up with a makeshift translation. The suggested translation of the quote is one of the versions available online that I personally consider works reasonably well, but is not from a published, formal translation done by a credible translator.

Nippon Sharyo

Nippon Sharyo (日本車両) (16) is a major rolling stock manufacturer that had appeared multiple times in the *Maitetsu* story. One should note that the official English name of the company is simply "Nippon Sharyo" and the "sharyo" part is directly transliterated, instead of being translated literally. Similarly, Kisha Seizo (汽車製造) (17) is also transliterated as-is, instead of being translated literally. The Crunchyroll version of

Rail Romanesque failed to translate either of the two examples correctly, therefore I believe that this issue is worth addressing.



Also note that in the Hikari Field translation, "Nippon Sharyo" is kept as-is, but in the Japanese text, the name is mangled.

Occident Express

 $Occident\ Express,$ a luxury excursion service that was brought up by Hibiki, is a reference to the $Oriental\ Express.$



Junction (信号所)

When appeared as a part of the name of a place, the Japanese phrase 「信号所」 (which literally means "signaling station") roughly translates to "junction" in English or 「线路所」 in Simplified Chinese.



While I cannot provide a reliable English translation of the mentioned junction in the game, as a real-world example, 「汉口线路所」 or "Hankou Xianlusuo" in Chinese can be translated to Hankou Junction in English, or 「漢口信号所」 in Japanese.

The Clown President

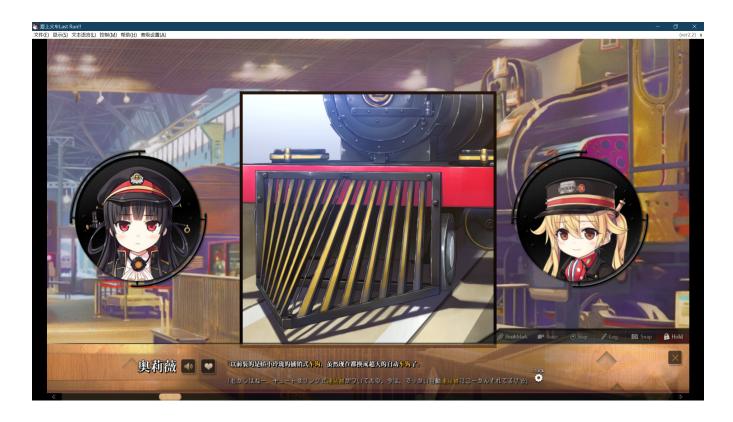
There had been an occasion in the Hachiroku after story where Fuakmi mentioned "the clown president" when referring to the United States. That was a reference to Donald J. Trump, POTUS 45, as *Last Run* was written in the Trump era.



Similarly, in the original *Maitetsu* story, Hachiroku had mentioned that the president of the US was "a wonderful man" and that was referring to Barack Obama, POTUS 44, as the original story was written in the Obama era.

Automatic Coupler

As a clarification, when encountering the phrase "automatic coupler" in Japanese railway (especially non-EMU and non-Shinkansen) context, it usually means the Janney / AAR coupler.



Hiyoko

Her nickname, which literally means "the bird that never dies" is another way that phoenix is being referred to in both Japanese and Chinese. And her actual name, Hiyoko, literally means young bird or young animal in both Japanese and Chinese.



Shimoyama Incident

The game had referred to the Shimoyama Incident (18), one of the mysterious deaths that had yet to be solved in postwar Japan (the Chinese text kept the incident as-is, while the Japanese text employed very simple mangling that easily indicates what was being referred). Shimyama Incident refers to the death of Sadanori Shimoyama, then the chief executive of the Japanese National Railways.

Along with the Matsukawa Derailment (19) and the Mitaka Incident (20), Shimyama Incident is known as a part of the "three unresolved mysteries of the JNR" that all happened between July and August of 1949. However, unlike the Shimyama Incident, the former two incidents were officially concluded to be sabotages done by members of the Japanese Communist Party, but the evidence were not conclusive enough (despite having people Japanese Communist Party members being arrested and sentenced for being responsible).



On July 5th, 1949, Shimoyama disappeared on his way to work, and was found to be killed by a freight train the next day. There had been no official conclusion on his death, and the media back the had released conflicting information.

Shimoyama was laying off JNR employees at that time, as outlined by the Dodge Line that was issued by the SCAP (Supreme Commander for the Allied Powers, also known as the GHQ) and was heavily opposed by the related labor unions. There had also been claims indicating that these layoffs were against his wills, and he executed them only because of the pressure from the SCAP. Therefore, there had been three different conspiracy theories regarding his death:

- Some think that he committed suicide because he felt guilty and did not want to continue laying people off.
- Some think that the SCAP was responsible for his death because he attempted to resist the layoffs. And to the SCAP, his resistance meant that he is either sabotaging the allied occupation, or he is supporting the labor unions, and were dangerous either way.
- Some also think that the labor unions and the Japanese Communist Party may held him responsible for executing the layoffs and murder him as a result.

The game explained Shimoyama Incident as the result of him advocating equal human rights for raillords, which could a reference to the second conspiracy theory regarding his death.

Quote: Lao Tzu

The people fear not death, why threaten them with it? – Lao Tzu (21)

民不畏死,奈何以死惧之 - 《老子》

When Dr. Phoenix warned Sotetsu and Hachiroku about the potential possibility of being assassinated for advocating raillord rights (and the Shimoyama Incident), Sotetsu responded with a line from $Lao\ Tzu$ (22), a collection of works on politics and philosophy, by the Spring and Autumn period Chinese philosopher Laozi.



That specific line, originally written in Classical Chinese, have since been translated into multiple languages (23), and being widely quoted. One of the most famous usages of this quote is in the essay Farewell, Leighton Stuart by Mao Zedong (21) (24). Like the previous quote from Discourse on Teachers, I also cannot determine whether Sotetsu quoted that line or was Hikari Field borrowing that line as a translation.

The suggested translation given at the beginning of this section was excerpted from the official English translation of the essay Farewell, Leighton Stuart which was included in the 4th volume of the English version of the Selected Works of Mao Tse-Tung (21). I am suggesting this translation mainly because of quality, as only some of the best bilingual scholars in China would have the privilege to officially translate Mao's works back in the 1950s. Besides, compared to some other translations that I have encountered, this

specific translation also seemed to me to balance well between fluency and formalness. However, if the translation team feels uncomfortable with quoting the work of Mao due to any reason, I would suggest attempting to find a formal, published English translation of *Lao Tzu* instead of attempting to come up with a translation oneself.

Ballastless Tracks

When Olivi was out with Sotetsu and Hachiroku on track maintenance duties, she mentioned about research in the field of "concrete ballast." It is probably referring to the various ballastless track (25) technologies, widely employed on high-speed rail systems in Japan and China.



Emergency Management Agencies

Unlike the United States, where there exists the federal-level FEMA, municipals and counties in Japan usually have their individual EMAs.



For example, the instance shown in the above image could be translated to Kirishima-shi Emergency Management Agency.

Centralia Coal and Coal Grades

In memorial of Olivi, Hachiroku mentioned that she was gifted by Olivi with some coal from a deserted coal mine that was suffering from coal-seam fires. By decoding the Chinese text, I speculate that this is a reference to the Centralia mine fire which caused the town of Centralia, PA to be mostly abandoned (26).



As the conversation continued, Sotetsu guided Hachiroku on the different kinds of coal that impressed her.



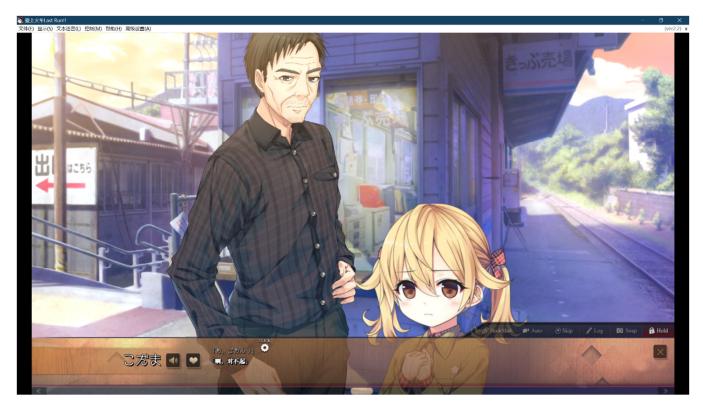


And the mentioned coal grades are of the following:

- 「褐炭」 is lignite (27)
- 「歴青炭」 is bituminous coal (28)
- 「無煙炭」 is anthracite (29)

Kodama and Nozomi

The two raillords who were descendants of Olivi, Kodama and Nozomi (name of the latter being visible only in CG viewer mode), are references to named passenger trains on the Tokaido / Sanyo Shinkansens.



Kodama, the first raillord that had inherited Olivi's tablet, is named after the passenger train Kodama (30). Kodama was originally the fastest limited express on the Tokaido Main Line and debuted with the 20 / 151 Series EMU (Niiroku / KuHa 26). Today the name is still being used for Tokaido and Sanyo Shinkansen services, but now these trains are all-stop services that only travel within their designated sections (i.e., Tokaido Shinkansen Kodoma trains only travel between Tokyo and Shin-Osaka, and Sanyo Shinkansen Kodama Trains only travel between Shin-Osaka and Hakata, with no through service Kodama trains available between Tokyo and Hakata).



Nozomi, the other raillord descendent of Olivi (also the one that got accepted into the Migita family), is a namesake of the passenger train Nozomi (7), the fastest limited express on the Tokaido / Sanyo Shinkansens, offering through service between Tokyo and Hakata. The name Nozomi, along with Hikari, can be traced back to WWII-era named passenger trains, and Nozomi was the long-distance express service between the then Japanese-occupied cities of Busan and Mukden (now Shenyang). The service was later extended to Hsingking (now Changchun), which was also under Japanese occupation. After the war, the name went unused. It was only until the early 1990s when Nozomi returned as the new flagship service on the Tokaido Shinkansen. With even faster speeds then that of Hikari, Nozomi was the response to an increase in competition from the airlines.

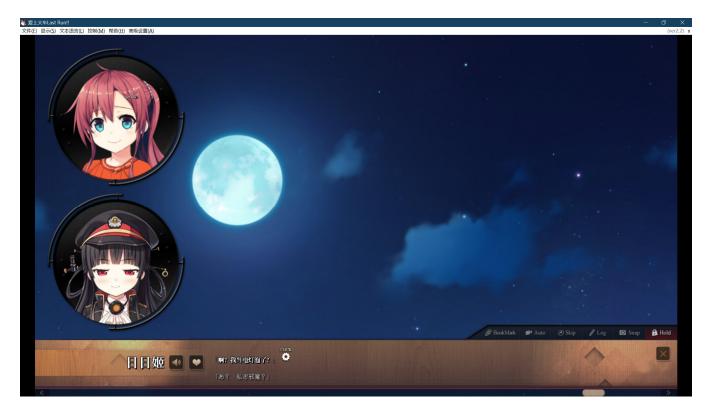
下		<u>)</u>	(東京	→ <u>}</u>	<u>新大阪</u>	ጀ →	博多	
	3	γij		の	v	=	の	= =	ひ
]	車		ぞみ	かり	だま	ぞみ	だま	かり
				Nozomi	Hikari	Kodama	-,	Kodama	Hikari
	3	名		75	531	761	77	763	533
東		京	発						
品		川	"						
新	横	浜	"						6:00
小	田	原	"						6:16
熱		海	"						V
Ξ		島	"						V
新	富	\pm	"						V
静		岡	"					6:07	6:41
掛		Щ	"					6:21	V
浜		松	"					6:32	V
豊		橋	"					6:45	ν
三	可安	城	"					7:00	V
名	古	屋	着					7:10	7:24
_	阜羽		発	6:20	6:36 6:47	6:51 7:04	7:06	7:12 7:23	7:25 レ
火 米	平小	原	"	l l	7:00	7:18	レレ		V
			"	'	7:00	7:16	7:41	7:36 7:56	8:00
京		都	" 着	6:55 7:09	7:20	7:51	7:54	8:09	8:00
新	大	阪	発	7:11	7:35	7.01	7:56	0.00	8:14
新	神	戸	"	7:24	7:48		8:09		8:27
西	明	石	"	V	V		V		8:39
姫		路	"	レ	8:04		V		8:52
相		生	"	V	V		V		ν
畄		山.	着発	7:55 7:56	8:24 8:25		8:41 8:42		9:13 9:14
新	倉	敷	11	7.50 V	レ		υ. 4 2		レ
福		山	,,	8:13	8:41		V		9:31
新	尾	道	,,	V	V		V		V
Ξ		原	,,	l v	V		V		V
東	広	島	,,	V	V		V		V
広		島	着	8:36	9:04		9:17		9:54
	ш		発	8:37	9:05		9:18		
新生	岩	国	"	\	V		V		
徳		山 _	"	\(\nu \)	ν		ν • • • • • • • • • • • • • • • • • • •		
新	Щ		"	\(\nu \)	ν		9:49		
厚	_	狭	"	\(\nu \)	ν 		V		
新	下	関	// 学	ν 0.22	9:47 9:54		レ 10:07		
小		倉	<u></u>	9:23 9:24	9:55		10:07		
博		多	着	9:39	10:11		10:24		

Currently, these named passenger trains are also color-coded on the official Shinkansen timetables and on-board information displays. As shown in the excerpted timetable above (31), *Nozomi* trains are colored in yellow, *Hikari* trains are colored in red, and *Kodama* trains are colored in blue.

See also: Hikari

"The Lightbulb" Expression

"The lightbulb" is an expression that had been used in the Hikari Field text multiple times throughout the game. Its meaning in Chinese slang is a reference to someone who is hanging out together with a couple and makes the couple "shine."



I cannot figure out a good translation suggestion for this specific term, but when encountering this expression, an unformal slang is preferred.

Notes for the China Story

Nomenclature and Etymology

Because *Maitetsu: Last Run* is speculative fiction that is set in an alternate universe, the original authors and the translators at Hikari Field have chosen to selectively⁷ mangle the names of places, things, and even people in the story. Also, a lot of the mangled names and names of characters are designed in such a way that for readers who are familiar with the related subjects and backgrounds, they are obvious references and puns, but for ones who do not possess the prerequisite knowledge, they can easily be meaningless.

⁷ The Lose edition has all names and places mangled, but the Hikari Field edition seemed to only mangle the ones related to China.

People and Characters

When the names of Chinese people are translated into western languages, a variety of romanization schemes can be chosen, and for people from mainland China, the Hanyu Pinyin scheme is the official standard. However, since *Maitetsu: Last Run* is dubbed in Japanese, such names in the game were pronounced directly in Japanese by treating Chinese characters as Kanji. Therefore, if the translator attempts to translate such names directly by transcribing the Japanese pronunciation, it will usually generate results that are technically incorrect. Also, note that in the CJKV family of languages, the family name comes before the giving name. In this document, the names will be normalized to the western writing order (given name then family name), but the original text will have the eastern order (family name then given name).

Below is a table of the names of the Chinese characters that appeared in game, with their names in native text (Chinese, family name first) and the corresponding romanization using the *Hanyu Pinyin* scheme (given name first).

Chinese	English	Notes
姜叶煌	Yehuang Jiang	N/A
刘志寰	Zhihuan Liu	See sections below for details
西瓜	Xigua	Or Suika as appeared in Rail Romanesque
No. 19	No. 19	This is the official name on character sheets

Yehuang Jiang

While according to the website of Hikari Field, she is the Vice-Minister of Railways' secretary, her title in game was the secretary of the vice-executive of the China Department of Transportation (DOT). Technically the latter is more in line with the real world, as currently the Ministry of Railways (MOR) had already dissolved into China State Railway Group Co., Ltd. (CSRG), and the administrative arm had since moved to the DOT. However, the game did not clearly state whether the MOR have dissolved or not.

⁸ Other romanization systems include the Wade–Giles scheme, Chinese postal romanization, and Yale scheme. While these schemes have all being deprecated in the mainland by the Pinyin scheme, they might still be used in other parts of the greater China region and may have influenced how names in the world of *Maitetsu* have been mangled.

⁹ When translating proper nouns between languages that use Han characters (Hanzi, Kanji, and Hanja), generally it is preferrable to keep the Han character itself from the source language and pronounce it directly in the target.

Zhihuan Liu

Apparent to Chinese readers, his name is a combination of Zhihuan Fu and Zhijun Liu, the 11th and the 12th Ministers of Railways of the PRC. This fact probably is not relevant to English translation efforts, but this kind of naming practice is generally deemed politically sensitive and inappropriate in Chinese contexts. This is especially true for Zhijun Liu because he is now sentenced to lifetime imprisonment for being accused of illegal subcontracting practices, an anticompetitive attitude towards locally owned railways, and held responsible for several major railway accidents during or shortly after his term.

Suika

Since raillords usually do not have family names, this is her given name, which means watermelon, and is a pun targeted at Chinese railfans (covered in later sections). According to Chinese protocols, her name should be transcribed to Xigua. However, the actual choice of how this should be done is complicated by the premiere of the related anime series Rail Romanesque, as her name is being transcribed into Suika in this series, which is the Japanese pronunciation of the original Han characters, and the Japanese word for watermelon. Whether to comply with the Chinese protocols, keep the translation in line with Rail Romanesque, or even use one of the older romanization schemes, is however ultimately at the discretion of the translation team, and this note is presented purely as a suggestion based on the background facts that I know.

Places

The names of places in the Hikari Field's version of the China after story were mangled in a way that usually left obvious hints to Chinese speakers about the originals (replacing Han characters with the ones that have the same or similar phonetics or similar shapes). Therefore, this section will provide both the corrected Chinese and English for the mangled Chinese names, as well the proper English transliteration for the mangle names of places, so that the translation team can choose to either use actual names or keep the mangled ones as-is.

Mangled Chinese	Mangled English	Corrected Chinese	Corrected English
仲国	China ¹⁰	中国	China
北琴	Beiqin	北京	Beijing
通洲	Tongzhou	通州	Tongzhou

¹⁰ The mangled version sounds the same as the corrected version. Therefore, one can use *China* directly.

乎和浩特	Huhehaote / Hohhot ¹¹	呼和浩特	Hohhot^{12}
栖安	Xi'an	西安	Xi'an
栖宁	Xining	西宁	Xining
盛都	Shengdu	成都	Chengdu
坤明	Kunming	昆明	Kunming
厦问	Xiawen	厦门	Xiamen
南琴	Nanqin	南京	Nanjing
苏洲	Suzhou	苏州	Suzhou
广洲	Guangzhou / Canton City ¹³	广州	Guangzhou / Canton City
哈尔宾	Harbin	哈尔滨	Harbin
上烸	Shanghai	上海	Shanghai
箱港	Xianggang / Hong $Kong^{14}$	香港	Hong Kong
健为	Jianwei	犍为	Qianwei

Naming and Translation Conventions of Train Stations

Stations on the China State Railway system are usually named after the city that it lies in. In the case of multiple stations in the same metropolitan area, they are usually differentiated by adding a directional suffix. In the case of the China after story, examples of the latter naming convention included Beijing West Station, Tongzhou West Station, and a few others.

While it is natural to directly translate the directional suffix into English, the updated China State Railway convention (according to documents issued by the former MOR in September 2012) is to directly transliterate the directional suffix using Pinyin and append it to the city name as a single word (similar to how SNCF translates the Paris-Nord station). So, Beijing West Station become Beijingxi Station and Tongzhou West Station becomes Tongzhouxi Station. This new convention has generated heated debate among

¹¹ Direct Pinyin transliteration, not necessarily accurate. But the characters sound the same as the correct one, so one can just use Hohhot.

¹² That city is in Inner Mongolia. Therefore, the official English name is a Mongolian transliteration.

¹³ The mangled version sounds the same as the corrected version. Therefore, one can use Canton City directly.

 $^{^{14}}$ The mangled version sounds the same as the corrected version. Therefore, one can use $Hong\ Kong\ directly$.

Chinese railfan communities, and both approaches have their fans. Therefore, this document will present the for commonly used directional suffixes (east, west, north, and south) in both Han characters and *Pinyin*, and which approach should be used in the final translation work is ultimately dictated by the translation team.

Han character	Pinyin	English
东	Dong	East
西	Xi	West
南	Nan	South
北	Bei	North

Rolling Stock and Railway Terminology

The China after story introduced various Chinese railway terminologies which are similar, but subtly different from their Japanese counterparts. This story also introduced various Chinese railway rolling stock, and some of them have their names or codes mangled.

Track Gauge

Maitetsu did not clearly state the different track gauges used by the various railways that were featured. Here is a quick run-down.

- The Ohitoyo Railway, and any other railway systems that inherited trackage from the JGR, such as the Hisatsu Mikan Railway¹⁵, have a track gauge of 1,067mm or 3 ft 6 in (Cape gauge).
- The China State Railway system has a track gauge of 1,435mm or 4 ft 8 $^{1}/_{2}$ in (standard gauge / UIC gauge).
- The Jiayang Coal Railway¹⁶, or Bashi Railway (covered in later sections), has a track gauge of 762mm or 2 ft 6 in.

¹⁵ Known in the real world as the Hisatsu Orange Railway.

¹⁶ Appeared in game as Bayan Railway (芭岩铁路); in the real world its name is Bashi Railway (芭石铁路) or Jiayang Coal Railway in English literatures.

Dongfu 4 / Dongfeng 4 / DF4

Suika's engine, DF4-2000, appeared in game as the pre-production passenger unit of the Dongfu 4 family. When dealing with this, there are a few things to note, including the numbering scheme used by the China State Railway system, and how the name was mangled due to some political implications of the name in the real world.

On the China State Railway system, the road number of a locomotive consists of two parts¹⁷: the model designation, and a 4-digit number (pad with o if not all four digits are used) which is usually unique within the same model, connected by a dash. Therefore, the complete road number for Suika's engine is DF4-2000.

Dongfu (东富) is a phonetically mangled version of Dongfeng (东风), the designation used by the China State Railway system for all their legacy diesel-electric locomotives. There are probably several reasons for mangling the designation. Firstly, Dongfeng, which means "east wind," came from a quote in the book *Dream of the Red Chamber* (32), "...it is either the east wind prevailing over the west wind, or the opposite¹⁸," which was popularized by Mao Zedong in a 1957 conference speech (33) and have since become an expression that has pro-Maoist political and ideological implications. Another possible reason is that the family of land-based ballistic missiles used by the PRC armed forces is also designated Dongfeng. It is ultimately up to the translator on whether to keep the mangled designation as-is, replace it with the correct one, or follow the conventions set forth in English literatures and just designate it as DF4 (which is correct for both the mangled and corrected versions).

The China story also mentioned DF₄D, which is the most advanced model in the DF₄ family of dieselelectric locomotives. It should be noted that DF₄ is only the base model of the DF₄ family, and the while the earlier three iterations of improvements, DF₄A, DF₄B, and DF₄C, shared the DF₄ designation (and consequently, the numbering space) in the China State Railway system, DF₄D is considered as a discrete model, and has its own numbering space in the China State Railway system.

Finally, as a Chinese railfan, I believe that the choice of featuring DF4 in the story is intentional. DF4 is one of the most widely deployed locomotives on the China State Railway system, and an icon of the system, much like the JGR Class 8620 in Japan, and the EMD SD40-2 in the United States. There is even a saying that says, "where the (China) Railway extends, where the DF4 presents."

¹⁷ EMUs have a similar but not identical numbering scheme, but this is not relevant to the story.

¹⁸ 但凡家庭之事,不是东风压了西风,就是西风压了东风。

The Suika or Watermelon Pun

Suika's name, which literally translates to watermelon, is a reference to the nickname given to the freight versions of the DF₄ by Chinese railfans (as shown in the image below).



The watermelon nickname was given to these engines due to their green paint scheme. And while DF₄-2000 carries the above paint scheme as described in game, the passenger versions of DF₄ would carry a different paint scheme in the real world, which Chinese railfans nicknamed orange (as shown in the image below).



Chinese Railroading Practices

The China after story covered various railroading practices on both the state-owned China State Railway and the locally owned Bayan Railway / Bashi Railway / Jiayang Coal Railway (a former mining railway that currently operates as a heritage railway). While both railways have similar practices and operating rules, the former has a more comprehensive codebook and a much tighter set of regulations. Therefore, these two systems will be discussed independently in the following sections.

China State Railway

As the state-owned nationwide railway system, China State Railway have some of the stricter operating rules compared to various industrial, mining, logging, and heritage railways. Besides, China State Railway is also conservative and sometimes paranoid in certain aspects, as shown in the game.

Train Symbols

Unlike in the United States, Canada, or Japan, where the passenger train symbol contains a number and a nickname for the service (such as *Mizuho 600* or *64 Maple Leaf*), both passenger and freight trains on the China State Railway system share a unified symbol system. This symbol system uses a single optional Latin character prefix, and a mandatory number, that uniquely identifies a given train in both the timetable and

the dispatch system. A train symbol under this system may look like the following: $X103^{19}$, $Z1^{20}$, or 1462^{21} . Below is a run-down of the train symbol prefixes that are relevant to the China story.

Prefix	Chinese	Pinyin	English	Example
<no prefix=""></no>	普快	PuKuai	Local / Regular / All-stop	1462
K	快速	KuaiSu	Rapid / Semi-fast	$K1189^{22}$
Т	特快	TeKuai	Express	$Tg6^{23}$
Z	直达特快	ZhiDa TeKuai	Limited Express	Z_4g^{24}

The details of the different train symbols were discussed in the second chapter of the China story, and a comparison between the Chinese and Japanese classification systems were also made.

¹⁹ Express parcel and mail service from Beijing to Shenzhen. Technically a freight service but uses baggage cars from passenger services and is dispatched with the same priority as a limited express passenger service.

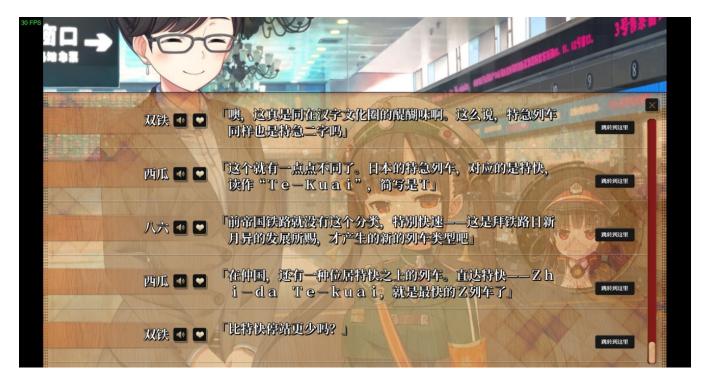
²⁰ Limited express passenger service from Beijing to Changsha.

²¹ All-stop passenger service from Shanghai to Beijing with RPO cars for surface mail.

 $^{^{\}rm 22}$ Semi-fast passenger from Beijing to Hohhot, mentioned in game.

 $^{^{\}rm 23}$ Express passenger service from Shenzhen to Wuhan.

²⁴ Limited express passenger service from Beijing to Chengdu, the train that Sotetsu rode.



However, what the game did not mention is that the unified train symbol system also has rules about the "up" and "down" directions, just like British Rail. Trains travelling towards Beijing is considered as travelling in the "up" direction, and are given odd numbers, while trains travelling away from Beijing is considered as travelling in the "down" direction and are given even numbers²⁵. A train may also carry multiple symbols if its travel direction changed. For example, $Z206/\gamma$, a limited express passenger service from Tianjin to Changsha, carries the Z206 symbol on the segment between Tianjin and Beijing, and carries the Z207 symbol on the segment between Beijing and Changsha.

No Photography

There were multiple references in game regarding restrictions on photography and other similar activities, and there is also at least one reference in the anime series *Rail Romanesque* about the same issue.

The official reason given in both the game and the anime is that in China, the railway is considered as a strategic asset, and is treated just like any other restricted infrastructure. Therefore, photography or other similar activities, especially when conducted by foreign nationals, can easily be suspected by security personnel and cause alarm and subsequent actions such as a search.

²⁵ Exceptions exist, but they are out of the scope of this document.





While there is certainly some level of truth in the above narrative, it is more of an exaggeration of the reality as I have experienced. It is true that China State Railway used to be very sensitive about photography and other similar activities, but that is only partially related due to the railroad's position as a strategic asset. Another major reason that contributed to such hypertension was the series of railway

accidents during Zhijun Liu's term as the Minister of Railways. The lack of any form of PR department plus the exaggerated and biased media coverage gave the MOR a very negative public image, which was exacerbated by the 2011 Wenzhou Train Collision, the first major accident involving China's high speed rail network. And since then, the MOR, and subsequently, China State Railway, have actively resisted any form of media coverage for several years, and had only recently restarted to embrace various forms of media and the public. Finally, the recent bloom of younger and inexperienced railfans came with some of them performing dangerous activities when railfanning, and as a result, first-line railroaders, especially the elder ones, tend to stop any activity which they deem to be causing a safety hazard, and they can sometimes get overly nervous. Another problem is that until this day, while China State Railway is trying to embrace the railfan community, there have been no official media policy, and this inconsistency also left significant room of conflict. This lack of official media policy, have in turn, generated significant amount of criticism from disappointed railfan who might be personally insulted by railroad workers.

While this difference in attitude could be caused by the fact that the original author of *Maitetsu* is a foreign national and will naturally trigger an alert from the security personnel, it is also possible that he just happened to run into an agent that is having a bad day and decided to write this into the story. From my experience, while sometimes you run into agents who are not as kind, many of the times the railroad workers are friendly and welcome to their fanbase, as long as one does not try to photograph some of the more sensitive trains, such as VIP transport or freight trains carrying military load, or directly photograph the station agents themselves. As a personal note, I have also participated in the open day of China Academy of Railway Sciences' test facilities in Beijing and entered several photography contests held by the State Railway and its affiliates and had won quite a few prizes.

And to be fair, this issue is not specific to the China State Railway system. I had been told by agents from MTA (New York City), CTA (Chicago), and station security personnel from Los Angeles Union Station that photography is not allowed. Also, as far as I know, the PATH²⁶ system (New York City and New Jersey) has an explicit media policy that prohibits photography without prior applications for escort and permission. From anecdotal evidence, it seems that such practices only arose in the United States after the September 11 attacks (except in the instance of PATH, which had been on a strict media policy much earlier), and are meant to thwart attempts of sabotage.

Security Checkpoints

The game has also noted that all railway stations on the China State Railway system implemented some form of security checkpoints. While these checkpoints are not as strict or lengthy as airport security, they are still required by the law. I do not have firm evidence on the actual effectiveness of these security

²⁶ Port Authority Trans-Hudson

checkpoints, but from what I know, while these security checkpoints have also generated some harsh criticism from railfans for disrupting the streamlined boarding experience and becoming throughput bottlenecks, they also seemed to thwart at least some attempts of terrorist attack or sabotage.

Couchette Cars

Unlike American overnight trains with sleeping cars, most overnight trains in China (as well as in Japan) have European style "couchette cars" that are divided into compartments accessible from a corridor on one side of the train, and each compart (either non-private or semi-private) contains 6 (for "hard bunk") or 4 (for "soft bunk") bunk beds that are laid orthogonal to the train's moving direction. These bunks are also not segregated by sex, and passengers should not undress (except shoes) when sleeping on such cars.

Food Service Car

Unlike Amtrak, where there is a differentiation between "café car" and "dining car," all food service cars on the China State Railway trains are considered as "full-service" cars in that they can all provide entrée items²⁷ and seating. While it is possible for a group of six to have their meal in their sleeper compartment, the space will become cramped, and the menu items will also become limited. Therefore, the group have decided to head to the food service car for a full meal. These food service cars are usually run by subcontractors that are somewhat separated from China State Railway itself (either separate subsidiaries, or completely independent business entities), and therefore different trains usually have different contractors. While some food service cars only provide table d'hôte options, many others (such as the one represented in game) also provide à la carte options.

²⁷ EMUs technically only have "café cars" as they can only heat up semi-prepared bento boxes, and usually offers no seating area, but that is beyond the scope of this document.



However, there is one depiction of the dining car that does not usually hold true on China State Railways. In the story, Suika and Hachiroku sneaked to the dining car that had been closed for service and had a chit-chat, later in the night.



This is probably impossible in practice. Unlike Amtrak "full-service" dining cars, the food service cars on China State Railway trains usually stay open throughout the night, serving late-night food and drink, and there would usually be quite a few customers around that makes this kind of chit-chat impossible.

Smooth Operations

The passenger service divisions of the China State Railways have recently started to emphasize on "smooth operations," which includes smooth acceleration and deceleration, and avoid slack action whenever possible. This requirement was not only directly referenced by the game, but also dictated how some the plot unfolded.



Suika complained in game that the extra slack action seemed to show that the engineer and raillord are inexperienced when the train they were riding pulled out of Beijing West Station. That is because China State Railway emphasizes on smooth operations, and any engineer with a reasonable amount of experience should be able to start a train at Beijing West Station (reasonably flat) smoothly.



When the train that Sotetsu was on encountered mechanical problems and was forced to stop on a 1.4% grade, and to make matters worse, the rescue engine available was also underpowered²⁸. Sotetsu and Hachiroku proposed that the draft gear to be compressed and create extra slack action, which should ease the startup. This method is technically allowed according to the China State Railway rulebooks but are generally limited to starting heavy freight trains. This is also due to the emphasis on smooth operations, as compressing the draft gear and introducing extra slack action will inevitably result in a shaky ride.

Plausibility of the Z₄₉ Mechanical Breakdown Incident

The train that Sotetsu rode, Z_4g , is a limited express from Beijing West Station to Chengdu Station. This train follows the Beijing – Guangzhou Main Line until reaching the City of Wuhan, where it turns to the Shanghai – Wuhan – Chengdu Express Corridor.

The mechanical breakdown happened later in the night, and the train briefly stopped at a major station that was featured in the game (shown below).

²⁸ This usually happens with older Chinese diesel locomotives, as China State Railway would slightly derate diesel locomotives with each rebuild cycle, unless a brand-new prime mover is being installed.



According to my personal knowledge, this should be the Yichang East Station, which I have stopped by several times when travelling. After leaving the city of Yichang, the train will enter the mid-western mountainous terrains. While the rulebook of China State Railways requires that the engineer use service brake instead of emergency brake and avoid steep grades when dealing with mechanical breakdowns, the inexperienced engineer probably panicked, and used emergency brake and did not note the fact that the train is on a steep grade. This is considered by experienced Chinese engineers as "creating unnecessary trouble for your buddies" and would be laughed at.

As for the improvised solution of compressing the draft gear that was proposed by Sotetsu and Hachiroku, it is technically possible, but with some limitations. The major limitation comes from the fact that the rolling stock used for limited express trains, Class 25T passenger cars, use custom-built tight-lock couplers that have very limited slack action. Therefore, only highly skilled engineers can successfully complete the operation.

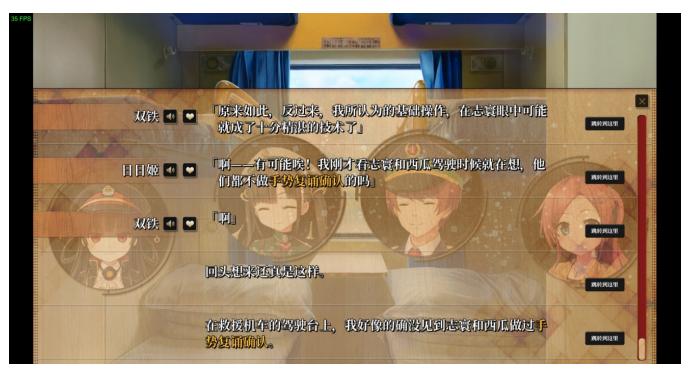
Shisa Kanko

Shisa Kanko (Japanese: 指差喚呼; Chinese: 指差呼喚; literally translates to "point and call" or "point and acknowledge") (34) is the practice of "pointing at certain indicators and calling out their status loudly to themselves" (35) and is aimed to reduce human error during operations. While this practice seems to have

²⁹ I spoke to another *Maitetsu* fan who happened to be a freight train engineer about this part of the plot, and that is his opinion.

originated from Japan and are mostly enforced among Asian railway systems (including Chinese and Korean ones), but certain North American transit systems such as MTA, TTC (Toronto), and GO Transit (Golden Horseshoe Region, Ontario) also adopts similar practices. MTA names this practice "point and acknowledge" (36), TTC refers it as "stop, check, and go" (37), and GO Transit have been officially using "Shisa Kanko" as the official translation since introducing this practice in March 2021 (35).

In the game, it was stated that China State Railway does not require their engineers to conduct the point and acknowledge process during daily operations.



However, this is a misconception. China State Railway requires all personnel to go through the "stop, check, and go" loop as a safety measure. This misconception is probably because the original author had insufficient understandings of the China State Railway rulebooks.

Bayan Railway / Bashi Railway / Jiayang Coal Railway

Bayan Railway (Bashi Railway in the real world, also known as Jiayang Coal Railway in English literature) is a locally owned 762mm (2ft 6 in) gauge heritage that operates independently from the China State Railway. As a former mining railway that operated independently, the Bayan Railway uses somewhat different and relaxed operating rules.

WeChat-Based Communication and Dispatch System

When Sotetsu and Hachiroku was riding the train of the Bayan Railway, they noticed that instead of using radio as a backup means of communication, the engineer of Bayan Railway used a smartphone and the application $WeChat^{30}$.



While this practice is not allowed on China State Railway due to both safety and data compliance reasons, this is actually a common practice on industrial branches, mining railways, and smaller private rail systems. For these smaller railways, using WeChat or similar IM applications over cellular data is much cheaper than maintaining a set of specialized radio systems, and while using a smartphone during operation can cause one to lose situation awareness, this can be partially mitigated on a slow-moving branch train by having a crew member who is partially dedicated to communication duties. Therefore, while this approach is deemed unorthodoxy, it does have its fans in shortline railways due to cost advantages.

³⁰ The Chinese name was mangled (薇信 instead of 微信), but the mangling sounded the same, and it is referring to the WeChat application that Trump threatened to ban earlier this year.

Farm Animal Passengers

No. 19 stated that the passenger cars on the Bayan Railway not only carry regular passengers, but also carries farm animals like chickens, ducks, domestic pigs, and lamb. As a result, there are cages on the ends of the passenger cars to safely transport these animal passengers.



In the real world, this has become a tradition for trains that serve the rural regions, both the ones operated by the China State Railways and various shortline railways. Usually, these trains will use older passenger stock that lack air conditioning, and sometimes they will receive modifications that allows farmer passengers to carry farm products or farm animals onboard.

For many of the rural regions, railway is their only connection to the outside world. Therefore, as critical lifelines, these railway services usually receive extra government subsidies to keep them running. In return, these need to keep a high service availability even under all but the worst weather conditions, maintain a low fare, adapt to the needs of the residents, and commit to service routes and stations that are not profitable.

As for the Bayan Railway, it also doubles as a heritage railway, and tourism has become a major source of income that keeps the railway running. On the other hand, similar services that are run by the China State Railway usually completely relies on government subsidies.

Historical References

Appendix

Table of Known Raillords and Corresponding Rolling Stock

This table includes all the raillords that have being associated with some rolling stock. Just like other references in *Maitetsu*, many of the road numbers of units have been mangled. If this is the case, a *duck test* is conducted, and both the road number appeared in game and the corresponding real-world unit are noted.

Character	Rolling Stock	Builder / Year	Notes
Hachiroku	JGR Class 8620 2-6-0 No. 8620	汽車會社 Kisha Seizo ³¹ (Japan)	Retired, on static display. Though more likely to be based on No. 58654 (Hitachi), which is currently being operated by JR Kyushu.
Reina	JNR KiHa o7 series DMU KiHa o7-5? (see notes)	Kawasaki Heavy Industries (Japan) 1935	Built as KiHa 42029, re-numbered as KiHa 07-5. Later sold to DOWA Katakami Mining Railway as KiHa 702. Capable of multiple working (with DMUs of other models owned by Katakami Mining Railway) and converted to hydraulic transmission for mining operations but appeared in the game as a mechanical transmission unit. Currently running excursion services at Yanahara Fureai Mine Park.
Niiroku	JNR 20 (151) series EMU KuHa 26001 Re-numbered as KuHa 151-1	Kawasaki Heavy Industries (Japan) 1958	KuHa 181-1 (formally KuHa 151-1, re-painted as KuHa 26001 for preservation purposes) is currently on static

³¹ Merged with Kawasaki in 1972.

	Rebuilt as KuHa 181-1		display at Kawasaki's Kobe Works.
Olivi	Fuji Minobu Railway Class 1 o-6-oT	FI	A Fuji Minobu-customized JGR Class 1240.
	No. 3 JFE Tsurumi Foundry No. 9	Baldwin Locomotive Works (US) 1912	Originally numbered as No. 3. Later JFE Tsurumi Foundry No. 9. Currently running ex- cursion services at Museum Meijimura.
Mikuro	JGR Class 8620 2-6-0 No. 38696	Kawasaki Shipbuilding ³² (Japan)	Scrapped. Possibly based on the preserved No. 48696.
Hiyoko	JNR Class C ₅₇ 4-6-2 C ₅₇ -14 ₅	Mitsubishi Heavy Industries (Japan) 1940	Scrapped. Possibly based on C57-135 which is being preserved at <i>The Railway Museum</i> , Omiya, Saitama City.
Suika	China Railway DF ₄ C-C DF ₄ -2000 (see notes)	中国中華 CRRC MOR Dalian Locomotive Works ³³ (China) 1969	Builder not provided in the character description. MOR records suggested Dalian origin. DF4-2000 is a fictional road number, believed to be based on the DF4-2001 (1969) which is presumably scrapped.
No. 19	China Railway Class ZM16-4 o-8-o No. 19	Exact builder unknown ³⁴ . 2017	Depicted in the game as a tank engine, despite being a tender engine. In revenue service.
Suzushiro	JNR Class C12 2-6-2T C12-67	HITACHI Hitachi (Japan) 1933	Retired, on static display. Though more likely to be based on C12-66, which is currently being operated by the Mooka Railway.

 $^{^{\}rm 32}$ Rolling stock business spun-off as Kawasaki Heavy Industries in 1928.

 $^{^{\}rm 33}$ Now CRRC Dalian.

³⁴ There are multiple foundries in China are capable of building Class ZM16-4 locomotives, and there is no public literature about the exact builder of No. 19, and the only information available is that it was built in 2017.

Iyo	Iyotetsu Class A1 o-4-oT	KMW	Retired, on static display.
	No. 1	KRAUSS-MAFFEI WEGMANN	
		Krauss & Co. ³⁵ (Germany)	
		1888	
Riiko	Tobu Railway Class B1 4-4-0 No. 5	< ₿ ₽>	Tobu's designation for the JGR Class 5500 4-4-0. On static display.
		Beyer, Peacock & Company (UK)	static display.
		1898	
Kiko	JGR JiHa 6000 (HoJi 6000 /		Probably scrapped.
	KiHa 6400) series steam railcar HoJi 6016	汽車管社	Could be based on the pre-
		Kisha Seizo (Japan)	served JiHa 6006 (HoJi 6014) which carries a 1912 Kisha
		1912?	Seizo builder's plate, but the respective cultural heritage entry indicates a 1913 buildate.
Beni	Iwasaki Corp. KiHa 100 series	I Kawasaki	An Iwasaki-customized ver-
	DMU	Kawasaki Heavy Industries (Japan)	sion of the JNR KiHa o7 series DMU. Scrapped.
	KiHa 101	1952	
Ran	JNR Class D ₅ 1 2-8-2	- 🗖	Her uniform suggested origi-
	D ₅ 1-840	UY	nating from Takatori Works, but her character description
		JNR Takatori Works³6 (Japan)	suggested Kawasaki origin. JNR records support Takatori
		1943	origin. Scrapped.
Shirogane	JNR Class EF10 1C+C1	I NIPPON SHARYO	Her uniform shows a Kisha
	EF10-23	Nippon Sharyo (Japan)?	Seizo builder's plate, but the character description suggests
		1939?	Nippon Sharyo origin. Multi-
			ple working capable and fea- tures an unpainted stainless-
			steel body shell was for en-
			hanced corrosion resistance

 $^{^{35}}$ Now KMW+N exter Defense Systems.

 $^{^{36}}$ Later became JR West Takatori Works. Closed in 2000.

			which is required for services won the Kanmon Tunnel route and corresponds to that of the EF10-24 (Nippon Sharyo origin). The exact builder of EF10-23 is unknown. Both scrapped. The exact builder of EF10-23 is currently unknown.
Kakaa	Jomo Electric Railway DeHa 100 series EMU	Kawasaki Heavy Industries (Japan)	Currently running excursion services on the Jomo Electric
	DeHa 101	TOSHIBA	Railway.
		Shibaura Engineering Works 37 (traction systems) (Japan)	
		1928	
Araje	Chōshi Electric Railway Class DeKi 3 B	AEG	Originally served as a mining engine on an Ube Industries
	DeKi 3	AEG^{38} (Germany)	branch. Now under preservation and is in full working or-
		1922	der.
Kaniko	JNR Class C ₁₁ 2-6-4T	HITACHI	Features dual headlights,
	C11-202	Hitachi (Japan)	which corresponds to that of C11-207. 202 is scrapped. 207
		1941	is leased to Tobu Railway for the SL $Taiju$ excursion service.

List of Museums and Resorts Appeared in Game

The Railway Museum, Omiya, Saitama City, Japan

Appeared in the Hachiroku and Grande stories as the site of Dr. Phoenix's raillord research institute and railway history museum, *The Railway Museum* is operated by JR East via a nonprofit affiliate. The museum

³⁷ Now Toshiba.

³⁸ Rolling stock business merged into ADtranz after German reunification, then became Bombardier Transportation. Owned by Alstom S.A. since Jan 29, 2021.

includes an extensive collection of historic and modern rolling stock, historical artifacts, as well as elements for public awareness and education, such as simulator stations and exhibitions on railway technology and culture.

The Railway Museum is accessible from the Omiya Station (JR East Shinkansen and conventional lines, as well as Tobu Urban Park Line) via the New Shuttle APM system.

See also: https://www.railway-museum.jp/e/

China Railway Museum (Main Complex), Chaoyang District, Beijing, China

Appeared in the China story as Sotetsu's second stop, the China Railway Museum is the premier non-profit institute for maintaining the national collection of historical railway artifacts, educating the public about railway technologies. The main complex sits right next to the National Railway Test Centre (closed to the public except for special events) and holds some of China's most comprehensive collection of historical rolling stock and other artifacts.

The main complex of China Railway Museum is not directly accessible by either bus or rapid transit, but is within bikeable (and walkable, albeit slightly on the long side) proximity from the Huanxingtiedao³⁹ bus stop. One can also disembark at Jiangtai Station (Beijing Subway M14 – East Segment) or Beijing Chaoyang Station (China State Railway) and use either rideshare or taxicab to reach the museum complex.

See also (Simplified Chinese): http://www.china-rail.org.cn/

References

- [1] 1. 181 series. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/181_series.
- [2] 2. General Motors streetcar conspiracy. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/General_Motors_streetcar_conspiracy.
- [3] 3. Electro-Motive Diesel. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Electro-Motive_Diesel.
- [4] 4. National Railway Workers' Union. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/National_Railway_Workers'_Union.

³⁹ Which literally means "loop tracks" in Chinese and refers to the test tracks of the National Railway Test Centre.

- [5] 5. National Railway Locomotive Engineers' Union. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/National_Railway_Locomotive_Engineers'_Union.
- [6] 6. Hikari (train). [Online] [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Hikari_(train).
- [7] 7. Nozomi (train). [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Nozomi_(train).
- [8] 8. Keita Gotō (industrialist). [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Keita_Got%C5%8D_(industrialist).
- [9] 9. 五島慶太. [Online] Wikipedia. [Cited: 04 26, 2021.] https://ja.wikipedia.org/wiki/%E4%BA%94%E5%B3%B6%E6%85%B6%E5%A4%AA# %E3%80%8C%E5%BC%B7%E7%9B%97%E6%85%B6%E5%A4%AA%E3%80%8D.
- [10] 10. Hisatsu Line. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Hisatsu_Line.
- [11] 11. **国鉄** 8620 形蒸気機関車. [Online] Wikipedia. [Cited: 04 26, 2021.] https://ja.wikipedia.org/wiki/%E5%9B%BD%E9%89%848620%E5%BD%A2%E8%92%B 8%E6%B0%97%E6%A9%9F%E9%96%A2%E8%BB%8A#%E8%B5%B0%E8%A1%8C%E 8%A3%85%E7%BD%AE.
- [12] 12. 'On Teachers' by Han Yu. [Online] Chinlingo. [Cited: 04 26, 2021.] https://www.chinlingo.com/articles/601035/.
- [13] 13. Shishuo 師說. [Online] ChinaKnowledge.de. [Cited: 04 26, 2021.] http://www.chinaknowledge.de/Literature/Classics/shishuo.html.
- [14] 14. Lee, Thomas Ming Zhi. A Translation of the Shi Shuo (Discourse on Teacher) by Hanyu. Nanyang Technological University. 2017.
- [15] 15. Han Yu. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Han_Yu.
- [16] 16. Nippon Sharyo. [Online] Wikipedia. [Cited: 02 26, 2021.] https://en.wikipedia.org/wiki/Nippon_Sharyo.
- [17] 17. Kisha Seizo. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Kisha Seizo.

- [18] 18. Shimoyama incident. [Online] Wikipedia. [Cited: 02 26, 2021.] https://en.wikipedia.org/wiki/Shimoyama_incident.
- [19] 19. Matsukawa derailment. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Matsukawa_derailment.
- [20] 20. Mitaka incident. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Mitaka_incident.
- [21] 21. Mao, Zedong. FAREWELL, LEIGHTON STUART! [trans.] Foreign Language Press. s.l.: People's Publishing House, 1960. Selected Works of Mao Tse-Tung, Vol. 4.
- [22] 22. Tao Te Ching. Wikipedia. [Online] [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Tao_Te_Ching.
- [23] 23. Tzu, Lao. *Tâo Teh King.* [ed.] F. Max Muller. [trans.] James Legge. Sacred Books of the East, Vol. 39.
- [24] 24. Camp, Bea. An Ambassador Returns to China. *American Foreign Service Association*. [Online] [Cited: 04 26, 2021.] https://www.afsa.org/ambassador-returns-china.
- [25] 25. Ballastless track. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Ballastless_track.
- [26] 26. Erin Blakemore. [Online] HISTORY, 04 26, 2019. [Cited: 04 26, 2021.] https://www.history.com/news/mine-fire-burning-more-50-years-ghost-town.
- [27] 27. Lignite. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Lignite.
- [28] 28. Bituminous coal. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Bituminous_coal.
- [29] 29. Anthracite. [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Anthracite.
- [30] 30. Kodama (train). [Online] Wikipedia. [Cited: 04 26, 2021.] https://en.wikipedia.org/wiki/Kodama_(train) .
- [31] 31. Central Japan Railway Company. Tokaido SHINKANSEN Timetable 2021.3.13-2021.4.30. [Online] [Cited: 04 26, 2021.] https://global.jr-central.co.jp/en/info/timetable/_pdf/210313timetable.pdf.

- [32] 32. Dream of the Red Chamber. [Online] Wikipedia. [Cited: 04 27, 2021.] https://en.wikipedia.org/wiki/Dream_of_the_Red_Chamber.
- [33] 33. Mao, Zedong. The East Wind Prevails Over the West Wind. 1957.
- [34] 34. Pointing and calling. [Online] [Cited: 04 27, 2021.] https://en.wikipedia.org/wiki/Pointing_and_calling.
- [35] 35. Matrolinx. Point and Call Metrolinx introduces the practice of Shisa Kanko to GO Transit trains. *Metrolinx News.* [Online] Metrolinx, 03 15, 2021. [Cited: 04 27, 2021.] https://blog.metrolinx.com/2021/03/15/point-and-call-metrolinx-introduces-the-practice-of-shisa-kanko-to-go-transit-trains/.
- [36] 36. The Metropolitan Transportation Authority. Subway Conductors Point the Way to Safety. *MTA news.* [Online] The Metropolitan Transportation Authority, 11 12, 2013. [Cited: 04 27, 2021.] https://www.mta.info/news/2013/11/12/subway-conductors-point-way-safety.
- [37] 37. American Public Transportation Association. Safety Management System Review Preliminary Report for Toronto Transit Commission. Toronto Transit Commission.

 [Online] 09 11, 2015. [Cited: 04 27, 2021.]

 https://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Committ ee_meetings/Audit_Risk_Management/2015/September_11/Reports/2014_TTC_AP TA_Audit.pdf.