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Database of Geographical Names by Administrative District over the Past 100 Years

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over the Past 100 Years

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1. Introduction Changes in Japanese geographical names and need for a database

The oldest recorded geographical names in Japan data back to the 2nd Century, when the governments of the ancient Chinese kingdoms started to record their national histories in such books as "Gishi Wajin Den" (literally, the story of the Japanese people in the Gi era). The total number of geographical names in Japan, including those already lost, is said to be over 10 million. Importantly, more than 85% of Japanese surnames are believed to come from geographical names, which bespeak the close ethnological relationship between the Japanese people and these geographical names.

In Japan, some long-established geographical names have been lost in the process of drastic social change over the past 100 years, and the meanings and origins of many geographical names have been forgotten. For those geographical names that have been lost, neither written materials nor maps that show places and boundaries are readily available for reading.

Geographical names include names of administrative districts, and even the names of administrative districts with clear boundaries have changed greatly during the past 115 years. There were about 16,000 administrative districts in the middle of the Meiji era. They were integrated into 1821 administrative districts as at the end of March 2006, with changes in the names and boundaries of administrative districts.

The provision of information on these changes is important to protect geographical names from the viewpoint of folklore and culture, to understand past records and literature, and to help in social and geographical studies. At the same time, geographic information systems (GIS) require this information as basic data for the analysis of various other pieces of information. The Geographical Survey Institute (GSI) of Japan has been asked to construct a database of geographical names, because it is a national agency that keeps and manages accurate topographical maps drawn after 1870 using modern survey technology.

The GSI has constructed a database of changes in the names and boundaries of administrative districts that have taken place during the past 100 years, and it is currently making arrangements to release the data to the public.

2. Changes in administrative districts and need for a database

From ancient times to the present the number of prefectures and administrative districts has changed greatly, as have the geographical names and boundaries.

In the Taiho-no-Ritsuryo, promulgated in AD701, Japan was divided into some 70 provinces

under the province-county-town system. The Meiji Government abolished the domain system and established the prefectural system in 1871, and it set up three fu (prefectures) and 72 ken (prefectures). Currently, these are integrated into 1 to (metropolis), 1 do (prefectures), 2 fu, and 43 ken.

There were more than 70,000 towns, villages and major village sections in the early 1860s. The great mergers of the Meiji era, together with the municipality, city, town, and village system was put into effect in 1889, integrated them to form about 16,000 cities, towns, and villages. These were merged and integrated to form about 3500 cities, towns, and villages during the Great Showa Merger that extended from 1953 to 1961. In turn, these 3500 cities, towns, and villages were merged and integrated into 1821 cities, town, villages, as well as several special wards, during the Great Mergers of Heisei, which extended to the end of March 2006.

In the current merger of Heisei, each municipality has been allowed to use the names of notable old provinces or famous features (e.g. "Fuji" from Mt Fuji); shortened or expanded names of sightseeing spots; different characters with the same sounds as wordplay; and generic, non-regional names.

Because these very varied kinds of naming methods have been used in the past, it is important that we develop a database to avoid the confusion that could arise in gathering information on incoming and outgoing administrative districts and geographical names.

3. Organizing data

In organizing the data on changes of administrative districts we followed the following guidelines.

We constructed a tree structure database based on changes in names of administrative districts , because the current administrative districts were established through repeated mergers between towns, villages and major village sections, each of which could be dated back to the Meiji era. From public announcements and other resources, we obtained information on place notations (regional division, the official name , most of them in Chinese characters, which are ideographic, and name in *Hiragana*, which are phonogramic Japanese characters also used to help read difficult Chinese characters) and on the times when changes were made (when municipalities appeared or were erased). To supplement the public announcements, we used records of old geographical names and books written by toponymists, such as "Directory of Changes of Administrative Names," "Topography of Municipalities," and "Japanese Toponymy Dictionary."

As we mentioned above, the boundaries of the current administrative districts were established through repeated mergers of major village sections in the Edo era. Thus, we used the "Imperial Map of the Nation (1920s–1930s)" (scale: 1 in 200,000), the oldest topographic record of country-wide investigations and measurements performed with the use of modern investigative technologies and uniform standards, and built a basic polygon (Japanese Geodetic Datum 2000, scale 1 in 1,000,000). The attributes used were the name of the regional division, the name of the administrative district, the year when the municipality first appeared, and the year when it disappeared. On the basis of this oldest topography, we measured the boundary of each old town, old village and old major village section and built basic polygons. To create base data we incorporated the polygons into the divisions and

mergers that occurred in each year of change.

We excluded geographical names corresponding to minor village sections. On old editions of maps there were more than 400,000 named areas of this kind for which we could not find boundaries.

4. Expected effects

Construction of a database should make it easy to analyze changes in major geographical names and should lead to a deeper understanding of the preservation of geographical names. In addition, the database will enable us to discover vanished named geographical areas and their boundaries.

Furthermore this database and GIS can be used for social scientific purposes to visualize the changes in population and economic activity mentioned in past literature. At the same time, synthesis of the boundaries of geographical names, topographic maps, and geological maps will make is possible for us to study a wide range of folklore and historical evidence. Through these studies we will be able to determine the origins of geographical names, ways of naming, and geographical traits according to their various geographical names.