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Investigation of rules for translating Japanese geographical names into English

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Investigation of rules for translating Japanese geographical names into English

Summary

In order to promote Japan as a tourism-orientated nation and ensure that the 2020 Summer Olympics and Paralympics in Tokyo go smoothly, relevant government agencies and local organizations have been working to enhance and improve their multilingual capabilities. As part of these efforts, in 2014 the Geospatial Information Authority of Japan (GSI) established the advisory committee to investigate methods of translating geographical names on maps into English. The results of this investigation were released in January 2016.

The GSI is planning to use these results to translate Japanese geographical names into English in English-language maps. The GSI is going to notify local governments, private sector map companies, and others of these results to unify how geographical names are written in English so they will be easier for visitors from other countries to understand.

Here we will introduce rules for translating geographical names into English.

Investigation of rules for translating Japanese geographical names into English

1. Background of the investigation

In order to help promote Japan as a tourist destination, and to help make the 2020 Summer Olympics and Paralympics in Tokyo go as smoothly as possible, it is necessary to create an environment that will enable foreign visitors to travel easily and have a comfortable stay in Japan. Already, the national government and some local governments have been investigating and implementing multilingual policies. Among these policies are maps, which are essential for foreign visitors to travel in Japan. An integral part of creating such an environment is to make use of maps in foreign languages, especially English, which is widely used as an international language.

Until now, no standardized guidelines had existed for translating geographical names into English for maps geared toward foreign visitors. Since different organizations had investigated various methods for translating, these investigations had significant costs, and English translations differed from map to map.

Against this background, the GSI, in order to promote the widespread use of maps with uniform English translations to make them easier for foreign visitors to understand, established the "Advisory Committee for Making Map Expressions Easier for Foreign Visitors to Understand" in 2014. By incorporating the opinions of experts who were extremely knowledgeable about maps, geographical names, culture, etc., in Japan and other countries, as well as organizations such as the Japan Tourism Agency and the Tokyo metropolitan government which have been proceeding with multilingual policies, the GSI investigated rules for translating Japanese geographical names on maps into English. The results of this consideration were released in January 2016.

2. Romanization of Japanese geographical names

Romanization of Japanese geographical names are usually made as direct transcriptions of the pronunciations of the geographical names.

Romanization of geographical names have the advantage of expressing the pronunciation of the geographical name in Japanese, and are very important for establishing an international standard of geographical names. The GSI, based on resolutions of the United Nations Conference on Standardization of Geographical Names (UNGEGN), created the Toponymic Guidelines for Map and Other Editors (3rd edition, 2007) as a reference material for translating Japanese geographical names into the Roman alphabet. In addition, the GSI worked with the Japan Coast Guard to compile the Gazetteer of Japan (2007) and reported on it to the UNGEGN. The Toponymic Guidelines and the Gazetteer can be obtained from web sites of the UNGEGN¹ and the GSI², respectively.

However, one of the disadvantages of Romanization is that foreign visitors who are not familiar with the Japanese language cannot understand words on maps that indicate geographical features, facilities, etc.,

¹ http://unstats.un.org/unsd/geoinfo/UNGEGN/docs/9th-uncsgn-docs/econf/9th_UNCSGN_e-conf-98-47-add1.pdf

² http://www.gsi.go.jp/ENGLISH/pape_e300284.html

so they cannot understand what kinds of categories there are. For example, the highest mountain in Japan is transcribed as "Fujisan," but foreign visitors who do not know that "san" can mean "mountain" in Japanese, may not understand that "Fujisan" is a mountain. However, it is easy for many foreign visitors to understand that if they see the English translation "Mt. Fuji."

3. English translation formats

English translations of Japanese geographical names are made based on the Roman alphabet pronunciations. There are two formats, "substitution" and "addition" format, for making this conversion. Substitution format:

In this format, for example, 富士山(Fujisan)is translated as Mt. Fuji, 利根川(Tonegawa)as Tone River.

富士山(Fujisan)is treated as 富士 (Fuji)十山 (san), where 山(san)is converted to Mt. in English.

利根川(Tonegawa)is treated as 利根(Tone) +川(gawa), where (gawa) is converted to River in English.

Addition format:

In this format, for example, 立山(Tateyama)is written as Mt. Tateyama,荒川(Arakawa)is written as Arakawa River.

The geographical names of these examples are unified and cannot be separated into some words. In the substitution format, where Tateyama is denoted as Mt. Tate ("yama" is written as "Mt.") and Ara River (where "kawa" is written as "River"), it is difficult for Japanese speakers to think of the Japanese names. Therefore, the English words (e.g., Mt., River) are added to the entire Japanese name.

4. Rules for translating into English

In the addition format, it is easy for the meaning to become redundant, and words become long, making them difficult for foreign visitors to remember. Therefore, these rules for English translations are based on the substitution format. For cases where the substitution format cannot be applied to the Japanese structure, or the substitution translation is difficult for Japanese speakers to understand, the addition format is used. However, regardless of the geographical feature, if there are English names designated by treaty, statute, facility managers, etc., or English names that are widely used, then those names are given priority. The following is a brief introduction to rules for translating natural feature names, administrative names, and facility names into English.

(1) Natural feature names

1) Simple natural feature names

Simple natural feature names include those containing the Japanese character(s) for "mountain," "river," "lake," "cape," "pass," "coast," etc. In most cases, the substitution format is used for these names. However, because there are numerous cases where island names are written as one unit to indicate a local

name, the addition format is usually used for islands.

(a) Natural feature names based on the substitution format

Most Japanese geographical names are written in *Kanji* (Chinese characters), and characters that express geographical features are usually added to the end of the word. This is especially the case for simple natural feature names that have long been used, and there are also many words to express geographical features³.

Table 1 lists standard Kanji characters used to express geographical features for each category, their standard reading(s)⁴, and examples of English translations. When Japanese speakers hear the English pronunciation of a Japanese geographical name, they convert the English that expresses the part of the geographical features into standard Japanese. Therefore, for the characters that express geographical features and their readings for geographical names that correspond to those in Table 1, it is easy for Japanese speakers to think of and understand the original Japanese name. Therefore, it was decided to use the substitution format of English translations. However, even in such cases, words that meet conditions (ii)-(vi) are treated as exceptions and the English translation is made with the addition format.

(b) Natural geographical names written with the addition format

Natural geographical names that meet conditions (i) - (vii) are usually translated into English using the addition format. These are names that should be treated as a unit, in their entirety. If the substitution format is used with these names, there is a chance that Japanese speakers will not be able to understand them.

The following shows examples written in the following order: Kanji characters, Hiragana, Roman alphabet, English translation.

³ For example, more than 80% of all mountain names have a standard character for "mountain" of "山" or "岳" at the end of the name, but there are cases where Kanji characters such as "森" ("forest") or "塚" ("mound") are used. According to the GSI's geographical name database (Digital Map (Basic Geospatial Information)), there are more than 240 Kanji characters that are used at the ends of mountain names.

⁴ Kanji characters were originally developed in China and are ideographs that were brought to Japan. The characters that are used in Japan often have more than one reading. These readings are classified into those that were brought over from China, Japanese readings that express the same meaning as the Kanji, and other readings. The readings that were brought over from China alone can have multiple readings, depending on the time and route they were brought to Japan. For example, in addition to the standard readings for "山" the character for mountain, which are "yama," "san," and "zan," there are also readings of "sen," "zen," and "dan." In Japanese, the readings are denoted by characters of either of the Japanese phonetic syllabaries *Hiragana* and *Katakana*.

Table 1 English translations of simple natural geographical names (substitution format)

(a)	(b) Standard Kanji	(c) Standard reading(s) of	(d) Examples of substitution
Geographical	character(s) used to	characters in Hiragana (Roman	format
feature	express geographical	alphabet) in (b)	Japanese reading (in Kanji and
	feature		Hiragana above the Kanji
			characters) and English
			translations
	山	やま (Yama), さん (San),	ふ じさん
Mountain		ざん (Zan)	富士山 Mt. Fuji
Wiodilani	岳	たけ (Take), だけ (Dake)	あさひだけ 旭 岳 Mt. Asahi
		, , , , , , , , , , , , , , , , , , , ,	
River	Л	かわ (Kawa), がわ (Gawa)	とねがわ 利根川 Tone River
Lake	湖	∠ (Ko)	あかんこ 阿寒湖 Lake Akan
		we (); ();	
Cape	岬	みさき (Misaki), さき (Saki),	あしずりみさき
Сирс		ざき (Zaki)	足摺岬 Cape Ashizuri
Pass	峠	とうげ (Toge)	びほろとうげ
1 433	·		美幌 峠 Bihoro Pass
	海岸	カいがん (Kaigan)	いづらかいがん 工油海 豊 Janua Danah
Beach			五浦海岸 Izura Beach
	浜	はま (Hama), ばま (Bama)	ふきあげはま 吹上浜 Fukiage Beach
			火 上 採 Tuklage Deach

		, , , ,	、 /	上 浜 Fukiage Beach
(i) Words exp	pressing geographical	features whose Kanji	characters or reading	s are not applicable to Table
1:				
Ex.)	安家 <u>森</u>	あっか <u>もり</u>	Akka <u>mori</u>	Mt. Akkamori
	大山	だいせん	Dai <u>sen</u>	Mt. Daisen
(ii) Words ex	pressing geographica	l features that are imr	nediately preceded by	y a geminated consonant
Ex.)	月山	が <u>っ</u> さん	Gassan	Mt. Gassan
(iii) Words ex	xpressing geographica	al features that are im	mediately preceded b	y an auxiliary character
Ex.)	芦 <u>ノ</u> 湖	あし <u>の</u> こ	Ashi <u>no</u> ko	Lake Ashinoko
	潮岬	しお <u>の</u> みさき	Shio <u>no</u> misaki	Cape Shionomisaki
(iv) Words ex	xpressing geographica	al features that are pre	eceded by one Japane	ese syllable
Ex.)	鵡川	<u>む</u> かわ	<u>Mu</u> kawa	Mukawa River
(v) Words ex syllables	xpressing geographica	l features that are pre	eceded by one Kanji	character and two Japanese
Ex.)	<u>西</u> 湖	さいこ	<u>Sai</u> ko	Lake Saiko
(vi) Natural	geographical names o	of mountains, lakes, c	apes (unlike in Engli	ish, the word that expresses
the type o	f feature comes at the	e end of the name) w	which consist of two	Kanji characters before the
word exp	ressing geographical	features with a tw	vo-syllable reading	that have a low level of
independe	nce.			
Ex.)	祖母山	<u>そぼ</u> さん	<u>Sobo</u> san	Mt. Sobosan
	<u>田瀬</u> 湖	<u>たせ</u> こ	<u>Tase</u> ko	Lake Taseko
	<u>佐田</u> 岬	<u>さだ</u> みさき	<u>Sada</u> misaki	Cape Sadamisaki

Note — A high level of independence refer to other natural feature names in the vicinity, community names, administrative names, residential area names, names of public facilities (names of schools, stations, post offices, etc.) For example, "Fuji" in "Fujisan" is written with two Kanji characters and consists of two syllables, but it is established as a high-independent name so it is written with the substitution format.

(vii) Words besides those described above where the entire name is an administrative name so it should be treated as a single unit.

Ex.) 十津川 とつかわ Totsukawa River Totsukawa Village is in the Totsukawa River watershed.

2) Extensive natural geographical names

In most cases, Japanese words that are used to express geographical features that cover an extensive area, such as mountain ranges, mountains, highlands, hills, plateaus, basins, plains, marshes, peninsulas, bays, straits, islands, seas, etc., are subjected to the substitution format.

Unlike simple natural feature names, with extensive feature names there are many cases where geographers and others have taken a comprehensive view of an entire region and assigned names and generic names within the area of the geographical feature in recent times. Basically, a name that expresses a region is given a special term for the geographical feature to provide for uniformity. Therefore, with a few exceptions, the substitution format can be used for nearly all cases. Table 2 is a list of extensive natural geographical names with standard Kanji characters and readings to express each category of geographical feature, and their English translations.

(2) Administrative names

Japanese local administrative groupings consist of 47 prefectures (provinces) which in Japan are divided into To(1), Do(1), Fu(2), and Ken(43). In each of these prefectures there are municipalities, which in October 2015 amounted to a total of 1718 cities, towns and villages. Tokyo-to, which is the capital prefecture, contains not only municipalities but also 23 special wards called "Ku."

The names of these administrative groups always contain a word to express their administrative category, so words that express these administrative groups are translated into English with the substitution format.

1) Names of prefectures

Because the Kanji readings of words designating type of prefecture are common pronunciations, the substitution format is used for English translations, as follows — "To" is translated as "Metropolis," while "Fu" and "Ken" are translated as "Prefecture." The addition format is only used with "Do." In daily conversational Japanese, "To", "Fu", and "Ken" are sometimes left out depending on the context, but Hokkaido is never spoken of as just "Hokkai," so that is why Hokkaido is always translated as a single unit.

Table 2 English translations of extensive natural feature names (substitution format)

(a) Geographical feature Mountain	(b) Standard Kanji character(s) used to express geographical feature	(c) Hiragana (Roman alphabet) readings of (b) さんみゃく (Sanmyaku)	(d) Example of substitution format Japanese reading (in Kanji and Hiragana above the Kanji characters) and English translations おううさんみゃく 奥羽山脈 Ou Mountain Range
Range Mountains	山地	さんち (Sanchi)	しこくさんち 四国 山地 Shikoku Mountains
	高地	こうち (Kochi)	きたかみこうち 北上高地 Kitakami Mountains
Highland	高原	こうげん (Kogen)	いわみこうげん 石見高原 Iwami Highland
Hills	丘陵	きゅうりょう (Kyuryo)	しらぬかきゅうりょう 白糠 丘 陵 Shiranuka Hills
Plateau	台地	だいち (Daichi)	こんせんだいち 根 釧 台地 Konsen Plateau
Basin	盆地	ぼんち (Bonchi)	こうふぼんち 甲府盆地 Kofu Basin
Plain	平野	へいや (Heiya)	かんとうへいや 関東平野 Kanto Plain
Marsh	湿地	しっち (shicchi)	くしろしつげん 釧路湿原 Kushiro Marsh
	湿原	しつげん (shitsugen)	
Peninsula	半島	はんとう (Hanto)	きいはんとう 紀伊半島 Kii Peninsula
Bay	湾	わん (Wan)	とうきょうわん 東京湾 Tokyo Bay
Strait	海峡	かいきょう (Kaikyo)	つがるかいきょう 津軽海峡 Tsugaru Strait
Islands	諸島	しょとう (Shoto)	いずしょとう 伊豆諸 島 Izu Islands
	群島	ぐんとう (Gunto)	だんじょぐんとう 男女群島 Danjo Islands
	列島	れっとう (Retto)	やえやまれっとう 八重山 列 島 Yaeyama Islands
Sea	海	カルヽ (Kai)	ありあけかい 有明海 Ariake Sea

Ex.) 東京都	とうきょうと	Tokyo To	Tokyo Metropolis
京都府	きょうとふ	Kyoto Fu	Kyoto Prefecture
茨城県	いばらきけん	Ibaraki Ken	Ibaraki Prefecture
北海道	ほっかいどう	Hokkai Do	Hokkaido Prefecture

2) Names of municipalities

The readings of Kanji characters for city and ward are always "Shi" and "Ku," respectively, but the reading for the character for "town" may be either "Machi" or "Cho," and the reading for "village" may be either "Mura" or "Son." In the English translation substitution format is used, "Shi" is "City," "Ku" is "Ward," "Machi" and "Cho" are "Town," and "Mura" and "Son" are "Village." In addition, each of the 23 "special Ku" in Tokyo Metropolis is translated as "City."

Ex.) つくば市	つくばし	Tsukuba Shi	Tsukuba City
神奈川区	かながわく	Kanagawa Ku	Kanagawa Ward
阿見町	あみまち	Ami Machi	Ami Town
美浦村	みほむら	Miho Mura	Miho Village

(3) Facility names

Facilities include bridges, tunnels, railway stations, airports, seaports, parks, castles, roads, shrines, temples, etc. There is a standard word to refer to each of these facilities, but because there are various expressions there are sometimes no standard words. In most cases, the substitution format is used with the former, while the addition format is used with the latter. In cases where the management of a facility has already designated a name, that name is given priority.

1) Facility names translated in the substitution format

As shown in Table 3, there are standard Japanese words to express bridges, tunnels, railway stations, airports, seaports, parks, and castles. There is almost an invariable pattern where standard words are used to express the category of facility that are attached to the name. The words used to express such facilities have corresponding English words, so even if that part is translated as is into English, it is easy for Japanese speakers to understand if they hear the pronunciation. Therefore, for the facility names whose readings correspond to those of the facilities in Table 3, the English translation is usually done with the substitution format.

2) Facility names translated with the addition format

Ex) 日比谷通り ひびやどおり

In most cases where conditions (a)-(b) apply to facility names, the English translations are made in the addition format.

(a) Names of facilities for which there are different words to express the type of facility

Ex.) 日比谷通り	ひびやどおり	Hibiya-dori	Hibiya-dori Avenue
(ii) Shrines and temples			
Ex.) 東大寺	とうだいじ	Todaiji	Todaiji Temple
清水寺	きよみずでら	Kiyomizu-dera	Kiyomizu-dera Temple
春日大社	かすがたいしゃ	Kasugataisha	Kasugataisha Shrine

(b) Names of facilities in Table 3 that do not include a standard word to denote the type of facility

5. Concluding remarks

The rules for making English translations of geographical names that we have introduced here are used by the GSI as the basis for creating English-language maps. In actuality, they are applied to the 1:5,000,000 scale English-language map JAPAN AND ITS SURROUNDINGS (paper version) and to the GSI's 1:5,000,000 scale English-language maps on its web site.

In addition, the GSI is going to inform local governments, private sector map companies, etc., about these rules in order to unify the English translations of Japanese geographical names to promote the widespread use of maps that are easy for non-Japanese speakers to understand.

Table 3 English translations of facility names (substitution format)

(a) Facility	(b) Standard Japanese word to express facility	(c) Hiragana (Roman alphabet) readings of (b)	(d) Examples	(e) Exceptions
Bridge	橋	はし (Hashi) ばし (Bashi)	かちどきばし 勝 鬨 橋 Kachidoki Bridge	びわこおおはし 琵琶湖 大 橋 Biwako-ohashi Bridge ¹ にほんばし 日 本 橋 Nihonbashi Bridge ²
Tunnel	トンネル	とんねる ³ (Tonneru)	こぼとけ 小 仏 トンネル Kobotoke Tunnel	
Station	鉄道駅	えき (Eki)	とうきょうえき 東京駅 Tokyo Station	
Airport	空港	くうこう (Kuko)	いばらきくうこう 茨 城空港 Ibaraki Airport	なりたこくさいくうこう 成田国際空港 Narita International Airport ⁴
Port	港	みなと (Minato) こう (Ko)	ょこはまこう 横浜港 Yokohama Port	
Park	公園	こうえん (Koen)	ひびやこうえん 日比谷 公 園 Hibiya Park	かいひんこうえん ひたち海 浜 公 園 Hitachi Seaside Park ⁴
Castle	城	しろ (Shiro) じょう (Jo)	くまもとじょう 熊本 城 Kumamoto Castle	しのりたて 志苔館 Shinoritate Castle ⁵

^{1:} When a bridge is designated as "Ohashi" (大橋), the addition format is used. The Kanji character for "O" (大) means "big."

- 3: "Tonneru" is originated from English, Tunnel.
- 4: The name is determined by the facility manager.
- 5: When the Kanji character for "castle" ("城") is not used at the end of a name, the addition format is used. When ruins of a castle are specified, then the English translation is "Castle Ruins."

^{2:} When the entire name of a bridge is used as the name of a residential area, train station, famous tourist spot, etc., the addition format is used.