

UNGEGN WG on Toponymic Data Files & Gazetteers

4.f. Discussion: Future of Gazetteers

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Some Concerns about Gazeteers

- Administrative / Political mapping: institutional needs
- Mandatory [generic/specific/coordinates] table scheme, with unique entry and ID for just 'one name = one place'
- Territorial structures, delimited for 'good administration'
- Database management standards; protocols for interoperability and fusion
- Coded list enumerating generic and very peculiar features
- Collection techniques poorly gather geographic footprints
- Lowest common denominator: too low for common users, not truly a universal basis, it limits reliable capabilities/ needs/ usages/ practices of/with geo-information



Toward a New Generation of Gazeteers

What should be a toponymy theoretical frame of reference?

- Geographical names (not ID in IT) should be in command
- Unique entry seems a unjustified elementary constraint
- Situation and multi-dimensional relations vs. location only
- Signification and cultural expression vs. correct spelling
- Geographical representation, sense, interpretation, identity
- Past, Present, Future capabilities/ needs/ users/ practices/
- Must enhance and expand: [generic/specific/coordinates]

A call for a WG sub-committee for brainstorming and report



Suggested Themes for Discussion

- Real purposes/applications/uses of toponymicDB+gazetteer
- Revised, extended definition of toponymic **ontologies**
- Continuing role of **cartography** as a scientific framework
- Semantic & syntactic **meaning**: the "sense of place"
- Adapted geometries for evolutive, unbounded geo-entities
- Gazetteer as a geospatial knowledge organizing system



1- Suggested theme: uses, needs, purposes

- Real purposes/ applications of gazetteers and TDB for other usages than political, administrative, postal, computational,...
- Administrative/official gazetteers are minimal, exclusive, normative, present-time, effective (if up-to-date), but meaningless
- New uses are more elaborated than location at request or search: policy making, commemoration, real estate and cadastre, territorial management, citizenship and identity, media, intelligence,...
- ...which pose new other problems or challenges that present TDB + gazetteers cannot address
- Extended rules, standards, ontologies for representation and structuration of geodata, and thus geoname signification
- Analytical, comparative, structural processes
 (e.g., geo-spatial coverage or footprints and cultural system of all toponyms beginning by ES Guada- or ending by ES -tenango)



2- Suggested theme: toponymic ontologies

- Definition of 'toponymic ontologies' or systems of generic features for complex or dynamic entities, non-hierarchical sub-divisions, relative orientations, geometrical shapes, linguistic composition
- Physical systems according (or not) to cultural, language, ethnic, law, perceptions or definitions in different regions, epochs, languages
- False, redundant, rare, or misinterpreted generic/descriptive terms
- Logic/ natural conditions and contingences of geospatial structures
- 3D, 4D structures of land representation by place name 'dimensions': language, landscape, social usage, cultural significance, cartography IT
- <u>Geo-ontologies</u>: more than lists/ catalogues with never ending generic classifications,... / far more than simple, direct translation of features, what is often misleading (*e.g.*, ES rio *vs.* ría; FR fleuve, étang, EN bight)



3- Suggested theme: role of cartography

- Continuing role of "cartography" that is still constantly ignored by authorities when adopting official or new names, surprisingly...
- Needs for seriously developed rules and standards of cartographic representation and structuration of data (not restricted to geometry)
- Maps communicate new information that was not placed there before, but extracted from their coherent structure of representation
- Maps as the ideal type of geographical information systems to represent the territory and relative position, footprint, extension, relation, explanation
- Generalisation and multi-scale representation of feature names
- Respect of mapping constraints in place name placing vs.
 commemorative anthroponym (e.g., person's title+first name+given
 name, twice longer than the street on the map at large scale, also
 gives searching problems in the unique entry index of a gazetteer)



4- Suggested theme: the "sense of place"

- Semantic/syntactic expression of the "sense of place" for community (its socio-spatial significance: descriptive, evocative, connotative,...)
 - with respect to the meaning (where pertinent)
 - and to the socio-linguistic uses (when practical)
- Etymology and constituents of both generic and specific toponyms
 - language and context at origins and/or in evolution (its story)
 - grammatical composition 'rules' and in plain use (speech, text)
 - roots, prefix, suffix, gender (article, concords), adjective
 - related structures of signification: whole/part, duplicate
 (e.g. New-, Little-, Mid-), function (e.g., -burgh, -ford, -port)
 - relative schemes of reference: location (e.g., -upon-, -lès-, -by),
 orientation (compass directions), altitude (e.g., Upper-, Nether-)



5- Suggested theme: evolutive footprint

- Adaptative geometries (more than primitives) for evolutive or fluctuant or (partly) unlimited geographical entities or features
- Orientations or directions in the evolution and adoption of geonames, as a part of the structure (*e.g.*, gulf named after furthermost river, city)
- Some place names change their place, core, extension (e.g., Poland)
- Some places change their name or entity generic
- Same names applied to cumulated, superposed places (e.g., Québec)
- Natural limits, boundary segments, types of division lines, fronts
- Reformed place names, (good) reasons to change, add, or move



6- Suggested theme: geo-knowledge

- New gazetteer as a geo-spatial knowledge organizing instrument
- Non-administrative, emergent, complex, performing, generative geographical usages and practices need deep significant information
- User-centred building-up of multi-level/multi-scale toponymy
- Geo-spatial structured ontologies to represent complex place meaning
- Entities/ features at the crossing of structures/ ontologies (e.g., bridge)
- Extraction of new information that was not placed there before, thanks to coherent structures of geo-spatial/semiotical representation
- Web 2.0 toponymic knowledge-building methods and capabilities
- <u>Geo-Semantic Web</u> capabilities, association of searched place-names to map display and informative cards; + *topon*-agents (AI) ⇒ Web 3.0



WG TDFG discussion sub-committee

- Geo-ontology: ontologies of geographic feature structures
- Geoparsing: massive investigation of document structures
- Geopedia: communities making sense of their places
- Superstructure of meanings, more than only mere infrastructures of data
- Questions, problems, topics, arguments, theories, methods to identify for preparation of an international research and planning agenda of activities on toponymc DB, gazetteers, and advanced modes/forms of place-name representation



Engage now in the 21st Century Toponymy!

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