

Creation and Application of Japanese Historical Gazetteer - Ontological Approach to Geographical Name and Place -

Ikuo OKETANI, Human Sciences, Osaka International University, Japan, oketani@hus.oiu.ac.jp

Mitsuru AIDA, National Institute of Japanese Literature, Japan, aida@nijl.ac.jp

What kind of thing will be clear by the historical Japanese place-names database?

I want to think paying attentions to the consciousness for place-names and analyzing it by the viewpoint of ontology.

For example, which name is to be used most abundantly and exist in what kind of area.

First of all, when only the character string is simply extracted from a Dainichi Honji great dictionary and a lot of place-names that are become "Yodo(or Yoto, Amarube... etc.)" . However and the place-names morpheme that closely relates to the place-names comes to the surface when seeing in more detail. There is comparatively "Kamo" in a lot of one that is in that.

"Kamo" is a name to be based in Kamo shrine of Kyoto.

However and there is not a little religious area space which has the name which includes "Kamo" in the area except for Kyoto as well.

Moreover, there are some cities called "Small Kyoto" now, too.

Some names of places which relates to "Kyoto" can be found in an area like Small Kyoto in others as well. There is just one charismatic space that more spread power is produced and that it seems to call other names in that.

This is paid to attention in consideration to the place-names and the point of fashion.

The design of naming can be confirmed to the place-names of Japan over both externals of the Chinese character mark and reading. It continues from ancient times until the present day.

It is possible that the unity of name ontology is separated by Onomasticcs (etymology argument) target idea.

Furthermore, whether the place-names that looks like for instance mutually coexists mutually by the space in the region and the database for the index of Dainihon Chimeijisho (The Dictionary of Place Names in Greater Japan) will become a strong tool if it is additionally thought GIS information.

The database for the index of Dainihon Chimeijisho is planned as follows.

With the recent spread of GIS, the correlation of the geographic information with digitized maps and satellite images, has become effective in the study of humanities, particularly archaeology, history, and area studies.

We are developing the database for the index of *Dainihon Chimeijisho (The Dictionary of Place Names in Greater Japan)* that provides the detail explanation of the historical investigation and change of place names such as country names, county names, names of mountains, rivers, lakes and harbors. Its first edition was published in 1900. The index contains 53,676 place names in *kanji* and *kana*.

The database for the Japanese Historical Gazetteer digitizes by providing *kanji* and *kana* readings of place names, Romanization of place names, geographical relations of countries, counties, towns and villages, the

relations with the current cities, towns, and villages, and latitude and longitude, based on the index of *Dainihon Chimeijisho*.

Considering the future expansion, we are preserving the volume numbers of *Dainihon Chimeijisho* and pages of the corresponding sections. Furthermore, as the provision of the information on the transition of place names and the digitization of the index of places (“Chi no Bu”) of *Kojiruien* (*Kojiruien* is a kind of encyclopedia and it is completed in 1914) and place names in the ancient Japan are completed, we are planning to merge the Digital Gazetteer with *Dainihon Chimeijisho*.

We are planning to construct the Japanese Historical Gazetteer using MySQL, and record structure is adopted XML.

In this report and whether the ontology of the place-names can be constructed up to which extent is tried by using the mark and pronunciation of the place-names. It is a first step to realizes the "Semantic-Web" based on the ontology of name places.