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Toponymic data files and Gazetteers
Content requirements

The Four Faces of Toponymic Gazetteers

Submitted by Australia**

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Summary

Gazetteers compiled by jurisdictional naming authorities have tended to focus on including officially-sanctioned names associated with their feature types and location information. These gazetteers have heavily favoured the publication of ‘one name for one place’ related to populated places, points of interest and government infrastructure. However, recent times have seen the proliferation of GIS and associated public access to digital maps, and subsequently there has been a rise in demand for non-traditional gazetteer information. These types of information requests typically relate to unofficial names (i.e. colloquial, temporal or commercial) or names which have not yet been officially approved (i.e. the data has been collected and proposed to the national authority, but due to lengthy quality assurance processes will not be published for 6-18 months). In addition, location data attributed to features has generally been limited to x,y coordinates and operational boundaries for areas such as census, postcode and fixed assets have generally not been included in jurisdictional gazetteers.

This paper proposes that UNGEGN member states consider developing definitions of gazetteer and data types that encompass the range of location referencing modes in common use. We suggest that gazetteers can be reimagined to be seen as having four faces, being:

- A record of official place naming processes.
- A repository of unofficial place names.
- A reflection of the cultural associations of place names
- An information delivery mechanism.

It is recognised that there is some overlap in these aspects, but as we consider them, we can gain insights into the structure of gazetteer databases and their potentials for being repositories and representatives of a wide variety of geospatial data.

Within UNGEGN resolutions and policies, and indeed within the wider research literature, there does not appear to be commonly accepted definitions for the terms ‘official’ and ‘unofficial’ as they relate to gazetteers and their data. Rather, there seems to be a proliferation of terminology used to define both the types of data which are incorporated into gazetteers, and the gazetteers themselves- ranging from official and authorised to unofficial and informal. We have sketched an outline of the different terminology as an attempt to commence the conversation on how gazetteers and their data can be defined.

The paper lays out a rationale for why national naming authorities should be considering increasing the scope of their data collection and approval methods, to focus not only on traditional official name data but also on meeting end-user requirements for rapid access to points of interest information and unofficial names. The need for the officially sanctioned gazetteers to be of a high quality in terms of accuracy and completeness of available data is increasing rapidly, and if we do not meet the needs of our communities, other unofficial providers will do so. We strongly encourage the member states of UNGEGN to commence the conversation on defining gazetteer and data types with the aim of developing robust definitions and increasing the relevance of the systems we currently maintain. There is potential to expand the scope of official data collection and name approval methods to allow for national gazetteers to incorporate both official and unofficial names which fulfil the information requirements of our communities.
Introduction

Gazetteers have long been recognised as an important component of place naming activities, providing a wealth of information for those who need to interact with place names. When we analyse the full scope of what gazetteers can accomplish for end-users, we gain valuable insights into the multiple potential formats for structuring the information in a way that provides maximum benefits and outputs.

Typically, authorised toponymic gazetteers developed by government agencies have been structured in such a way that they have tended to focus heavily on the ‘one name for one place’ rule and promotion of official, currently-in-use names. We suggest that gazetteers can be reimagined to be seen as having four faces, being:

- A record of official place naming processes.
- A repository of unofficial place names.
- A reflection of the cultural associations of place names
- An information delivery mechanism.

In some cases place naming is simply assignment of a unique identifier by the maintainer of some asset or definition. This is seen as a trivial case of the broader problem of assignment of official names in social and cultural contexts. It is recognised that there is some overlap in these aspects, but as we consider them, we can gain insights into the structure of gazetteer databases and their potentials for being repositories and representatives of a wide variety of geospatial data.

Within UNGEGN resolutions and policies, and indeed within the wider research literature, there does not appear to be commonly accepted definitions for the terms ‘official’ and ‘unofficial’ as they relate to gazetteer data. Rather, there seems to be a proliferation of terminology used to define both the types of data which are incorporated into gazetteers, and the gazetteers themselves- ranging from official and authorised to unofficial and informal. We have sketched an outline of the different terminology as an attempt to commence the conversation on how gazetteers and their data can be defined (refer to Figure 1).
Figure 1: Preliminary Characterisation of Gazetteer and Data Type Definitions

**GAZETTEER** (ie system)

- **Authentic**
  - Accurately reflects information from the perspective of an agency
  - Regular maintenance regime for the data

- **Non-Authentic**
  - Provides a snapshot of information which has not necessarily been quality assured or approved by organisation or group to which it refers
  - Not regularly maintained

**DATA** (ie information)

- **Formal**
  - Developed by agency for specific project purposes and with oversight
  - Collated for specific purposes

- **Informal**
  - Developed by teams or organisations for internal information purposes only
  - Not intended to be cross-referenced or utilised by external agencies.

- **Official**
  - Legislated
  - Recognised by Government

- **Unofficial**
  - Non-Legislated
  - Not used for official government reporting purposes
Within the context of Official gazetteers, the names have usually been through a formal process of government authorisation for use- an example would include names of administrative areas. Where names are recorded in a Formal gazetteer, they have usually been collated by an agency for a specific purpose related to a particular program- for example, names of Internally Displaced Persons (IDP) camps. An Authoritative gazetteer by distinction might be an index maintained by a government Department of Education and contain names of government funded schools.

Each gazetteer type has its own structures and formats for data collection, maintenance and distribution. We are sure there are many more examples of gazetteer types, and encourage UNGEGN members to commence developing appropriate definitions.

The Official Face – A Record of the Naming Process

The gazetteers maintained by a place naming jurisdiction are seen as being a record of official place names, providing spatial references of features. Usually these gazetteers are defined by laws or government policy and the data collection, maintenance and approval mechanisms are legislated to a certain degree. As a minimum, these gazetteers include information on place names and their associated feature types and locations.

Gazetteers are the ideal place to access information (metadata) about the rationale for a name, covering aspects of the decision making process that are relevant for future reference. Background information could include answers to questions future researchers might ask, such as:

- Why this name?
- Who suggested it?
- Were there any alternatives considered?
- When was the name assigned?
- What is its meaning and / or derivation?
- Is there any documentation that details all aspects of the proposal?

This information forms the initial history of the name, leading to a better understanding for all parties of its cultural significance and provides visibility of the approval process used to determine the official name. The information also assists where multiple gazetteers or spatial datasets are brought into one system and have competing or misaligned information. Being able to make quick reference to the background of the official name can assist in determining the correct spelling, appropriate location and other details.

For these reasons, we would recommend that naming jurisdictions and UNGEGN member states explore the options for incorporating historically-relevant metadata into their gazetteer systems.
Unofficial Place Names

There appears to be reluctance in some areas to incorporate unofficial place names in the same database as those that are deemed to be official. Perhaps by redefining the purposes of a gazetteer, and determining appropriate definitions of gazetteer types, there is scope for naming jurisdictions to consider including unofficial, or colloquial, names into their existing gazetteers, or developing new unofficial gazetteers for these purposes.

If Australia is an example of the common situation, it suggests that many countries will have more unofficial names than official names. As sketched in Figure 1, there are multiple use purposes for unofficial names, particularly in non-authoritative, informal and unofficial gazetteers. Some examples of unofficial names include:

- Place names that are only known to a few people in a specific geographical area;
- Place names that are activity specific, perhaps used by only a small fraction of the total community;
- Names that are referred to in scientific and other publications, in journals and diaries and in local history books;
- Names that are recorded only in oral histories;
- Colloquial names which are used to associate familiarity with a place, or to shorten a long name; and
- There are a proliferation of commercial names being used in the wider landscape, particularly for sporting arenas, shopping centres and residential development complexes, which often do not have official government endorsement, but are used widely by the local population.

In each case, these names are used in some context, and as such, need to be available to the wider community for the following reasons:

- Emergency services purposes – in times of stress, people will revert to that which is most familiar to them, irrespective of any official naming process that may have taken place. Structured and comprehensive gazetteers can greatly aid in the provision of such services.
- Effective navigation, using either hard copy or electronic mapping – the demands of a modern society for accurate spatial data have increased to the point that there is an expectation that this information will be readily and freely available for a wide range of functions.
- Heritage and cultural rational – the retention of culture is one aspect of this and cultural respect is another, as the recording of such names will ensure that their existence is known when any official naming proposal is considered. Ownership
of place names by the community is very important in order to avoid conflict, and the replacement of well-known local names is one sure way to introduce conflicting place names. This is relevant in both single and multi-cultural environments.

Each official naming jurisdiction must be aware already of the availability of competing Points of Interest or Features of Interest datasets within their states. Examples include non-authoritative gazetteers which have been compiled from Open Street Map users. Informal gazetteers might compile information related to features mapped during specific field-trips. Whilst Unofficial gazetteers can incorporate information on private schools within a jurisdiction where the government has no jurisdiction to determine the school name or curriculum, but keeps the information for reporting purposes only. The development and rapid proliferation of these non-authoritative, informal or unofficial gazetteers indicates that there is a strong demand for geospatial data by the wider community and that gaps in current gazetteer compilation and distribution methods are being met by alternative sources to the traditional government data distribution systems.

Cultural Associations

The cultural relevance of place names can cover a number of possible aspects, each of which is important to the relationship between a community and the land it is associated with. Patterns of historical thought processes and attitudes, significant events, persons, stories and legends (humorous and serious) as well as day to day occurrences and the “normal” people are all reflected in place names, providing a rich insight into the heritage of a nation. Hence the identification of place names as part of UNESCO intangible heritage (UNGEGN Resolution IX/4).

Cultural association that can be incorporated into gazetteer data include the following:

- Derivation of a name, including:
  - Who names the feature – this may be an individual, an agency or a language group.
  - When was the feature named?
  - Named after or meaning of the name.
  - Language the name was derived from.

- Pronunciation (sound file is the best option or phonetic alphabet representation).

- Cross reference or linkage to any alternative, previous or current name.

- Feature extent - I have included this in the cultural association as this is often as much a perception of the community as it is the result of a formal naming process. Feature extent also incorporates the need to be able include temporal data for those cultures that have seasonal or temporal place names, such as the Inuit people for the ice related features that appear only in winter and some
indigenous groups in Australia that have a different name for a river when in flood.

- Child / parent relationship between features - groupings such as island groups and water bodies into “** Lakes” are all reflections of how the community view the physical environment. In some instances, the groupings used by the community may result in differences between the official or original naming and what is known locally, or may differ between particular groups in the community, for example hydrologist versus biologists.

It is recognised that some of these aspects overlap with the official naming process, but most place names in any jurisdiction were in place well before the establishing of a naming process. I consider that most important point of this face of the gazetteer is to recognise and reflect the cultural association of place names and ensure that both the naming, recording and information dissemination processes can do this accurately.

**Information Dissemination**

The existence of the best database in the world is meaningless if the information is not available in an appropriate and timely manner to prospective clients.

The rapid increase in the use of spatial data for a wide range of functions makes it imperative that an authoritative place names database is widely available to be incorporated into Spatial Data Infrastructures, into web based applications and into car and hand-held navigations systems (including mobile phones). As previously mentioned, this data is being made available for one source or another, be it officially sanctioned or not. There is considerable benefit to be gained if the source is seen as data sanctioned by the place names body within the country.

In the past, information dissemination has been seen as a one way process, from the place naming authority to the community. Given the available technology, there is now scope for a two way information dissemination process, with resultant benefits to the accuracy and comprehensiveness of the data. There is considerable knowledge in other government agencies, academic institutions and the community in relation to place names that needs to be gathered, processed and returned in a structured manner.

The concept of crowd sourcing is one that has raised some concerns, but in effect it is no different to the standard mapping field check from the past. Structures and processes, many of which can be automated, can be put in place to verify the information supplied. There is also scope for multiple editors to the gazetteer data that will enable specific agencies to enter its own data into a central database, subject to appropriate quality control.

**Conclusion**
As we consider the cultural and data requirements of our own situation, and do so in a broad capacity, we can create a better data solution for place names use in our jurisdictions.

These is no question that gazetteers are deemed to be a critical data set (in Australia we have seen the government list gazetteers as one of the top 10 critical datasets). Indeed, they provide the major index key into most other spatial databases and many aspatial databases - and are a major linking point between databases.

Perhaps one of the first steps for us to take is to attempt to socialise the concepts of gazetteers to the wider geospatial and general community- to explain that gazetteers are more than just lists of names. It is critical to promote that gazetteers are the linking agent between information and they have the potential to bring together disparate information held by a range of agencies for multiple purposes ranging from emergency response to social planning.

The need for the officially sanctioned gazetteers to be of a high quality in terms of accuracy and completeness of available data is increasing rapidly, and if we do not meet the needs of our communities, other unofficial providers will do so. We strongly encourage the member states of UNGEGN to commence the conversation on defining gazetteer and data types with the aim of developing robust definitions and increasing the relevance of the systems we currently maintain. There is potential to expand the scope of official data collection and name approval methods to allow for national gazetteers to incorporate both official and unofficial names which fulfil the information requirements of our communities.